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# Acculturation, social support, and self-esteem as predictors of mental health among foreign students: A study of Nigerian nursing students

Verna V. LaFleur  
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# Walden University

## COLLEGE OF HEALTH SCIENCES

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Walden University  
2010

ABSTRACT

Acculturation, Social Support, and Self-Esteem as Predictors of Mental Health Among  
Foreign Students: A Study of Nigerian Nursing Students

by

Verna V. LaFleur

M.S.N., University of Phoenix, 2003  
B.S.N., University of Maryland, Baltimore, 2001

Dissertation Submitted in Partial Fulfillment of  
the Requirements for the Degree of  
Doctor of Philosophy  
Health Services

Walden University  
May 2010

## ABSTRACT

Nigerians are an integral part of the nursing profession, yet there is no literature on their common health risks, such as homesickness, isolation and suicide ideation. The purpose of this study was to investigate the association between lack of acculturation, social support, and self-esteem and mental health among Nigerian nursing students. Berry's model of acculturation was used which identifies individuals perception of self in relation to their ethnic culture and the host culture. A sample of 76 Nigerian nursing students enrolled in Baccalaureate nursing programs from 3 universities in the District of Columbia and Maryland participated in the study. Data were obtained using an online survey of 69 items assessing their acculturation, social support, self-esteem and their mental health. A descriptive cross sectional design was used. Analysis of the data included descriptive statistics, Pearson correlation, multiple regression, and ANOVA. The final regression model revealed that acculturation, companionship construct of social support and self-esteem are predictors of mental health status as shown by the adjusted R squared ( $R^2 = 0.638$ ). Recommendations are for universities to commit to increasing acculturation, social support, and self-esteem among foreign students in an effort to decrease isolation and improve their mental health. It is also recommended that future studies should be conducted on social isolation of subcultures to improve acculturation and reduce incidence of low self-esteem among foreign students within the American society. The strategies would create positive social change for healthcare organizations and nurse educators, resulting in an increase of ethnic diverse nurses and reducing the shortage of nurses in the USA.



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## CHAPTER 1: INTRODUCTION TO THE STUDY

### Introduction

Presently, the United States of America (USA) is the destination of choice for many international students. These individuals attend universities and colleges, enrolling in health and other degree programs. Brown (2008) reported that the majority of all international students come from Ghana, Ethiopia, Nigeria, and Kenya, as well as from the Philippines, Vietnam, Mexico, Panama, and the Caribbean Islands. As diversity in the United States increases, nurses care for clients from an increasing number of cultural and linguistic backgrounds, making it more imminent to support and retain international nursing students. This change in the population has initiated a demand for nurses with multicultural backgrounds to provide culturally sensitive and appropriate care to various cultural groups. In light of the nursing shortage, many individuals choose this career path, but find it difficult to achieve the required nursing certification standards. Cultural differences are one of the major issues faced by international students. Amaro, Abriam-Yago, & Yoder (2006) agreed that these challenges are related to academic needs, financial demands, adapting to new roles, and discrimination from faculty, peers, and patients. The issue of low enrollment in nursing programs, coupled with the high attrition rate of minorities, has created a need to retain and graduate foreign-born nursing students in the effort to increase the diversity in the health care field (Abriam-Yago, Yoder, & Kataoka-Yahiro, 1999).

The sample population for this study is derived from African students, a group which is understudied. There is literature focusing on most minority groups of international students, addressing the factors influencing success in nursing school,

including adaptation into the American culture and mental health issues. There are also recommendations for academic success of these international students, but very minimal documentation on African students. Africans represent 7% of the total number of international students (Blake, 2006). There is scarce documentation on international African students, though many have chosen nursing as a career. Akosah (2004) reported that many African nursing students do not pass their state board exams. Such failure has caused much frustration for these students, to the point where some quit, while others keep trying until they are successful.

For African students, nursing is a career of choice due to its highly competitive pay (Akosah, 2004). They are gradually increasing the rich diversity of the country and add to the demand for culturally competent service (Blake, 2006). Cultural norms and traditions have a very strong influence on the knowledge and skills of individuals. As Gardner (2005) described, “culture influences how individuals interpret their world” (p. 14). African nursing students are now an integral part of diversity within the health care profession and cultural sensitivity is necessary in order to maintain their retention, healthcare standards, and diversity. This study will focus on Nigerian students.

### *Significant Problem*

There is need for increased retention and graduation of African nursing students to add to the body of culturally competent healthcare professionals to attend to the needs of clients with similar cultural norms. Gardner (2005) reported that, “according to the commission on Collegiate Nursing Education (CCNE) minority nurses are needed to continue creating nursing models for the unique needs of minority populations” (p.155). Though there is continuing growth in the racial and ethnic diversity in the United States,

ethnic diversity in the health care field has not kept pace. This disparity can be reduced through the employment of foreign nurses and by international students successfully completing the requirements for a successful nursing career. Constantine and Okazaki (2004) reported that foreign students of African descent were more challenged than those from Asia or Latin America. As other students whose native language is not English, many African students are exposed to several native and tribal languages prior to learning English. As Omotosho (1998) reported, “Nigeria is a country that comprises over 200 ethnic and sub-ethnic groups with 3 main languages and over 200 local languages” (dissertation, p. 10). This makes it harder for Nigerians to communicate with educators and peers in the USA and forces them to learn reading, writing, and speaking the English Language. Sometimes, because of language deficiency, they transfer their difficulty of mastering the new language into personal issues that result in adaptation challenges, leading to stress and low-self-esteem.

#### *Summary of Research Literature*

A literature review revealed that studies have been conducted on Hispanics, Jews, Russians and Asian immigrants (Kamya, 1997). A related study by Rodriguez, Morris, Myers, & Cardoza (2000), discussed various acculturative stresses Latino college students are likely to experience. Similarly, Lopez, Ehly, & Garcia-Vazquez (2002) reported on Mexican- American students’ academic achievement with regards to acculturation and social support. However, there are limited studies concerning Africans in regard to mental health and acculturation, despite the growing population of African students that are attracted to the field of nursing (Newman & Williamson, 2003). According to Noone (2008), there is disparity among ethnic minorities employed in

health care jobs compared to the related ethnic population, meaning that there are fewer healthcare professionals of cultural identity as compared to the US minority population. Studies did confirm that the main factors responsible for the under representation of minorities in the nursing profession include cultural norms and moral standards that influence their nursing education (Doutrich, Wros, Valdez, & Ruiz, 2005). This demonstrates the need to support retention and increase success in program completion for African nursing students (Amaro et al., 2006). This study will investigate the role of acculturation, self-esteem, and social support as they relate to mental health among Nigerian students completing their nursing education. This study is appropriate at this time when recruitment and retention of minority nursing students is one of the top priorities of nursing research (Brown, 2008).

The Hispanic population, the largest minority group in the US at present, is included in the literature concerning nursing schools and the implications of nursing education. Although there are only 2 % Hispanics in the nursing profession, as compared to 7% of Africans in nursing and other healthcare profession (4.9 % in nursing), there are more documented studies on Hispanics than African nursing students dated back to 1997 (Omotosho, 1998). An example of such a study from which information can be gleaned to guide Hispanic college students, educators, chairs, and deans of colleges and universities is the study reported by Valentine (2001). The results provided data that self-esteem and generation status positively correlated with acculturation while the cultural identity had no influence on acculturation.

In the same manner, the number of Asian students is increasing. Xu (2005) confirmed that nursing educators and faculty members require far more than being

knowledgeable of nursing content to succeed in educating Asian students. Rather they require strong background knowledge of Asian culture and norms.

There is limited information on African nursing students to aid with their retention in nursing schools. Unfortunately, it has been difficult for most of the African students to fulfill their desire, as they fail to achieve the nursing certification requirements. Despite the appealing salaries in health care, nursing certification requirements are not easily obtained. A student must pass the national council licensure examination for registered nurses (NCLEX-RN), known as the state board examination, before the student is eligible to practice as a qualified nurse in the USA. It can be a difficult task, especially by foreign students. Many do not pass at the first attempt, which may negatively affect their mental health.

Newman & Williams (2003) reported an increased rate of failure within a nursing program among a diverse college body. The authors concluded that part of the reason was the faculty was unprepared to serve the diverse student population. Doutrich et al. (2005) revealed that generally many nursing educators use one method of delivery to teach all the students, which do not adapt or adjust for the vast diversity among the students, especially when most of the students in the classroom are from ethnic minority groups. This creates the greatest challenges for the students in the nursing program, as they must qualify at the national standard requirement regardless of deficiencies due to a lack of English proficiency. According to Newman & Williams (2003), only a small percentage of students progressed to the required standards of the program, which includes success on the first attempt at the NCLEX-RN. It is not an easy road, beginning with immigration and culminating with the successful completion of the nursing program by passing

NCLEX on the first try. This process will continue to be a struggle if there is no change in the nursing education programs or among nurse educators to promote the development of skills to attain academic proficiency in meeting the established standard of nursing practice. Pardue & Haas (2003) stated: “For the faculty, the concerns are equally complex; success in delivering a United States-based curriculum to an international nursing student population has been contingent on meticulous pre-planning of coursework, followed by adaptive and creative delivery of academic material” (p. 73).

Furthermore, one of the main struggles foreign students encounter is overall success, which supports the findings that one of the highest risks for poor performance on the NCLEX is poor verbal reasoning (Gardner, 2005). The pressures and demands are great, and these add to emotional and mental stresses, which could result in psychiatric disorders. There is strong evidence that issues of self-esteem, a sense of self-worth, and self-respect are linked to psychological stress and mental illness (Alexander, 2001). The lack of success for Nigerian students will place them in an underserved population, rather than part of the group that can provide care for their cultural counterpart in the US.

#### Problem Statement

Nigerians are an integral part of the nursing profession, yet there is no literature on their common health risks, such as homesickness, isolation, suicide ideation, nursing school success, retention, and integration into the nursing profession in the US. Regardless of the increase in number of international college students in the USA, there is a lack of resources for African students (Kamya, 1997). There is literature on other minority groups in the US but none or very scarce literature relating to African students dating back as far as 1997. This knowledge is important to improve acculturation among

foreign students and encourage social support, thereby decreasing or preventing mental health illness.

### The Nature of the Study

This study will use a cross-sectional survey design to determine the association between the independent variables, acculturation, social support, and self-esteem, and the dependent variable, mental health. It is a simple form of study that can be carried out quickly. International college students experience several demanding challenges as they adapt to the unfamiliar environment of American culture. Very little research has been done regarding educational barriers for African students.

### *Research Question*

In this study, I addressed three primary questions dealing with acculturation, social support, and self-esteem and the defining variable of mental health in Nigerian nursing students attending US universities. American International Relations Scale, the Interpersonal Support Evaluation List, and the Rosenberg self-esteem scale were used to assess the three primary questions respectively.

### *Research Hypotheses*

The first question (Q1) to be tested is: What is the impact of Acculturation on mental health among Nigerian nursing students?

H10: Acculturation has no impact on mental health among Nigerian nursing students.

H1A: Acculturation has an impact on mental health among Nigerian nursing students.

It is suggested that the more acculturation or adaptation foreign students, and more specifically African students, experience, the less mental health behaviors will be exhibited.

Q2: What is the impact of Social support on mental health among Nigerian nursing students?

H2O: Social support has no impact on mental health among Nigerian nursing students.

H2A: Social support has an impact on mental health among Nigerian nursing students

Q3: What is the impact of Self-esteem on mental health among Nigerian nursing students?

H3O: Self-esteem has no impact on mental health among Nigerian nursing students.

H3A: Self-esteem has an impact on mental health among Nigerian nursing students.

### The Purpose of the Study

Although there is an extensive collection of literature addressing the challenges of international college students and mental health issues, there is insufficient literature on individuals of African origin pursuing nursing degrees. Atri, Sharma & Cottrell (2006) reported on Asian American students, Kanya (1997) reported on studies involving Hispanics, Jews, and Russians, and Brown (2008) documented studies on other ethnic groups from the Philippines, Vietnam, Panama, and the Caribbean Islands. The main objective for this study is to determine the association between lack of acculturation, social support, and self-esteem and mental health among Nigerian nursing students.

I aim to provide developmental programs to assist in retention and success in passing the NCLEX-RN exam. Developmental programs can be created to help with

critical thinking, speech therapy, and understanding the rudiments of the English language. There is also a demand to ensure healthcare personnel are culturally competent and equipped to provide services to the population at large, especially with the American diversity. The African students are not only an asset to the pool of ethnically diverse nurses, but also help address the national nursing shortage.

The AACN (2002) projected the need for one million nurses by the next decade. So, every effort to promote the retention of nurses will be beneficial for meeting the needs. The purpose of the study is to inform and facilitate change for African students, including those from Nigeria, who are enrolled in nursing programs in an effort to promote success by reducing stress and ultimately decrease mental health issues. The awareness can increase the chances of family members to be supportive, physically and psychologically, and attentive, including financial support. The results and recommendations could alert faculty members and nurse educators as they work diligently toward increasing the rate of ethnic minorities entering the nursing profession (Gardner, 2005).

#### Theoretical Base

Detection of acculturation, social support and self-esteem issues is crucial as these are predictors of mental health (Atri et al., 2006). The extents to which international college students adhere to both cultures are affected by mental health related issues, including low self-esteem and acculturative stress. Kim & Omizo (2005) defined acculturation as the process by which the cultural norms and values are accepted by individuals and incorporated into their norms and practices in an effort to adapt to the host culture.

In the nursing education program there are many students who are foreign born or born to immigrant parents. Many of these students have been encouraged by others, whereas some have the natural desire to enter the profession. The stress from adapting to the American college environment is called acculturative stress. Marginalization and separation are linked to increased levels of acculturative stress (Berry, Feldman, & Feldman 1997-2010). Berry's concept of marginalization points to the detachment of individuals from their native cultural identity and their lack of bonding with others from their new culture. Likewise, separation is maintaining one's original cultural identity while refusing to assimilate to the new culture. Increased levels of acculturative stress, due to marginalization and separation, could create an impact on health (Berry & Feldman 1997-2010). However, how individuals develop greatly depends on adaptation and assimilation. Adaptation refers to the alterations in behaviors that facilitate functioning in a new environment.

International students face a more stressful lifestyle than their native counterparts, resulting from the stressors they encounter during adaptation and assimilation. According to Barratt and Huba (1994), the challenges include the adoption of new roles, academic competence, inadequate finance, substandard English language skills, and lack of self advocacy. Unsuccessful course of study or low grades for international students may cause family conflict, low self esteem, feelings of hopelessness, and even worthlessness. In the early stages of transition, the international students may feel helpless and overwhelmed while experiencing academic challenges. In addition, unlike the host students, international students often lack the resources to counteract stress, thus resulting in more suffering.

Kim & Omizo (2005) strongly believed that the international students suffer a decline in coping mechanisms required to successfully master their cultural differences. The authors observed that, with better coping mechanisms, stressors can be minimized, resulting in lower acculturative stress and higher self-esteem. Finch & Vega (2003) reported that:

Higher levels of social support may also indicate a greater propensity toward healthy interaction with other individuals, greater involvement in social activities (religion, civic participation) as well as instrumental supports such as the reassurance of being able to rely on others in time of need. (p. 109)

In other words, a healthy profile is often the result of higher levels of social support.

Moreover, proper attachment and adaptation do not prevent international students from being vulnerable to emotional health problems. Failure to receive the necessary social support decreases the effectiveness of coping mechanisms, resulting in low self-esteem (Friedlander, Reid, Shupak, & Cribbie, 2007). These students may deem themselves as failures and often enter into seclusion. Those students who have not been able to manage stress effectively eventually suffer adverse effects in their college performances (Murff, 2005). Nursing educators may be aware of the isolation issues which face international minority students (Noone, 2008). However, they might not be aware of any intervention for discrimination and racial bias resulting from isolation (Noone, 2008). The challenge for educators, then, is how to effectively facilitate the learning of culturally diverse students so that they can become active participants in the learning process. Since the majority of international students are likely to be in transition, the educator's role should include meeting their immediate needs, such as enhancing their learning abilities by decreasing the challenges of adaptation. Educators should aid in the adaptation to the new language, and the rigorous nursing program by effectively using the

resources available such as financial aid and loans for those who are eligible to avoid unnecessary employment and stress from the activities of daily living.

### Operational Definitions

*Foreign students:* This study will recognize foreign students as those who migrated to America and have a primary language other than English. International students are those who were born outside of America and for whom English is their second language (Finch & Vega (2003). Both foreign students and international students can be used interchangeably.

*Immigrants:* These are individuals who have been granted permanent status in the USA and an opportunity to apply for citizenship after 5 years of residency (Kamya, 1997). Immigration involves a process of acculturation.

*Acculturation:* This occurs when a group of individuals from a different culture adapts to the host culture. The outcome could be devastating, either from the stress of leaving the original culture or filtering into the new culture. Acculturation is indirectly a learning phenomenon. Both acculturation and adaptation have a profound impact on the learning ability of international college students in America. As discussed by Sodowsky & Plake (1991), the American International Relations Scale (AIRS) is used for the measurement of acculturation. It is a 34-item scale which includes eight multiple choice and 26 items on a 6- point Likert-typed scale with a range from agreed strongly to strongly disagree.

*Social support:* Finch & Vega (2003) discussed that social support among international students involves measures of social, emotional and spiritual support along

with the peers and family groups in the United States. Cohen & Hoberman (1983) 4-point scale ranges from 0-3, denoting from definitely false to definitely true.

*Acculturative stress:* This is stress that is acquired during the process of acculturation. It may be considered as having the greatest impact on college students. The rigors of college programs can become a very daunting encounter for international students. People who enter them are sometimes unaware of the phenomena that are necessary for successful transition through the series of events. These include allotted time to study, financial burden to be addressed, the right choice of program, housing and transportation, and adaptation into college life. If these are not addressed, college life will be very difficult to adapt to. Unmanaged stress may result in worsen physical and emotional problems. For the international students, the stress of college life may be very challenging, in addition to the rigors of infusing into a new culture. Joiner & Walker (2002) found that the individuals who experience high levels of acculturation pressure obtained higher acculturative stress scores also.

*Stress:* This is common to almost everyone, regardless of race or cultural background. Very often though, individuals respond differently to the same stressors due to their coping abilities, memories of past events, struggles, lack of support, and other outcomes. As cited by Yeh and Inose (2003), international students who are incompetent in the English language experience greater acculturative stress than those who are fluent in speaking the language. A stressful state occurs when these students are confronted with situations or problems that they lack the resources to manage effectively. Resources may be emotional, spiritual, or psychosocial.

*Self-esteem:* Padilla, Wagatsuma & Lindholm (2001) stated that self-esteem is responsible for some of the stressors immigrants' experience. Rosenberg (1989) described the 10-item Likert typed questions. It includes a 4- point scale that ranges from strongly agree to strongly disagree with a possible score of 10-40. The higher the score indicates higher self esteem. The demand for appropriate coping mechanism creates stressful situations as it requires learning of new skills to be adaptive and function effectively. Otherwise, the individual is said to be maladaptive.

*Mental Health* is defined as a psychological well being and was measured using the Kessler Psychology Distress, as reported by Atri et al. (2006) and Kessler, R.C. (2003). It includes a 6-item Likert-typed questions ranging from 6-30.

### Assumptions, Limitations, Scope & Delimitations

#### *Assumptions*

The assumption for this study is that Nigerian students fit the profiles of other international nursing students. The Nigerian nursing students come from a country with over 200 languages and an English Language literacy rate of 50% (Omosho, 1998). The focus of this study is to highlight this understudied population. They are a unique subgroup of the African continent with specific norms and practices and communicate with numerous native and tribal languages. Norms, practices, and language are a source of perplexity for Nigerian nursing students, as they cope and adapt to their host culture. The language experience is often embedded in the psyche of the students and is transferred into other aspects of life. An assumption is that the Nigerian nursing students can function as native English speaking students without any help due to the fact that

they must acquire similar results to graduate. Their cultural upbringing have caused them to revert into a passive mode in midst of a high paced assertive learning environment but this does not mean an inability to learn. Instead, it is more of a functional disability to adapt to the academic and social environment. It has become paradoxical; the path of success in their native society becomes a disabling phenomenon in another society. Ultimately, this leads to the question of how can the findings be utilized to make their lives better. The assumption is that the findings may highlight the need for speech and language training, cultural adaptation, and infusion training in terms of their rights, self actualization, and assertiveness.

#### *Limitations*

The response to the survey may contain bias due to the participants' perception of their respective situation and experience. There are issues of compliance and increased anxiety regarding the release of personal information or the accusation of whistle blowing. The fear of creating any mistakes could deter self reporting mainly due to cultural factors. An outsider reported findings. Also, this study was done in a large metropolitan area, so the results may be different from those found in a small rural area that provided closer interaction and family support

#### *Scope and Delimitations*

A detailed investigation was undertaken to understand the relationship among the predictor variables acculturation, social support and self-esteem and the criterion variable mental health. This study sought to develop an explanation on the perceptions of the challenges that Nigerian students experienced while completing their nursing education in the US. Moreover, both language deficit and social support are considered as

predictors of psychological distress among international students (Dao, Lee & Chang, 2007). There was an expectation in the study that significant evidence of acculturation, social support, and self-esteem existed among Nigerian nursing students, and that these factors are predictors of mental health. Understanding what the feelings are, and taking positive steps to address those feelings, can help strengthen their coping strategies resulting in more positive results.

### The Significance of the Study

The study investigated the role of acculturation, social support and self-esteem as predictors of mental health among Nigerian nursing students. There is no documentation on coping strategies for Nigerian nursing students in their adaptation into the host society. Understanding the factors that impact academic performance in nursing school will help educators to design interventions that will decrease the health problems and increase the possibility of success for this subgroup. Teaching in higher education, especially within colleges in the United States often involved working with diverse populations. This can be very challenging for both faculty and students. The diverse population is considered as a ‘melting pot’, meaning interactions takes place among several cultures and value systems. Hence, the demand for multiple diverse strategies in teaching is even greater.

Valuable information was sought to improve success for Nigerian nursing students. Information that will promote success for the Nigerian students and facilitate the improvement of retention rates for ethnically diverse nurses in practice.

This data is useful for college educators planning instructional and learning tools to facilitate learning among foreign students including Nigerian nursing students. College

professors and clinical instructors will be able to design strategies to decrease the number of stressors and anxiety in an effort to reduce stress and increase success. Multiple strategies should be developed and executed to meet the learning needs of foreign students in the nursing program. By so doing, self-esteem will be alleviated as the students will experience a sense of self-worth. Success rates will be improved, and the increased numbers of qualified personnel will aid in the reduction of the impending national nursing shortage crisis. A guaranteed employment and attractive salaries lure students into nursing school but they are later confronted with the struggles and sometimes failure to meet their expectations. The stress from the failure often leads to mental health issues.

#### *Implications for Social Change*

Future studies should examine the correlation between the same variables in the study for other cultures and the host culture. The results and recommendations from this study may not eliminate the stressors, but may lessen the degree to which the students are affected. The results will delineate ways that faculty, staff, and educators can address the pedagogical and mental health needs of African students in nursing education, and reduce stress for foreign students and, perhaps, American students with poor language skills.

Although the findings about Nigerian students may be similar to those of other international students, it does not reveal the same experiences encountered with peers, instructors and the difficulties resulting from mastering the English language (Blake, 2006). These experiences will be totally different due to the Nigerian students' exposure

to a tribal or native language prior to learning the English language. This may increase the stresses which could be easily internalized, resulting in psychiatric problems.

### Summary of the Study

This chapter provides an overview of the independent variables, acculturation, social support, and self-esteem and the dependent variable mental health, among Nigerian nursing students as well as the research questions and corresponding hypotheses. Chapter 2 discussed the relevant literature addressing the aim of this study, the implications of mental health issues and how they can be reduced if not avoided or eradicated. Chapter 3 gave a detailed description of the methodology used in the study including the research procedures. Chapter 4 presented the results and analysis of the research findings and chapter 5 discussed the results a, social implications, and recommendations for further studies.

## CHAPTER 2: LITERATURE REVIEW

### Introduction

This chapter entails a review of the literature concerning immigrants' adaptation into the US college environment, as well as the challenges faced by them. The main focus is on the numerous factors affecting African students in nursing school, specifically Nigerians. The main research questions relate to the relationship between acculturation, social support and self-esteem and mental health. This chapter covers a general description of research studies of international students, followed by research studies on African students in nursing school and Nigerian nursing students. The literature review includes (a) a review of related research, (b) summaries of literature and theoretical models, (c) related research and variables, (d) literature related to the method, and (e) literature related to the use of differing methodologies. The strategy for review entailed a rigorous and detailed search of databases for peer-reviewed and academic journals using related key words. A systematic review of data was done with specific emphasis on the participants, objectives, methods and outcomes.

The US continues to be a melting pot with the influx of immigrants from many parts of the world, including various cultural groups from South and Latin America, Europe, Asia, Africa, and the Caribbean. This requires cultural diversity to be a central focus, especially in the healthcare field, where diversity is common. The healthcare environment currently embraces an increase in numbers of older adults with multiple chronic illnesses of higher acuity, despite the high technological advances. This situation, coupled with cultural diversity, make the responses of nurses to client illnesses increasingly more complex. Cultural diversity is a very important issue in nursing,

resulting from the multicultural environment both within the American population and in the nursing field. Due to the diversity in America, it is imperative for nurses to learn the values, similarities, and differences in cultures to avoid stereotyping or being judgmental. Nurses are expected to respect their patients' cultures and should not impose their values.

The cry for diversity in the healthcare field and the shortage of nursing personnel in the USA has attracted a large cadre of international students. The dire need for diversity within the nursing field has been echoed throughout the nation and with the increased influx of immigrants several institutions have taken up the challenge by admitting students from diverse ethnic groups. Many international students choose nursing but become disappointed when they are confronted with the rigors of the nursing program, especially when they are not equipped with the resources to help them cope and succeed. Students felt they had more work than they could manage, including reading, completing care plans and projects, and writing papers (Amaro et al., 2006; Dzurec, Allchin & Engler, 2007). Nursing school can be very stressful due to rigid programs, the clinical components, and time constraints that reduce available avenues for extra curriculum activities.

Recently, nursing as a scholarly discipline has grown and has attracted many to a second career. Magnussen & Amundson (2003) reported that individuals pursuing a professional career to become a nurse seize on opportunities to provide medically ill clients with the care they require. However, others see it as an opportunity to earn a good pay and live in a middle class economic status. Regardless of the perceived incentives and personal satisfaction, the nursing shortage persists and international students continue to make an effort to achieve their endeavors while filling this gap.

Success of international students in nursing school is important (a) to decrease disparities and increase retention and (b) address the health demands of the United States populace of diverse ethnicities and cultures. This situation points to the necessity for nurses to become culturally competent in order to communicate effectively with clients from different ethnicities, socioeconomic statuses, cultures, and religious backgrounds. It is evident that, if the integrity of nursing is to be maintained, then educators must adopt a high standard of curriculum and practice that includes efficient communication skills. Also, junior and senior nurses should be held in the highest esteem, as the profession demands, so that longevity can be increased and maintained.

The lack of culturally diverse nurses in the country creates a need to retain and graduate minority students in nursing education programs. Demographic studies revealed that nursing personnel do not reflect the ethnic diversity of the United States (Noone, 2008). According to statistics, minorities represent approximately one-third of the United States population, but only 12% are employed in the nursing workforce. One has to be well prepared for this experience and should receive detailed orientation for the nursing profession in order to decrease the stressors that could hinder success. Culturally congruent care can only be incorporated into nursing practice if the values and beliefs of the client are known. To others the practices may seem weird and senseless unknowingly, but it is normal for that particular culture. Some of the main stressors reported were adjustment to college life, the pressures of studying and lifestyle changes including, housing arrangements, and financial constraints. In addition to the stressors of college life and the pressures of everyday life, some international students have chosen programs where the curriculum is very intense and rigorous, and are often unprepared. For this very

reason good coping skills are required, as it is proven to enhance students' success. These and all other stresses that occur during the adaptation, if not addressed appropriately, will definitely hinder the success of the college students.

### *Content of review*

Table 1 presents a summary of key findings. This review is arranged into sections with subheadings for more clarity. Discussions on immigrant minority students, African students, and Nigerian nursing students are arranged by adaptation, discrimination, and the attraction to nursing careers. The many challenges that these students face are grouped into subheadings for clearer discussion. The related literature is also discussed according to culture, language and the available information. The literature review that includes the related variables acculturation, social support, self-esteem and mental health are reviewed individually, followed by an overall summary summarizes the key findings.

### *Strategies used for searching the literature*

Reviewing the literature was a tedious task in making sure that all of the studies involving the immigrants, international college students and African nursing students specifically Nigerians were captured. A systematic review of the data was done and included: methods, types of participants, interventions and outcomes. The reviewer did a detailed search of the following databases (as shown below), journals and other sources using the keywords immigrants, acculturation, social support, self-esteem, mental health, stressors, discrimination, homesickness, and US college students, African nursing students, Nigerians, barriers, stressful life events, international students, foreign-born nursing students and success in nursing school. The articles were scanned for content and

appropriateness before the selection for inclusion in the study. The search yielded a total of 84 articles from 1994 to 2008 of which a few are important studies with key findings (Table 1). There are also several articles with corroborated findings by multiple authors (Table 2). Due to the sparse amount of research studies on African-born international students, the few that are mentioned dated back as late as 1994.

#### *Databases*

- The Cochrane Library (1994 to September 2008)
- Academic Search Premier (1994 to September 2008)
- MEDLINE (1994 to September 2008)
- CINAHL (1994 to September 2008)
- ERIC (1994 to September 2008)
- ProQuest Nursing & Allied Health Source (1994 to September 2008)
- PsycINFO (1994 to September 2008)

Table 1

*Important Studies with Key Findings*

<b>Author/Year</b>	<b>Objectives</b>	<b>Study Population</b>	<b>Findings</b>
Amaro (2006)	To determine the perceptions of ethnically diverse nursing students	Ethnically diverse nursing students	A high level of personal, academic, language, and cultural needs that influence coping.
Atri (2006)	To determine the role of social support, hardiness, and acculturation as predictors of mental health among students of Asian Indian origin	Asian Indian University students	Social support, acculturation, and hardiness were all predictors of mental health.
Blake (2006)	To identify the experiences and adjustment problems of African students in a historically black institution	International students of African origin	The main problems experienced were psychological adjustment which incorporated loneliness, isolation, and loss of identity.
Gardner (2005)	To identify the factors influencing the success of foreign-born nursing students	International students	Minority students reported feeling lonely and isolated with lack of sufficient support.
Magnussen (2003)	To identify the challenges experienced by nursing students	Undergraduate nursing students	Students complained of difficulty balancing home, college life, financial constraints, feeling incompetent in the clinical setting and feelings of disconnect with the clinical faculty.

(table continues)

(table continued)

<b>Author/Year</b>	<b>Objectives</b>	<b>Study Population</b>	<b>Findings</b>
Schmitt (2003)	To construct a minority group identity from shared rejection	International students	These students often experience a shared identity of loneliness and rejection that could impact their socialization. Perceived discrimination increased identification among international students which makes it harder for them to make strong social connections with individuals from the host culture
Sharif (2004)	To determine the effect of psychological and educational counseling for nursing students to reduce anxiety	Nursing students	Psychological and educational counseling reduce anxiety in nursing students
Yeh (2003)	To examine age, gender, social support satisfaction, and English competency as predictors of acculturative stress	International students	Social support and social connectedness may contribute to acculturative stress among international students.

Table 2

*Key Findings Corroborated by Multiple Authors*

<b>Authors/ Year</b>	<b>Study Population</b>	<b>Similar Findings</b>
Gardner (2005) Noone (2008)	Diverse nursing personnel	Some of the main barriers that influence the success of minority nursing students are: English proficiency, feelings of alienation and loneliness, financial difficulties, academics, lack of understanding of cultural differences by peers, meriting appropriation from instructors and coping with insensitivity and discrimination
Abriam-Yagon (1999) Noone (2008) Yoder (2001)	International nursing students	The need to develop appropriate teaching strategies to promote success for foreign-born nursing students that could play an important role in retention and address a diverse nursing workforce

## Research and Literature Related to the Problem Statement

*Multicultural challenges of international students*

It is of utmost importance for one to understand the experiences encountered by African students enrolled in colleges in the United States. There are studies that have examined the challenges and adaptation issues experienced by international students and the general findings were adaptation to the new environment, financial and health issues (Blake, 2006). Though their interest may not be similar, identification with other international students still exists and is often due to perceived alienation and discrimination of this entire foreign group by the host population (Schmitt, Spears, & Branscombe, 2003).

Moving to the United States has proven to be very challenging for international students. The main problem is acculturative stress which can also be referred to as the stressors of assimilating into a new cultural tradition including values, beliefs and behaviors (Constantine & Okazaka, 2004). As a note of importance, many international students from underserved countries are of the belief that they could prosper more in America than in their host country. Social support and acculturation stressors both contribute to health issues (Finch & Vega, 2003). In addition, Atri et al., (2006) reported that people who adapt a self-directed approach demonstrates a likelihood to perform better in a different cultural environment from theirs, resulting in reduced mental health issues. Note social support which impacts many aspects of life bears significance in predicting mental health outcomes for international students (Atri et al., 2006).

Research data have revealed that nursing programs are very intense, vigorous, and stressful. Imagine these stresses being added to the already existing stressors faced by international students as they pursue social and financial stability, while adapting to the American college life. Magnussen & Amundson (2003) confirmed that nursing students do face many challenges and stressors. They experience challenging demands such as, feeling overworked, unprepared, isolated and financially depleted while simultaneously seeking respect and support from their faculty and staff. Stress is common among college students and when challenging situations are greater than coping skills, multiple problems could arise. Stress and stressors have been found to be significantly linked to acculturation. Immigrants experience greater stress than non-immigrants during the process of adaptation in the new culture. The migration process is a multivariable interaction involving the individuals' internal resources, their available support and the

type of stressors they experience (Kamya, 1997). There are similar experiences shared among immigrants. Regardless of their place of origin, they all seem to have an attachment for their country of origin and they experience home sickness accompanied by a strong desire to return for any life events such as anniversaries and death (Van Ecke, 2005).

As a result of the nursing shortage many individuals are choosing this career path. However, Magnussen & Amundson (2003) emphasized that nursing has become stressful due to the nation wide shortage. In addition to the stress from the nursing program, students also identified some problems faced in baccalaureate programs. Aside from clinical practices which are usually off campus at various health institutions, there are many other nursing courses to be completed in the curriculum. It was clearly revealed that students from other ethnic groups such as Asian American cultures seemed to experience more adjustment problem than those from nearing countries such as, European countries. Asian students like African students, may also feel distant to the American culture. The study revealed that the nursing students experienced a high level of anxiety and lack confidence in self and others. This finding was not surprising, as anxiety can be triggered by any of the many stressors already existing in their environment at the same time.

Poyrazli et al. (2004) discovered that the nursing students' fear of making mistakes was evident. The research literature confirmed that the high level of stress in nursing education as documented repeatedly, causes poor success in grades and overall graduation outcome. Gardner (2005) reported that there are numerous factors that influence the success of foreign-born students in nursing school. Some of these barriers

listed were the English language, feelings of alienation and loneliness, financial struggles, academics and discrimination. In addition to the rigorous nursing program, many of the foreign -born students also experience lack of family support especially from their spouses or significant others. This situation places them in compromising positions when a family crisis arises or when confronted with the negativity or abandonment from the opposing family member. For example, Gardner (2005) reported that Bani (an East Indian nursing student)'s husband had opposed her attending college and studying nursing. According to Gardner, Bani explained that her husband told her those women who go to school and then work care less about their family and children. He felt that all of her attention should be focus on her husband and family rather than her studies. It is true to say Bani's experience in nursing school presented numerous challenges.

Other challenges include inevitable cultural conflict with the American culture. The educational system is far different in other cultures. Following is an example from the educational system in India due to the lack of information regarding African born international students. In India there are no class discussions; the teacher just lectures (Gardner, 2005). As such, the students are not expected to express their views or opinions, but rather they listen and accept the teacher's point of view, a direct contrast to the American classroom. In addition, family obligations are highly recognized in other cultures especially the Indian culture. Gardiner reported that the student, Bani wanted to return home with her dad and other family members to witness his right of passage in his homeland. Fortunately, her teachers allowed her to take her final exams early so that she can attend to her family needs. Similarly, in the African culture, the male is more dominant. Therefore the attitude of the male will be most likely similar to Bani's

husband. In such household there is limited or total lack of support for the student which makes it even harder for success to be a reality.

### *Attrition*

According to Gardner (2005), minority students are dropping out of the nursing program almost twice as much as the Caucasians. The literature review indicated that studies were done on the retention of foreign-born students in nursing schools. There are also several published articles that have addressed effective teaching strategies for ethnically diverse nursing students but there is minimal little literature on African students, especially Nigerians who seem to have a high population or a great attraction to the nursing programs. Gardner stated that the only reason minorities attrition in college is high is based on the fact that they agree to change majors after dropping out from nursing rather than quitting college altogether.

### *Protocol and compliance*

The current trend in the American population has created great challenges for health providers, healthcare institutions, and nurse educators (Sealey, Burnett, & Johnson, 2006). It is of utmost important for nurses to understand the culture of their patients in order to gain compliancy with their treatment regimen. In order to meet a client's health care needs and provide culturally competent care, cultural sensitivity is required (Sealey et al., 2006). Culturally congruent care can only be incorporated into nursing practice if the values and beliefs of the clients are known.

### *Financial challenges*

In response to diverse patient care, many nursing state boards are asking that all nursing students receive adequate training in Transcultural nursing. According to Sealey et al. (2006), culturally competent nursing care includes cultural sensitivity and knowledge of the recipient's culture which should be an ongoing process. The findings from a study among African students at a historically black institution in Delaware, revealed that the most challenging encounter was financial as they were prohibited to work in the US making it even more difficult for their family overseas to cover their tuition payment from their sparse income, and the large currency exchange (Blake, 2006).

### *English Language Challenges*

Several research studies have identified social isolation and discrimination as a main impediment for English for second language nursing students (Gardner, 2005; Yoder, 2001; Brown, 2008). It is obvious that these students practice different sociocultural norms than their peers which are often perceived as wrong or degrading due to lack of knowledge. This condition often results in discrimination and increase risks for low self-esteem. The potential respondents for this study come from a country where the English language is only one of five official languages (National Geographic, 2009). It is obvious that English Language is not one of the skills that are well developed by the majority of the sample population.

## Review of Related Research and Literature

### *According to culture*

The review of literature reveals studies on international students describing their adjustment in the United States including those from South and East Asia. The International Higher Education (2007) survey revealed that during the 2006/07 academic year, over 580, 000 international students studied in the United States which was a 3% increase from the previous year and the first major increase in enrollment since 2001/02 academic year. The survey was conducted by the Open Doors Project supported by the Bureau of Educational and Cultural Affairs of the US State Department. Blake, 2006 also reported that over 37 thousand African students were enrolled in US institutions for higher learning during the 2001-2002 school years. However, there are very few documented studies found on African students adjusting in the USA and even worse, there is none on African nursing students. Yang, Chum, & George (1994), also confirmed that cultural adjustment could affect the development of mental illness. In fact, individuals' behaviors and norms are often governed by their culture. It is very common for individuals to practice what they have learned.

In the study done by Atri, et al. (2006), the statistical evidence revealed that the independent variables acculturation, social support and hardiness positively correlated with mental health, the dependent variable among international students of Asian origin. The instruments chosen for this study are the same instruments used in Atri et al. (2006) study. The instruments were used in previous studies where validity and reliability were established. Regression analyses were done and all the independent variables were proven to be predictive of mental health. Due to the findings, improvement of social

support, hardiness and acculturative stress of international students were recommended in order to improve their mental health. Gaps in the literature will be addressed by investigating the mental health of African nursing students specially Nigerians.

*According to language*

According to Sandhu (1994), it is not alarming that the international students are attracted to the USA. The majority of them are from developing countries where they believe that higher education in America could improve not only their quality of life but also those of their families in their homelands. Many of the students who experienced acculturative stress reported that they did not seek psychological help to address the issue because of their emotional feelings (Constantine & Okazaki (2004). This was due to cultural barriers and language differences with counselors, which forced them to undergo self-concealment. It was also discovered that students who were proficient in the English language were better able to cope and adjust to the challenges faced in the new country (Poyrazli, 2007). This shows that language proficiency played a main role in coping and adjustment. The longer the African students length of stay in America, chances are the more proficient they may be in the host language. One of the development programs should be speech therapy thereby improving the spoken language and ultimately the reading and writing language.

*According to available information*

Kim & Omizo (2005) argued that better the coping mechanisms, fewer are the stressors resulting in lower acculturation stress and risk for mental health. Sharif & Armitage (2004) discussed the responses from immigrants during the stages of pre-migration, migration, adjustment and adaptation. According to the authors, interestingly,

most if not all immigrants regardless of where they came from, or how they came, have a shared common experience. This experience is coming to the USA (the pre migration stage). They also feel the sense of sadness when told about events occurring back home, especially if they can not attend. The author reported that there is a unique tendency for humans, similar to animals of other species to remain in a familiar locale and in the presence of familiar faces. For this reason, the majority usually conjugate among familiar immigrants (their counterparts) as this practice was proven to decrease their adaptation and adjustment time. The immigrants even experience less stress during this period. Studies showed that major separation and permanent loss do pose a risk for mental health disorders (Yeh & Inose, 2003). Being away from their homeland and lost of social support along with acculturative stress and the rigors of nursing programs, it is easy for the African students to experience self-concealment, loneliness and isolation which are risks for mental health. Yeh & Inose (2003) reported that lack of interconnectedness and social support among international students could result in acculturative stress. Schmitt et al. (2003) reported that, international students often experience loneliness and social isolation which could impact their socialization with members of the host culture. This study seeks a similar outcome with the relationship of lack of support and mental health. This study should corroborate the findings that there is a strong relationship between social support and mental health.

### *Immigrants' adaptation*

College students have a tremendous amount of burden to bear which causes severe stress. Murff (2005) postulated that “there are several explanations for increase stress level in college students, regardless of race or culture” (p.102). First, much

adjustment is needed for college life, as interpersonal relationship is affected due to the pressures of studying. Secondly, housing arrangements and change in lifestyle are required. If not attended to, they will contribute to the negative impact on academic success for college students. American colleges serve students with diverse ethnic backgrounds and needs. The needs may be driven through current or historic perspectives related to family, society, and individual understanding of their roles. Culturally, African women are expected to follow the norms of their mother-land although they reside in a new environment. Based on ethnicity, these women are commonly called African Americans as they now reside in America. However, being labeled as African Americans does not mean that they are totally infused into the American culture, as they are still locked into the culture of their mother country.

A study revealed that “there are similar experiences shared among immigrants, irrespective of where they came from or how they came”, (Van Ecke, 2005, p. 467). Most immigrants share either the excitement of new opportunities or the sense of sadness from leaving their family behind. Regardless of how well they seem to prosper in the new environment, they still experience home sickness and miss the feelings of being surrounded by those of the same cultural norms they are accustomed to. Home sickness was discovered to be a psychological reaction of international students missing their loved ones from their homeland along with their familiar surrounding (Poyrazli, 2007). This loneliness can easily lead to a depressive state of mind which ultimately results in low self-esteem. Poyrazli (2007) also reported that age and gender play a role in homesickness whereby the younger students experience more homesickness than the older ones, and women more than men. Studies confirmed that international students

experience difficulty in adjusting to their new environment, mainly due to cultural shock which denotes the vast differences in the practices of a new culture. The more different the cultures are, the more stressful the adjustments are likely to be (Yang et al., 1994).

There is often a feeling of excitement about immigrating to the U.S. for some immigrants, while others may experience some sadness and loneliness. Both feelings are normal, but the level of coping skills makes the difference, as studies reveal that, individuals with good coping skills experience less acculturative stress and are better able to assimilate into a new cultural tradition (Kamya, 1997). The coping skills may include academic, personal and social skills. These individuals are considered to have achieved great personal and social skills when they are able to participate in social events with others who shared similar experiences and have already adapted into the new culture.

Van Ecke (2005) confirmed that attachment is common among immigrant families. In other words, they all share the experience of abandonment and loss from their previous supporting environment and culture. Both include the sense of sadness when a member of the family 'back' home is ill or has passed, or more so, when they cannot be there to share the grief or say their goodbye. Despite the stressors, many immigrants successfully adapt to the new environment including, earning college degrees, becoming home owners, and starting businesses. It may take several years, many struggles and turmoil, but with perseverance, they achieve their endeavors. However, proper attachment and adaptation still do not prevent the immigrants from being vulnerable to emotional health problems (Van Ecke, 2005). Stress is still one of the most common stressors among emotional health problems. Some immigrants, who have not been able to manage the stress effectively, suffer adverse effects in their college performance.

### *Discrimination*

Being a member of a minority group can have numerous repercussions especially if the group has experienced some form of prejudice or discrimination, or both which can contribute to low self-esteem and psychological wellbeing (Schmitt et al., 2003). The common belief is that humans were made for relationship as no one wants to experience rejection. Everyone almost always actively seeks inclusion or to be a part of a group or to experience some sense of belonging. When this is not achieved, the victims could experience psychological effects which could eventually lead to mental illness.

Many international students gravitate towards the groups of the same cultural norms that borne their identity. Although these groups may not satisfy all of their needs, they do feel comfortable within the group. They often feel that they do not fit into the group with unaccustomed cultural norms (Schmitt et al., 2003). It is common for individuals to seek comfort within a group that they could identify with and also which they feel they will not be ostracized (Schmitt, et al., 2003). However, individuals are high risk for psychological disparities once they are members of a minority group (Schmitt et al., 2003). In other words, if victimization is experienced by the minority group through prejudice and other forms of discrimination, then the members' self-esteem and psychological well being will be affected regardless of their connectedness to a larger group.

International students who perceive discrimination are forced to form identification with members from their native home because similarities in the cultural norms enable easy adaptation rather than immersion into another group or culture (Ward & Rana-Deuba, 1999; Schmitt et al., 2003). These students may also form a group under

the shared identity as an outsider or a foreigner within an established culture. It is common for human beings to have a sense of belonging and attachment to others of similar interest and well being. Research has found that rejection can cause psychological problems by increasing anxiety and inducing the feelings that one's existence is no longer needed, resulting in low self-esteem (Schmitt et al., 2003).

Schmitt and Branscombe (2002) argued that the negative responses displayed during the period of perceived discrimination are most likely due to social rejection and isolation. Interestingly, it was reported that European international students experienced lower levels of perceived discrimination than other international students (Schmitt & Branscombe, 2002). In addition, discrimination could also mean that the individuals' social identity is not accepted in the new society and this could lead to isolation from individuals of other groups and participating in antisocial behaviors. Regardless if the international students experience overt discrimination, or whether it was perceived, it is a negative socio-cultural interaction which could lead to mental illness.

Census data have confirmed that one-fifth of the children in America are raised in minority immigrant homes which demand an intense transportation of cultural norms, and values (Suarez-Orozco, Carola, Todorova, & Louie, 2002). This change has often led to complications with the family structure that later affects the family dynamics. Many minority immigrant children especially African children are forced to enroll in career programs because the family felt it was best and may lead to high lucrative salaries, and easy transition into the adult world, although it may not have been the students' choice. Thus, the students are set up for failure (Akosah, 2004).

*Nursing attraction*

Ngo & Lee (2007) reported that numerous researchers have so far discussed the degree of violence, substance abuse; illegal activities and increase mental illness adolescent have developed as a response to life stressors in coping and adapting to the new American culture. It is obvious, not all immigrant adolescents are engaged in the above activities, but some are (Ngo & Lee, 2007). Those adolescents who are not involved in deviant behaviors but have difficulty coping to stressors of acculturation may be the very ones to enroll in a healthcare career or choose nursing, if not already enrolled, since it is in demand with attractive bonuses and excellent benefits and relatively high salary (Brown, 2008). In addition, nurses can contract themselves through agencies and obtain substantial earnings besides their regular salaried employment. With the current nursing shortage, nurses are provided the opportunity to work in other states that have established nurse licenses reciprocity (NCSBN, 2009). This prevalence allows nurses to choose the place they prefer to raise their family. They are not bound like other employment status to a job in a specific area of employment.

Moreover, nurses are not bound to a specific retirement age. Nurses as they advance in age can still work one or two days a week and still sustain a substantially high quality of life. In this field of employment the diversity is so rich and specialties are in great demand that nurses are not confine to bedside care. Regardless of the premiere attraction of the nursing career, there is still severe shortage. It beholds the government and stakeholders to contribute to the success integration of nursing students into the American society to address the shortage. The influx of immigrants into the United States

is here to stay. As such, it is important for the success of diverse nursing students in order to attend and provide culturally competent care. A strategic plan was initiated by the American Nurses Association (ANA) in 2002 and endorsed by numerous nursing organizations with one of the domains being to increase the diversity of nursing students, nursing faculty and members of nursing organizations (Noone, 2008).

### *Theoretical frameworks*

Schmitt et al. (2003) discussed the rejection identification model as consisting of minority group identification, perceived discrimination, and psychological well-being. The model demonstrates that members of a minority group can easily increase group cohesion once prejudice and discrimination has been perceived. The individuals see themselves as having a shared identity, and henceforth some cling together for support, some for venting and others to confirm their beliefs. This model was validated for African American studies especially women (Schmitt et al., 2003). It is very easy for a group's identification to be recognized by a common history and a shared identity.

Among the many challenges to nursing faculty are two critical issues, the shortage of nurses and the need to recruit students from the entire pool of student prospects (Xu et al., 2005). These challenges create the necessity for universities and colleges to develop strategies to encourage minority students to enter nursing as a career, especially due to the fact that minorities are under represented in nursing. As diversity in the US population increases so does the number of persons of African and Asian descents. Xu et al. (2005) provided a model for assessing differences between people in cultural groups with emphasis on (a) communication, (b) space, (c) time, (d) socialization, (e) environmental control, and (f) biological variation. The model has been constantly used

in nursing and allied health. According to the authors, understanding the six phenomena is the first step in appreciating the diversity that exists between individuals from varying backgrounds. If this step is accomplished, the nursing faculty will be better able to understand and be a part of the adjustment into the American culture. Remember, lack of acculturation and mal-adaptation would affect learning. The students have already begun to value success at any cost such as by whatever means necessary, meaning some may have already indulged in deviant behaviors such as plagiarism, and cheating to succeed (Lipsett, 2004). Stress and anxiety to succeed coupled with the value to succeed are factors that could influence learners to be dishonest. Xu et al. (2005) reported that “culturally competent faculty could facilitate learning by understanding and adapting personal behaviors to the needs of students with difficult cultural orientation” (p. 9). The nursing students need to be proficient in caring for patients from diverse cultures while maintaining their own values and beliefs.

### Literature of the Research Variables

#### *Acculturation*

Review of relevant literature documented that acculturation is often a stressful process for immigrants as they become acclimated into a new culture. Acculturation involves a great deal of adjustment into the new culture that may include behavior attitudes, norms and values (Paukert, Pettit, Perez, & Walker 2006). Acculturation stress is an important issue to discuss due to the large percentage of immigrants in the United States who are affected. Stressors experienced by immigrants, their offspring (second generation) and their grand children (third generation) may differ in accordance with the

differing degrees of acculturation level achieved by each generation (Blake, 2006). Previous researchers have confirmed that self-esteem and social support have an impact on acculturative stress and other psychosocial variables (Paukert et al., 2006). Very often when social support is limited, the individuals suffer with low self esteem, which affects their adaptation and later results in psychosocial problems. Finch & Vega (2003) reported on a study that used logistic regression to determine the relationship between acculturation, stress, and social support on health. “The respondents exhibited very high rates of social support and moderately low rates of acculturative stress caused by language deficiency,” (Finch & Vega, 2003, p. 112). The conclusion drawn was, as the level of social support increase, there was a corresponding decrease in acculturative stress as expected.

Constantine & Okazaki (2004) also reported on a study about acculturation, stress, self-concealment and social self- efficiency involving international college students from Africa, Asia, and Latin America. The research findings revealed that these students faced many stressors such as language barriers, academic challenges, ethnic identity, immigration status, and adapting to a new culture. Many of the students who experienced acculturative stress expressed clearly that they were not comfortable to seek psychological help to address this issue. This was due to cultural barriers and language differences with counselors, which forced them to undergo self-concealment. In addition, it was discovered that students who were more proficient in the English language were better able to cope and adjust to the challenges faced in the new country.

Landrine & Klonoff (2004) described the use of the behavioral theory of acculturation to initiate cultural change in behaviors among ethnic minorities. It is a bi-

dimensional model meaning that similar health behaviors among different ethnic diverse groups elicit opposite effects. The model includes an outline of ways to increase health promotion practices in an effort to reduce health disparities among ethnic minority groups. The authors concluded that culture changes do affect the health of minorities.

Yeh & Inose (2003) discovered that foreign students encounter numerous problems as they assimilate into the new environment. These problems are linked to increase in acculturative stress. The most common predictors of acculturative stress reported by many researchers are language deficits, academic demands, lack of social support, low self-esteem, and lack of self-advocacy. Good assertiveness has been linked to students who displayed great confidence and good self expression which gives them better control of their environment. Perceived English fluency could also affect acculturative stress. An international student who masters the English language tends to feel more comfortable, speaks with confidence and participates more in classroom. This is possible, as the risk of making errors or mocked at while using the English language is minimized. The international students who adapts well into the new culture, are more likely to achieve academic success and encounter less stress and adjustment problems. In addition, the American students also benefit from the cultural mix, by learning cultural information and practices from the foreign students.

Another research study reported by Poyrazil et al., (2004) found out that students with English proficiency seemed to have a smoother transition into the new environment than others with the language barrier. In other words, the student level of proficiency does have an impact on their effort to deal with the challenges of adaptation and acculturation. A majority of the students who experienced acculturative stress proclaimed

that they felt uncomfortable to seek psychological help to address the issue. This was due to cultural barriers and language differences with counselors, which forced them to undergo self-concealment. Additionally, it was discovered that students who were proficient in the English language were better able to cope and adjust to the challenges faced in the new country. This forces the individuals to seek comfort among those they could relate to. Poyrazil et al. (2004) also confirmed that “students from more traditional cultures such as Asian American cultures seemed to experience more adjustment problem than those from closer proximity and may also feel distant to the American culture” (p. 73). Finch & Vega (2003) postulate that increase acculturation among immigrants often includes socioeconomic demands and a greater inclination for coping in the United States which ultimately leads to improved health outcomes. Higher levels of acculturation among ethnic minority groups are associated with lower health maintenance and decrease health just as discrimination was shown to have a positive correlation with poor health among ethnic minority populations (Finch & Vega, (2003).

Zinnah (2007) strongly believed that African students when in Africa have different perception about the United States. He postulated that the USA is perceived as the land of many opportunities which has attracted the immigrants to take full advantage of the available resources. Like other immigrants, African students are faced with many immigration issues both before and after arrival. Most of them are interviewed by the United States immigration department in New York which is the port of embarkation for them. Each group has differing immigration matters. Some of the African students sought their conflict regarding immigration matters by way of acquiring an immigration lawyer (Zinnah, 2007). Many of these students refuse to discuss their dilemma with the United

States immigration for fear of being deported or arrested (U.S. Citizenship and Immigration Services, 2007).

The USA has had the highest attraction for immigrants than other countries in the world (Akosah, 2004). There is also a high attraction for Africans to the healthcare field especially nursing. However, coming to America is not as easy for the immigrants as it appears. Thanks to the green card lottery which was introduced by President Clinton's government in 1990. According to Akosah (2004), it is not a complicated process, as it entails filing of an application form and sending it to the appropriate authorities. However, the applicants must be citizens from the countries that are eligible to be qualified for selection. Upon selection, the winners and their immediate families migrate to the US and reside as permanent residents. The immediate families include spouses and children less than eighteen years old. After five years of residency, the families over eighteen years are eligible to apply for American citizenship (U.S. Citizenship and Immigration Services, 2007). All children under eighteen automatically gain citizenship together with the parents as they acquire theirs.

### *Social support*

Yeh & Inose (2003) posit that English fluency and social support are predictors of acculturative stress. Very often, social support systems play a great part in validating individuals' self- concept. When there is lack of social support, it is very easy for the individuals to feel rejected as they perceive selves as losers, failure or outcast. So they become depressed and isolate self. It is apparent that acculturative stress correlates with social support resulting in a negative effect (Paukert et al., 2006). The negative effect is

often perceived as internal and external factors such as English proficiency and academic difficulties as internal and discrimination as external factors. Conversely, with the increase diversity in the United States, there is also an increase in various experiences and health problems. Unfortunately, the international students are not proactive in their health care. In fact, it is not their custom to be airing their problems to others outside of the family. So it is even harder to get them to understand that help is available as needed. For some immigrants, considering a counselor may be deemed as a culture shock. Note that cultural orientation and interpersonal relationships are perceived to increase risk for depressive feelings. Thus, it is critical for mental health professionals including college counselors, university faculty, staff and administrators, and social workers to be proactive in providing services.

Dao et al., (2007) stated that international students develop negative attitudes when they lack the coping skills necessary for the new environment stressors. Hence, they then experience feelings of helplessness and have lost their autonomy. These adjustments can definitely affect international students' academic performance, especially nursing with such a rigid program. A review of the literature indicated that social support is regarded as predictors for high levels of psychological disorders among international students. Most of them have left their social support behind in their homeland. In some instances, those at home are of no help to them in America.

Van Ecke (2005) sought to determine whether immigrants are more likely to have an insecure attachment than non-immigrants. They all seem to have a sense of attachment for their country of origin, and do experience home sickness, abandonment, and the longing to return for life events such as, births, anniversaries and even death (Van Ecke,

2005). Early attachment theorists often predicted that bonding with the mother or care giver is of special interest (Suarez-Orozco et al., 2002). However, when this is not achieved due to perceived failure, the students are abandon with no social support or financial assistance which places a strain on the relationship as well as the individuals involved.

Oppedal, Roysamb, & Heyerdahl (2005) reported that discrimination exist in almost all multicultural societies which have been frequently examined as having a direct impact on the psychological well-being of immigrants. One of the main problems for the immigrants is deciding which cultural norms to keep and which to disregard.

Antonovsky's salutogenic model supports the fact that individuals can have a positive response to stressful situations or hardships irrespective of the stressors, providing that resources are made available to support their success (Lindstrom & Eriksson, 2005), According to Kim & Omizo (2005), there is a small belief among immigrants that an individual could live and enjoy both cultural worlds simultaneously.

### *Self-esteem*

Minority nurses are underrepresented in this current nursing workforce as compared to the demographics of the US ethnic groups. This makes it even more important for ethnic nursing students to be retained and supported to successful graduation and effective integration into the workforce. Noone (2008) reported that although international students attain high scores in SAT & GPA, they still experience more education and economic challenges than students from the host country. Some perceived barriers are believed to be responsible for the challenges such as, financial needs, academic difficulties, feeling isolated and experiencing discrimination from

faculty and peers and patients alike (Noone, 2008; Amaro et al., 2006). Students revealed that they felt the best way of overcoming the barriers was to associate with other foreign students (Noone, 2007). Ethnic diverse nursing students also claimed that they felt lonely and discriminated. Although it is common for nursing students to feel isolated from family and friends due to the rigid and demanding program, according to Noone (2007), the isolation felt by ethnic diverse nursing students were far more intense.

Some African students residing in the United States are supported by sponsors in Africa who happen to be Government employees. If the government changes then there is a strong possibility that the students may no longer receive support from the sponsor. This change may force the students to search for employment in an illogical manner to support self or may accept several job offers. This makes it almost impossible to work full time and study successfully in the nursing program. These events could cause additional stress for the students in which case they later acquire low self-esteem that leads to psychological problems. Zinnah (2007) argues that in order for the African students to be successful in college, they need to adjust into the American society by learning effectively how to adapt to the new culture.

Africans, more so females are raised in a society where questioning and confronting authority figure is not socially accepted. They are conditioned to have their self-esteem suppressed (Stopford, 2006). When they move to a society where their peers are encouraged to voice their opinion and exercise equality in every aspect of society, Africans find themselves inept, ill prepared and they withdraw from interactions where assertiveness is required. They become the silent minority. Nigerians readily accept the position and internalize all the emotional stress and inability to perform. This is a

crushing blow to the already fragile culturally induced self-esteem. Kanya (1997) reported that self-esteem is predictive of stress perceptions. A point to note is that even the simplest things that only appear to be stressful could influence an individual's self-esteem. Self-esteem is a person's inner perception of him or herself. It is very important because people react to self and others according to their perception of self. For instance, a negative perception often results in low self-esteem which could account for injuries to self and others (Alexander, 2001). Although there are numerous reports on the effects of stress and social support among immigrants, there is no knowledge about these variables on the physical health of African nursing students especially Nigerians. Acculturative stress and perceived minimal social support is known to have a negative connotation on health among immigrants. Foreign students require a feeling of autonomy and control as they often experience loneliness and a sense of helplessness which are high risks for low self-esteem. Remember, they do not access health care services or seek counseling as they should. Culturally, most foreign students are accustomed to solving their own issues, as it is considered a weakness to ask for help. Whether or not these immigrant students have health insurance or are capable of having regular physician visits is irrelevant. What is most important is that stress could lead to changes in physical health, but there is very little documentation on how it is possible. Despite the advance in technology the health of international students are still affected by the challenges they experience which creates more difficulty for them to achieve the goals by Healthy People 2010 (2007). Health promotion involves the increase of well being and the high level of health maintenance among individuals or ethnic groups. In January 2000, the Department of Health and Human Services launched Healthy People 2010, which is a universal, nationwide health

promotion and disease prevention program intended to meet its target of a healthy nation by 2010 (NCHS – Healthy People 2010, 2007).

### *Mental health*

Mental health is the absence of mental disorder and the state of emotional health and wellbeing whereby one has the ability to control their thoughts, feelings and behaviors (World Health Organization, 2007). It is the lost of interest in normal activities, and inhibition of taking care of self. According to McAllister (2008), mental health disorders are stigmatized and perceived as degrading, as it deprives the victims of their self-esteem, and self-worth, and places them in a mood of isolation and hopelessness. A research study reported that mental health risk is highest among college students including nursing students especially during training (Fitzroy, 1999). The aim of the study was to teach students to seek help when needed and avoid pent-up emotions, as these causes stress which can lead to depression which is a psychological disorder. It is even more challenging for international students. The main challenges are adaptation into the American culture and gaining academic success and these are associated with acculturative stress.

### Literature Related to the Method

A quantitative design will be used for the study. Edwards & Staniszewska (2000) argued that the most dominant method of inquiry in research is quantitative as it involves a more deductive process. The main aim of quantitative method of inquiry is to determine the correlation between the independent and dependent variables within the given population. This research method uses numerical data rather than literary or informative text. It may produce less in depth information but covers a broader breadth of

the information that could include numerous cases. Quantitative method also uses statistical tests such as means, standard deviation and ANOVA for the analysis (Paukert et al., 2006).

The type of quantitative research design chosen is descriptive as the respondents will be measured once only. However, a descriptive study requires an appropriate sample size in order to decrease the probability of any bias. Although some researchers feel that qualitative method of inquiry is most appropriate to investigate the feelings and behaviors of individuals, it is still high risk for bias as they may only list all the negative encounters or omit them rather than reporting both experiences for fear of being ostracized. Edwards & Staniszewska (2000) are of the notion that researchers need to be very careful as they formulate appropriate questions to be used in this research as it makes the difference in the collection and presentation of the numerical and non-numerical data.

Ngo & Le (2007) have used similar methodology and have received similar outcome as this study is seeking. According to the authors, the study was done on daily life events, including cultural and violence among Chinese and Southeast Asian immigrants. In addition to the methodology, and predicted outcome, the analyses are also the same as planned, such as means, standard deviation, and multiple regression analyses. Ngo & Le (2007) confirmed that social support and variables related to culture revealed similar expected outcomes.

#### Literature Related to Differing Methodologies

Finch & Vega (2003) studied the health status of Latinos in California using quantitative research method and logistic regression to assess the prevalence of psychiatric disorders. The data for this analysis consisted of a large number of

respondents of Mexican American. Correlations were done to investigate the extent to which social support affected health and the relationships between and among the variables. The response rate of acculturation was high although it differed according to the place of residence (Finch & Vega, 2003).

Oppedal et al. (2005) also used the same methodology in investigating the cause, effect and origin of psychiatric problems and its relation to acculturation factors among the adolescent population of immigrants. The study yielded the expected results that there are significant variations in developing psychiatric conditions and acculturation among ethnically diverse groups. There is a commonality among all the participants which is immigrant population. The procedure will be very similar in nature involving the process of using self-directed and self-motivated respondents where consent form will be completed prior to participating in the study. Even the variables are common such as stressful life events, perceived social support, and acculturation.

Paukert et al. (2006) argued that little is known about the emotional features of acculturative stress or its negative attributes. It is apparent that acculturative stress is associated with cultural or language differences. However, there are much more attributes involved including adaptation, attitudes, values, beliefs and behaviors (Paukert et al., 2006). Yeh & Inose (2003) also utilized similar methodology using means and standard deviation of international students predicting acculturative stress. The study determined the impact of being English proficient, perceived social support and connectedness as predictors of acculturation stress. Again, the results were as predicted which revealed that international students do experience numerous mental health issues.

In a study on multicultural groups of adolescents, relationship was measured among the variables. The frequency and percent of participants with similar ethnicity and gender were measured by grades, with the number of suicide attempts. The number of physical and sexual abuses was also reported. The results of the regression analyses indicated that the significant variables including stress, high risk behaviors, and suicide attempts, physical and sexual abuses by family members should be further investigated to determine its relevance to adolescent suicidal attempts (Rew, Thomas, Horner, Resnick, & Beuhring, 2001).

Most studies focus on the attitudes of immigrants but few if any have explored the significant factors that may have influenced the attitudes. In the study reported by Fung & Wong (2007), quantitative data were analyzed using stepwise multiple regressions. The aim of the study was to determine the relationship of personal beliefs, the self-assessment of mental health services and care. The results clearly distinguished that women tend to have more psychological problems. Fung & Wong (2007) stated that many Asian immigrants especially women may neglect their own mental health needs while taking care of their families, although they seemed to have more mental issues than their male counterpart. This and all similar studies are critical for understanding the interacting of international collegians to others in a new or unfamiliar cultural environment (Yeh & Inose, 2003).

## Overall Summary

Research on stress and coping has revealed that social support is one of the most effective coping mechanisms for individuals dealing with any form of stress. Lack of social support does not mean abandonment or abuse. Being there for a person physically or socially when needed is considered social support. Today's social support system includes numerous entities from an individual, friends, and families to the community at large. The opportunity for help is great, but it takes perseverance and the will to seek social support. Very often, the willingness to pursue help is determined by one's norms and values. Some individuals' cultural norms prevent them from involving others in their experiences. They prefer to strive or struggle by themselves or with the help from close acquaintances only, even if those involved are unable to help. For others, pride and low self-esteem may be the reason for their refusal to seek help. Therefore, it is very necessary for educators or all stakeholders to become aware of these cultural barriers. They may need to develop appropriate strategies whereby the students' learning needs can be met, especially those in nursing school.

Olivas & Li (2005) is of the opinion that gaining competencies in multicultural issues and beliefs will definitely contribute to effective managing of international students in higher education. Several coping strategies that could support international students were discussed including English proficiency, establishing relationships with academic advisors, instructors, peers, and strengthening relationships with social supports (Olivas, & Li (2005). Note that some international students are not willing to seek counseling and instead internalize their feelings and experiences and unknowingly decrease their self-esteem while their psychologic disposition becomes affected. Many

international students perceive academic demands as being stressful and with the additional stressors of adaptation increase the difficulty of coping effectively without causing mental illness. Olivas & Li (2005) suggested that there should be more research to address effective coping for international students including college counseling services and this will in turn improve or prevent mental illness. To date very little has been spoken of African immigrants.

According to Blake (2006) a vast majority of the African students from a study population reported that their experiences at the university they attended were great and attribute it to the fact that the family and student body were diverse. It seems easier for those of diverse ethnic groups or other foreigners as is often termed to be more understanding of those of similar ethnic groups. Some of those who reported negative experiences described their problems as more financial than sociocultural or psychological, while others reported discrimination and stereotyping from instructors (Blake, 2006; Okafor, 1986).

The general consensus from other studies among African students in the USA revealed similar issues such as immigration matters including limitations, homesickness and racial and ethnic discrimination. It should be easy to picture how frustrations from these issues could increase anxiety and lower self-esteem for the African students. The problems become more severe when these students are enrolled in nursing programs. There are substantial evidences to show that parental support and discrimination was demonstrated while family norms and support positively correlated with mental health improvement among immigrant students (Oppedal et al., 2005). There was evidence of discrimination but no specific link was made between mental health and discrimination,

in this study. However, as the family norms and support increased mental health improved. There is a strong possibility that perceived discrimination and identity crisis may have produced more symptoms that were ever reported. Cultural practices of ethnic groups are very important in understanding the way immigrants adapt over time to a new sociocultural environment (Oppedal et al., 2005). Once host competence is achieved, then there will be an increase in social support from classmates. There is a strong relationship between behavioral and emotional issues among ethnic groups. Kanya (1997) is of the notion that stress is negatively correlated with self-esteem while effective coping strategies have a positive correlation with self-esteem among African students. The main aim of the research was to determine the assimilation of African immigrants with the host country's social environment. The migration and adaptation process is complex and requires continuous effort. The purpose of this study is to determine the relationship between acculturation, social support and self esteem as predictors of mental health. This chapter presents a discussion on the literature review of international nursing students and African students especially Nigerians. Chapter 3 provides information on the methodology, setting and sampling, instrumentation, data collection and analysis of the study.

## CHAPTER 3: METHODOLOGY

### Introduction

This chapter includes the methodology used to investigate, analyze, and interpret the research findings. It covers a descriptive account of the research design, setting and sample, instrumentation and materials, data collection and analysis, and the measures taken to protect the participants' rights. The goal is to examine the relationship between acculturation, social support and self-esteem and mental health among Nigerian nursing students from Baccalaureate nursing program. The participants were recruited from 4-year nursing programs from universities in the District of Columbia and Maryland.

### Research Design

This section includes the research design used in the study including the reasons for the choice. A detailed investigation was conducted to understand the relationship among mental health and the stated predictors. The study investigated the challenges Nigerian students experience while completing their nursing education. In addition to language proficiency, social support is linked to psychological distress among international students (Dao et al., 2007).

#### *A descriptive cross-sectional survey design*

A descriptive, cross-sectional design was chosen to guide the study. It is a survey instrument that is used for data collection while the descriptive statistics aids in the interpretation. This design is a simple form of study that can be executed quickly. It is most appropriate for this study as it can determine the association between the variables

within a short period of time. No follow up is required and it is very useful for Public Health planning. This descriptive study is applicable for establishing association between variables.

The advantages of cross-sectional design are the use of population base sample rather than a convenient sample and the fact that it can be collected expeditiously (Creswell, 2003). The time factor also allows the study to be inexpensive. Another outstanding benefit lies with the researcher having control over the selection of the participants and being able to investigate several outcomes concurrently. However, a disadvantage is the potential for sampling bias, as the group size may be inadequate, influencing the internal validity of the experiment.

The longitudinal study is not appropriate for this research, as it does require an extended time period with repeated measurements. The experimental studies are also longitudinal. There is also no control group and the participants are not randomly assigned. Thus, this study does not fit a randomized controlled trial. Previous studies have used similar variables and the research studies were conducted and produced the desired outcomes using Pearson correlation. For example, Yeh & Inose (2003) examined the relationship between the independent variables and acculturative stress in a study of over 350 international students from Asia, Central/Latin America, and Africa. The purpose of the research was clearly expressed and the hypotheses and research questions were adequately developed and discussed using the t-test and ANOVA.

The research question guiding this study is investigating the relationship between acculturation, social support, self-esteem, and mental health among Nigerian nursing students in the US. The question defines the main variables to be measured. There is an

expectation in the study that significant evidence of acculturation, social support and self-esteem, exist among Nigerian nursing students and are predictors of mental health.

## Setting and Sample

### *Population*

The target population included all levels of Nigerian nursing students, from freshman to seniors, and registered nurses who are completing their Baccalaureate degrees. There are about 115 Nigerian students enrolled in Baccalaureate nursing programs at universities in the District of Columbia and Maryland that are accredited by the National League for Nursing Accrediting Commission (NLNAC)

### *Sampling Method*

Sampling involves the process of choosing a portion of the population to represent the larger population. A stratified sampling method was used to stratify the population into groups according to (a) language and (b) length of stay in the US. Recruiting participants from the universities was based on the participants' willingness to participate. Volunteering is the process of accepting to participate in the research. The sample frame included participants attending nursing programs from three universities within the DC/MD Metropolitan area. A demographic profile was completed to ensure that they met the criteria for the study.

### *Sample Size*

The sample size is very important. According to Bartlett, Kotrlik & Higgins (2001) it is imperative for the appropriate sample size to be determined in order to reduce bias among who were unable to participate or those who did not respond. In other words,

this sample of the population should make inference for the entire population. A calculated sample size of 76 was used for this study. It was estimated by using a statistical power analysis table with an alpha level of 0.05, and 3 predictors. To achieve power of .80 and a medium effect size ( $f^2 = 0.15$ ), a sample size of 76 was required (Cohen, 1988). According to Cohen an effect size greater than 0.35 is considered large, 0.15 is moderate, 0.1 is small, and anything smaller than 0.1 is of little importance.

### *Selected Sample*

The participants were not randomly assigned to specific groups because of overlapping nature of their period of acculturation. Instead, the participants were grouped according to their native language and the length of stay in the US. They assimilated into the society at different times resulting in varying needs. There are three main languages spoken by the Nigerian students known as Hausa, Igbo & Yoruba (Omotosho, 1988). A vast majority of Nigerians communicate using these tribal languages apart from English. Congregating together with a common identity has afforded them the opportunity to communicate in their native language in place of the English language.

A minimum of three nursing schools in the Washington DC/MD Metropolitan area were contacted. The main sample size needed to produce valid results for this study with an 80 % confidence level is 76 which were characterized using a stratified method based on age, language and length of stay. There were 81 participants but five were omitted due to incomplete surveys.

### *Inclusion Criteria*

The criteria for participation in this research were as follows:

The participants confirmed that their country of origin is Nigeria and have lived there for at least seven years before migrating to the US. Studies reported that the older the candidates are at the time of transition into a new culture, harder is the acculturation process. Acquisition of a non-native language after six years old is often delivered with an accent dominated by the native language (Locke, 1993). At seven the language and speech from Nigeria has already been influenced. They have started their initial schooling, and have immersed in their cultural foods, customs, beliefs, and practices. Most likely, they would have already formed relationships and developed an identity. The students had to be eighteen years and over and enrolled in a Baccalaureate nursing program.

### *Exclusion Criteria*

The exclusion criteria for participation involved the participants whose parents are originally from Nigeria but they were born elsewhere. The study also excluded those who migrated from Nigeria before the age of seven. According to Locke (1993) there language would not have been influenced by the native country at that age. Most likely at such a tender age there would have been faint memory of any relationship to the extent of causing any adverse effect such as loneliness or fear of migrating. The minimum number of years spent in the US should be three years by which time there should be some influence from the new culture.

## Instrumentation and Materials

### *1- Demographic Questionnaire*

This instrument included the date of birth, gender, age at time of entry. The place of birth played a significant role in determining the criteria for inclusion of study as it confirmed the place of origin to be Nigeria. Equally important was the age when the subject migrated to avoid external influence. Marital status and parenthood are also important as they can be influential in regards to stress (See Appendix A). The demographic data of Nigerian nursing students were computed using the mean or average and the standard deviation which measured the spread of the data or the relationship of the mean to the rest of the data (Tabachnick & Fidell, 2001). The standard deviation was estimated using  $(n-1)$  (Table 2.).

### *2. Survey Instruments*

There were four instruments employed to measure each variable within the study (Appendix D). The instruments used in this study were previously utilized in studies with similar variables where the reliabilities were completed with use of the Cronbach's alpha coefficient. The validity of an instrument is essential to the success of the study or research endeavor, meaning the study accurately measured the research concepts (Creswell, 2003). It is the extent to which a participant actually possesses the characteristics that are being examined. Pearson's correlation was used to measure the degree of relationship between each predictor variable, acculturation, social support and self-esteem and the criterion variable mental health (Table 5). A correlation of +1 refers to a positive relationship between the variables (Tabachnick & Fidell, 2001).

*a. Acculturation:* Acculturation was measured by the American International Relations Scale (AIRS). This scale was specifically designed to measure the acculturation of international students and included a 34-item questionnaire (Sodowsky & Plake, 1991, 1992). A factor analysis was employed to develop the instrument. The AIRS instrument has a high degree of content validity by successfully assessing acculturation, language use and factors involved in cultural adaptations (Sodowsky & Plake, 1991). The Cronbach alpha coefficient for acculturation was reported as .72 and .66 for perceived prejudice and .78 for the full instrument ((Sodowsky & Plake, 1991, p. 215). The scale has measured the extent to which a participant actually possessed perceived prejudice. The questionnaire consisted of eight multiple choice questions and 26 Likert – type questions from strongly agree to strongly disagree. The study by Atri et al. (2006), have also utilized the scale and have supported its reliability and validity.

*b. Social support:* This variable was evaluated by the Interpersonal Support Evaluation List (ISEL) with use of a 12-item version of the scale. Cohen & Hoberman (1983) developed the ISEL to measure social support, which includes various types of supports such as, emotional, instrumental, and informational. Other instruments may only be able to assess one aspect of family functioning or can only be appropriate for a particular population. Reliability and validity establish the credibility of an instrument. ISEL was used in a study by Cohen & Willis (1985) relating to social support and stress, and the findings supported the reliability and validity of the instrument. Cohen & Willis (1985) have expressed adequate reliability. The instrument included questions from three categories, 1) companionship support, 2) appraisal or emotional support such as an individual in the physical realm to communicate with, and 3) instrumental support which

is tangible and substantial (Atri et al. (2006), The responses ranged from definitely false to definitely true. The original version of the ISEL has 40 items but only 12 were chosen for this research study. This questionnaire measured the social support satisfaction rather than the amount of support rendered. The questionnaire was used on numerous occasions to measure acculturative stress (Yeh & Inose, 2003).

*c. Self-esteem:* The Rosenberg self-esteem scale was designed to measure feelings of self-worth and includes 10 items (Rosenberg, 1989). This instrument was used in research for over three decades to measure self-esteem. The measurement yielded the same results overtime and it did measure what was expected which was the relationship between the concepts. The scale was tested for reliability and validity in numerous studies in previous years. It also has a high reliability with a Cronbach's alpha within the range of .77 to .82 for numerous various samples and correlation in the range of .82 to .88 (Blascovich and Tomaka, 1993). The 10-question scale in Rosenberg's self-esteem scale has established a causal relationship between the construct and the predictor variables (Rosenberg, 1989). The scale ranged from 0-30, with 30 being the highest score possible.

*d. Mental health:* Mental health which is regarded as psychological distress was measured by the K10 & K6 scales. Kessler et al. (2003) reported that the scales were developed with help from the U.S. National Center for Health Statistics and were also used in the redesign of the National Health Interview Survey (NHIS). These scales were tested to screen for serious mental illness and were reported to have high reliability and validity. According to Kessler et al. (2003), the K6 scale was appropriate in predicting serious mental illness (SMI). Modified versions of the scales were used as measurement for the (WHO –DAS) World Health Organization - Disability Assessment Schedule

(Rehm et al., 1999). Mental health dysfunction is characterized as depressed state, low self-esteem and a loss of interest in normal activities and this mood keeps the victims isolated. The questions addressed the participants' state of well being within the past 30 days.

## Data Collection and Analysis

### *Procedure*

After the University Research Review board approved the study then the following procedures began. The researcher proceeded in applying to the institution's review board. Upon receipt of acceptance, the researcher was ready to proceed.

1. The participants were contacted via email, by their nursing department head. The entire population was 81 and a minimum of 76 were used which could skew the judgment.
2. The purpose of the study was explained in details to the participants so that they could make an informed consent (Appendix A).
3. The participants completed the written consent once the inclusion criteria were met (Appendix B).
4. The full requirements for the study and the reason this subgroup was selected were stated.
5. Next, the demographic questionnaire was completed which confirmed the inclusion criteria (Appendix C).
6. The participants were assured of the anonymity and confidentiality during the research study and thereafter.

7. The participants were then ready to begin the research questionnaires which included questions on acculturation, social support, self-esteem and mental health.
8. The process took less than twenty minutes to complete.
9. It took place online.
10. The whole questionnaire was administered through Monkey Survey, an online survey tool.
11. There were no interviews.

Data collection was set after approval was given using survey questionnaires which did not utilize more than twenty minutes. All the participants were notified by the internet and the university's web page. The students were provided with detailed information to make informed decision about participating in the study. Particulars of the study included the consent form, purpose, and the reason was explained in detail to ensure a clear understanding that supported voluntary participation. Survey participants were asked demographic questions such as age, gender, native language, and number of years spent in the US. A descriptive analysis such as means and frequencies were conducted to examine the demographic variables (Table 5).

Similarly, data retrieved from the survey were transposed to a statistical software program, SPSS 17, and analyzed. Multiple analyses were conducted to measure the significance of the relationship between the predictor variables and the criterion variables including the distributions of means and standard deviations. A quantitative design was employed along with multiple regression data analysis technique based on a linear bi-variant statistical approach to make prediction about the correlation between the criterion variable and the predictor variables. This analysis design was chosen to determine the

best prediction of mental health for Nigerian nursing students with acculturation, social support and self-esteem. According to Atri et al., (2006), acculturation and social support are the most significant predictors of mental health. Ngo & Le (2007) reported on a study involving the rigors of daily living activities and social support involving adolescents of Chinese and Southeast Asian origin.

### *Data Analysis*

Multiple linear regression allow for investigating the correlation of a greater number of independent variables against the dependent variables. It involves one dependent variable and many independent variables that can be correlated independently of each other. It also determines the predictive power of each variable. The correlation approach allowed for proper analysis of the relationship between the variables (Table 3). As such, it is appropriate for studies with multiple variables. However, there are some assumptions for regression that should be addressed.

### *Assumptions for Regression*

Failure to reject the HO satisfies the assumption of multiple regressions. There are several assumptions for regression analysis which should be tested, such as:

1. The assumption is that the independent variables have a linear or straight line relationship with the dependent variable. Multiple regressions can only accurately estimate linear relationships (Cohen & Cohen, 1983; Berry et al., 1985).
2. Assumption that variables are normally distributed equally. In order to be assured, the researcher can decrease the probability of making Type I and Type II errors

- and improve accuracy by removing the univariate and bivariate outliers (extreme values). Note, the rate of change for the dependent and independent variables are the same (Tabachnick & Fidell, 2001),
3. Assumption that variables are measured without reliability errors. The higher the Cronbach alpha, higher is the reliability. According to Tabachnick & Fidell, (2001), although most researchers set their Cronbach alpha below .80, it was reported by other researchers that an average Chronbach alpha around .83 helps in reducing the risk of Type II errors.
  4. Assumption of homogeneity means that the dependent variable exhibits similar amount of variance of error across the range of values for the independent variables, thereby increasing the risk of Type I error (Berry, Feldman, & Feldman, 1997-2010).
  5. The data need to be checked for outliers. These are individuals who often are not from the sample population or were incurred due to typing errors. This can be checked visually.

### *Research Hypotheses*

Q1: What is the impact of Acculturation on mental health among Nigerian nursing students?

HO: Acculturation has no impact on mental health among Nigerian nursing students.

HA: Acculturation has an impact on mental health among Nigerian nursing students.

It is suggested that the more acculturation or adaptation foreign students, and more specifically African students, experience, the less mental health behaviors will be exhibited.

Hypothesis 2:

Q 2: What is the impact of Social support on mental health among Nigerian nursing students?

HO: Social support has no impact on mental health among Nigerian nursing students.

HA: Social support has an impact on mental health among Nigerian nursing students

Hypothesis 3:

Q 3: What is the impact of Self-esteem on mental health among Nigerian nursing students?

HO: Self-esteem has no impact on mental health among Nigerian nursing students.

HA: Self-esteem has an impact on mental health among Nigerian nursing students.

### *Analysis Plan*

First, the demographic data was compiled together to create a data set for the statistical analyses. Each variable was then measured in standard deviation independently. The data was analyzed using descriptive statistics which included the means, standard deviations along with correlation coefficients. Pearson Correlation determined the correlation between the variables which could be between 0.00 (meaning no correlation) and 1.0. The hypotheses testing were done using the t-test. ANOVA which is a statistical technique is really the analysis of variance, and was used to test the null hypotheses (Tabachnick & Fidell, 2001). The means of the groups were compared for effectiveness (Table 6).

### Measures Taken for Protection of Participants' Rights

The students were provided with detailed information about the study in order to make informed decision about participation in the study (Appendix A). Participation was voluntary and there were no penalty by the researcher or the university to participate or later withdraw from the study. The confidentiality of the students will be maintained. The names will remain anonymous meaning the identity of the participants will not be disclosed. The consent form was signed prior to completing the questionnaire (Appendix B).

### Summary

The goal of this study is to provide valuable information for nurse educators, hospital administrators, and college professors to utilize in order to bring about social change while embracing success among Nigerian nursing students. It is an area of great concern due to multicultural healthcare environment in the US. Not only will the stakeholders be able to provide high quality nursing education and practice, but also to tailor their program to meet individual needs and personal learning. Hopefully other international nursing students including African students will also benefit from the study.

## CHAPTER 4: RESULTS

### Introduction

Chapter four presents the results, analysis, and interpretation of the research findings in relation to the research questions and hypotheses. It includes the reliability coefficient of the subscales, the demographic data of the participants and the results from the regression models. The research questions examined the impact of each interdependent variable, acculturation, social support, and self-esteem as predictors of mental health and their extent among Nigerian nursing students.

#### *Participants*

The sample represented 76 nursing students enrolled in Baccalaureate nursing programs from three universities in the DC/MD Metropolitan area. A university in Virginia did not participate in the study as planned. According to Cohen (1988), a sample size of 76 is required to achieve power of .80 and a medium effect size ( $f^2 = 0.15$ ). Participants were required to be at least 18 years of age and lived in the USA for a minimum of three years. There were 81 participants, but five were excluded due to incomplete surveys. The respondents identified themselves as African immigrants who were born in Nigeria and one was only 10 years old on arrival in the US. Seven was the minimum age required for the participants to be at time of arrival.

### Research Tools

#### *Reliability Coefficients for Instruments*

*Acculturation:* The American International Relations Scale (AIRS) was used to measure acculturation. This scale was initially designed to measure the acculturation of international

students and included a 34-item questionnaire (Sodowsky & Plake, 1991, 1992). A factor analysis was employed to develop the instrument. The AIRS instrument has a high degree of content validity by successfully assessing acculturation, language use and factors involved in cultural adaptations (Sodowsky & Plake, 1991). The Cronbach alpha coefficient for acculturation was reported as .72 and .66 for perceived prejudice and .78 for the full instrument ((Sodowsky & Plake, 1991, p. 215). The scale has measured the extent to which a participant actually possessed perceived prejudice. The questionnaire consisted of eight multiple choice questions and 26 Likert – type questions from strongly agree to strongly disagree. Atri et al. (2006) also utilized the scale and support its reliability and validity.

*Social support:* This variable was evaluated by the Interpersonal Support Evaluation List (ISEL), using a 12-item version of the list. Cohen & Hoberman (1983) developed the ISEL to measure social support, which includes various types of supports such as, emotional, instrumental, and informational. Other instruments may only be able to assess one aspect of family functioning or can only be appropriate for a particular population. Reliability and validity establish the credibility of an instrument. ISEL was used in a study by Cohen & Willis (1985) relating to social support and stress, and the findings supported the reliability and validity of the instrument. Cohen & Willis (1985) have expressed adequate reliability. The instrument included questions from three categories: (a) companionship support, (b) appraisal or emotional support such as an individual in the physical realm to communicate with, and (c) instrumental support which is tangible and substantial (Atri et al., 2006), The responses ranged from definitely false to definitely true. The original version of the ISEL has 40 items but only 12 were deemed necessary for this research study. This questionnaire measured social support satisfaction and not necessary

and not necessary the amount of support rendered. It was also was used on numerous occasions to measure acculturative stress (Yeh & Inose, 2003).

*Self-esteem:* The Rosenberg self-esteem scale consists of 10 items and is designed to measure feelings of self-worth (Rosenberg, 1989). This instrument was used in research for over three decades to measure self-esteem. The measurement yielded the same results overtime and measured what was expected which was the relationship between the concepts. The reliability and validity of the scale were tested in numerous studies in previous years. “The scale has a high reliability with a Cronbach’s alpha within the range of .77 to .82 for various samples and a correlation ranging from .82 to .88,” (Blascovich and Tomaka, 1993, p. 115). The 10 questions in Rosenberg’s self-esteem scale have established a causal relationship between the construct and the predictor variables (Rosenberg, 1989). The scale ranged from 0-30, with 30 being the highest score possible.

*Mental health:* Mental health which is regarded as psychological distress was measured by the K10 & K6 scales. These scales were developed with assistance from the U.S. National Center for Health Statistics and used in redesigning the National Health Interview Survey (NHIS). Kessler et al. (2003) reported that the scales were tested to screen for serious mental illness and were reported to have high reliability and validity. According to Kessler et al. (2003), the K6 scale was appropriate in predicting serious mental illness (SMI). Modified versions of the scales were used as measurement for the (WHO –DAS) World Health Organization - Disability Assessment Schedule (Rehm et al., 1999). Mental health dysfunction is characterized as depressed state, low self-esteem and a loss of interest in normal activities and this mood keeps the victims isolated. The questions addressed the participants’ state of well being within the past 30 days.

The research instruments were used appropriately in the study and the findings are illustrated in Table 3 consistent with the Cronbach's alpha for each instrument as reported in Chapter 3. Cronbach's alpha measures how each individual item in a scale correlates with the remaining items. It measures consistency among each item in a survey instrument by testing its reliability (Creswell, 2003). Alpha values of 0.7 to 0.8 are regarded as satisfactory. In this study, most of the items were reliable at the appropriate level. The subscale acculturation and companionship from the social support scale yielded low Cronbach's alpha which was not surprising as the findings revealed that Nigerian students are not fully adapted into the host culture (Table 3). However, the low Cronbach's alpha levels will be discussed in chapter five.

The alpha levels for the other subscales of the social support scale were high. The responses to the questions were consistent with the researcher's expectations and will be discussed in chapter five. The study revealed a high Cronbach's alpha of 0.98 for self-esteem which is consistent with the range of 0.82 - 0.88 reported by Blascovich and Tomaka (1993). This tool has been in use for several years. The mental health alpha level was not as high as expected which could be due to the question rather than the tool itself, as this tool was reported to have high reliability and validity.

Table 3

*Cronbach's alpha for Acculturation, Social Support, Self-Esteem and Mental Health*

Variable	Subscale	Alpha levels
Acculturation	Language usage	0.753
	Perceived prejudice	0.774
	Acculturation	0.388
Social support	Companionship	0.386
	Appraisal	0.852
	Tangible	0.756
Self-esteem	Feelings	0.976
Mental health		0.649

*Demographic Data*

The demographic data of the participants are displayed in Tables 4 and 5. As seen in Table 4 (39.4%,  $n=30$ ), of the 76 participants' ages ranged between 18-29 years, 27 (35.5%,  $n=27$ ) fall between the ages of 30-39, 18 (23.6%,  $n=23$ ) fall within age 40 – 49 years and one between age 50-59 years. The participants mean age was  $32 \pm 8$  years with a median age of 23. A large proportion of the participants were females (75%) as well as being single (44.7%,  $n=34$ ). Of the three main languages spoken by Nigerians, almost half of them (44.7%,  $n=34$ ) spoke in Igbo. More than half of the participants (60.5%,  $n=46$ ) are parents. Only 22 (28.9%,  $n=22$ ) of the 76 participants were seen by a counselor in the US. Table 5 shows on average they spent  $11 \pm 5$  years in the US with most of them (60%) less than 10 years.

Table 4

*Socio-demographic Data*

Variable	Number of Participants ( <i>n</i> = 76)	%
<b>Age of Participants</b> (in years)		
18 – 29	30	39.4
30 – 39	27	35.5
40 – 49	18	23.6
50 – 59	1	1.3
<b>Participants' length of stay in the United States</b> (in years)		
0 – 10	46	60.5
> 10	30	39.4
<b>Gender</b>		
1. Male	19	25.0
2. Female	57	75.0
<b>Marital Status</b>		
1. Married	32	42.1
2. Single	34	44.7
3. Divorced	10	13.1
<b>Language spoken</b>		
1. Hausa	14	18.4
2. Igbo	34	44.7
3. Yoruba	28	36.8
<b>Participants who are parents</b>		
1. Yes	46	60.5
2. No	30	39.4

(table continues)

(table continued)

Variable	Number of Participants ( <i>n</i> = 76)	%
<b>Participants seen by a counselor in the US</b>		
1. Yes	22	28.9
2. No	54	71.0

Table 5

*The Demographic Data of Nigerian Nursing Students (n=76)*

Variable	<i>N</i>	Minimum	Maximum	Mean	Std. Deviation
Age (in years)	76	19	51	32.45	7.750
Length of stay in the United States (in years)	76	4	29	11.42	4.908

### Data Analysis

#### *Findings*

Table 6 displays the means and standard deviation for the acculturation of the surveyed sample. The three constructs of acculturation are language usage, perceived prejudice and acculturation. Language usage had a mean of 28.870 out of a score of 100 (standard deviation =5.399), perceived prejudice had a mean of 63.170 (standard deviation = 17.206), and acculturation had a mean of 33.370 (standard deviation = 10.632). The standard deviation for perceived prejudice is very high which is significant and is an indication of how the Nigerian students view situations and individuals in the host culture. Due to their perception of the host

culture which implies lack of trust, the students have taken on a character trait by viewing everyone from a prejudicial state.

Table 7 displays the means and standard deviation for the constructs of social support for the surveyed sample. Companionship support had a mean of 11.360 with a range from 4 to 16 (standard deviation = 3.093), appraisal support had a mean of 10.930 (standard deviation = 3.212), and for tangible support the mean was 11.160 (standard deviation = 3.263). The standard deviation for each construct of social support bears similar significance with respect to the standard deviation.

Table 8 displays the means and standard deviation for self-esteem of the surveyed sample. Feelings, the main construct had a mean of 21.560 with a range from 0 to 30 (standard deviation = 6.806).

Table 6

*Means and Standard Deviations for the Nigerian Nursing Students' Acculturation (n=76)*

	<i>N</i>	Mean	Std. Deviation
Language usage	76	28.870	5.399
Perceived prejudice	76	63.170	17.206
Acculturation	76	33.370	10.632

Table 7

*Means and Standard Deviations for the Nigerian Nursing Students' Social support (n=76)*

	<i>N</i>	Mean	Std. Deviation
Companionship	76	11.360	3.093
Appraisal	76	10.930	3.212
Tangible	76	11.160	3.263

Table 8

*Means and Standard Deviations for the Nigerian Nursing Students' Self-esteem (n=76)*

	<i>N</i>	Mean	Std. Deviation
Feelings	76	21.560	6.806

Table 9 illustrates the distribution of means and standard deviation for the mental health of the sample of Nigerian nursing students. The instrument comprises of 6 items of which each have a possible range of 1 -5. The means and standard deviation of each item is displayed in Table 10. The total possible score in mental health is ranged from 6 to 30 and the mean was 25.010 (standard deviation = 4.020) which shows an 83 % significance.

Table 9

*Means and Standard Deviations for the Nigerian Nursing Students' Mental Health (n=76)*

	<i>N</i>	Possible Range	Mean	Std. Deviation
During the past 30 days, about how often did you feel nervous?	76	1-5	4.18	0.533
During the past 30 days, about how often did you feel hopeless?	76	1-5	4.24	0.463
During the past 30 days, about how often did you feel restless or fidgety?	76	1-5	4.66	0.556

(table continues)

(table continued)

	<i>N</i>	Possible Range	Mean	Std. Deviation
How often did you feel so depressed that nothing could cheer you up?	76	1-5	4.26	0.440
During the past 30 days, about how often did you feel that everything was an effort?	76	1-5	2.82	1.633
During the past 30 days, about how often did you feel worthless?	76	1-5	4.85	0.395
Total Mental Health Score	76	6-30	25.010	4.020

### Analysis of Variables

#### *Research Hypotheses*

The first question (Q1) to be tested: What is the impact of Acculturation on mental health among Nigerian nursing students?

H10: Acculturation has no impact on mental health among Nigerian nursing students.

H1A: Acculturation has an impact on mental health among Nigerian nursing students.

It is suggested that the more acculturation or adaptation foreign students, and more specifically African students, experience, the less mental health behaviors will be exhibited.

Question 2:

Q2: What is the impact of Social support on mental health among Nigerian nursing students?

H2O: Social support has no impact on mental health among Nigerian nursing students.

H2A: Social support has an impact on mental health among Nigerian nursing students

Question 3:

Q3: What is the impact of Self-esteem on mental health among Nigerian nursing students?

H3O: Self-esteem has no impact on mental health among Nigerian nursing students.

H3A: Self-esteem has an impact on mental health among Nigerian nursing students.

Table 10 illustrates the chi square analyses comparing males and females with age, length of stay in years in the US, marital status, parenthood and language spoken to test for differences. Chi-square is useful to test if in fact the frequency distribution for a variable is consistent with expectations. Chi square also tests the null hypothesis which states that any observed data is due solely by chance, therefore, there is no relationship meaning; there is no significant difference between the results expected and those observed. The only statistically significant factor by gender was the language spoken but there were no significant differences by gender. The stronger the p-value, stronger will be the evidence against the null hypothesis. The purpose of hypothesis testing is to determine whether a relationship exists between the independent and dependent variables and to what extent.

Table 10

*Chi-square analyses comparing males and females with the demographic variables*

Variable		Male Frequency (%)	Female Frequency (%)	Total	Chi Square	P-value
Age	18-29	6 (20.0)	24 (80.0)	30		
	30-39	11 (40.7)	16 (59.3)	27		
	40-49	2 (11.1)	16 (88.9)	18		
	50-59	0 (0)	1(100)	1		
	Total	19	57	76	27.670	0.428
Length of Stay	0-10	13 (28.3)	33 (71.7)	46		
	>10	6 (20.0)	24 (80.0)	30		
	Total	19	57	76	13.095	0.666
Marital Status	Married	8 (25.0)	24 (75.0)	32		
	Single	8 (23.5)	26 (76.5)	34		
	Divorce	3 (30.0)	7 (70.0)	10		
	Total	19	57	76	0.173	0.917
Parents	Yes	13 (28.3)	33 (71.7)	46		
	No	6 (20.0)	24 (80.0)	30		
	Total	19	57	76	0.661	0.416
Lang Spoken	Hausa	7 (50.0)	7 (50.0)	14		
	Igbo	4 (11.8)	30 (88.2)	34		
	Yoruba	8 (28.6)	20 (71.4)	28		

(table continued)

Variable	Male Frequency (%)	Female Frequency (%)	Total	Chi Square	P-value
Total	19	57	76	8.034	0.018
Counselor Yes	5 (22.7)	17 (77.3)	22		
No	14 (26.0)	40 (74.0)	54		
Total	19	57	76	0.374	0.829

#### Research Questions

Correlation was done to determine the relationship existing among the independent and dependent variables which could be between 0.00 (which is no correlation) and 1.0. The relationship between mental health and the independent variables were found for several variables such as age, length of stay in the US, gender, marital status, language spoken, and whether or not they have been seen be a counselor in the US.

#### *Research Question 1*

The first research question examined the impact of Acculturation on mental health among Nigerian nursing students. Pearson's correlation coefficient was the method used to measure the correlation as it gives information on the degree of the correlation as well as the direction of the correlation. These correlations are shown in Table 11. There is a moderately negative correlation between acculturation and mental health which indicates that high scores in one variable are associated with low scores in the other variable. These results imply that stronger the acculturation less mental health behaviors will be exhibited ( $r = -.322, p < .01$ ).

### Research Question 2

The second research question examined the impact of Social support on mental health among Nigerian nursing students. There is a significant correlation between social support and mental health ( $r = -.077, p < .01$ ).

### Research Question 3

The third research question examined the impact of Self-esteem on mental health among Nigerian nursing students. There is a moderately positive association between mental health and self-esteem, which indicates that as the level of self-esteem increases mental health also improves ( $r = .364, p < .01$ ).

Table 11

### Correlations

Variable		Acculturation	Social	Self-esteem	Mental
		Support		Health	
Acculturation	Pearson Correlation	1	.221	-.493**	-.322**
	Sig. (2-tailed)		.055	.000	.005
	<i>N</i>	76	76	76	76
Social Support	Pearson Correlation	.221	1	-.118	-.077
	Sig. (2-tailed)	.055		.311	.511
	<i>N</i>	76	76	76	76
Self-esteem	Pearson Correlation	-.493**	-.118	1	.364**
	Sig. (2-tailed)	.000	.311		.001
	<i>N</i>	76	76	76	76
Mental Health	Pearson Correlation	-.322**	-.077	.364**	1
	Sig. (2-tailed)	.005	.511	.001	
	<i>N</i>	76	76	76	76

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

### *Regression Model*

Regression analysis is the prediction of the linear relationship between a dependent variable and each independent variable. This study used multiple regression analysis to determine the influence of acculturation, social support, and self-esteem (independent variables) on mental health (dependent variable) in the model, as shown in Table 12. All of the predictor or independent variables were entered simultaneous using the enter method. No variable was removed. Note that regression analysis involves some assumptions. Take for instance weight and height according to the developmental growth chart, weight is plotted against height, meaning as weight increases height is expected to increase. Similarly, if  $x$  represents weight and  $y$  represents height, the  $x$  value should produce a particular  $y$  score, and both should be able to be plotted on a straight line called the regression line which demonstrates the straight line relationship. This is referred as the linearity assumption. Another assumption is called the normality assumption which is considered a normal distribution as it should take the form of a bell-shaped curve skewed to the right. Figure 1 illustrates a histogram for the residuals (dependent variable) mental health, but it was not normally distributed, as it is skewed to the left. The normal p-p plot was found to be linear as shown in Figure 2. The adjusted  $R^2$  which measured the proportion of variance in the dependent variable as explained by the independent variables was 0.124. This means that the independent variables account for only 12.4 % of the variation in the mental health scores for the participants (Table 12). Hence, a natural log transformation was conducted. The natural log transfer of the dependent variable resulted in normal distribution of the dependent variable as shown in Figure 3. The residuals in the normal p-p plot of regression were also found to be linear (Figure 4).

Table 12

*Model Summary*<sup>d</sup>

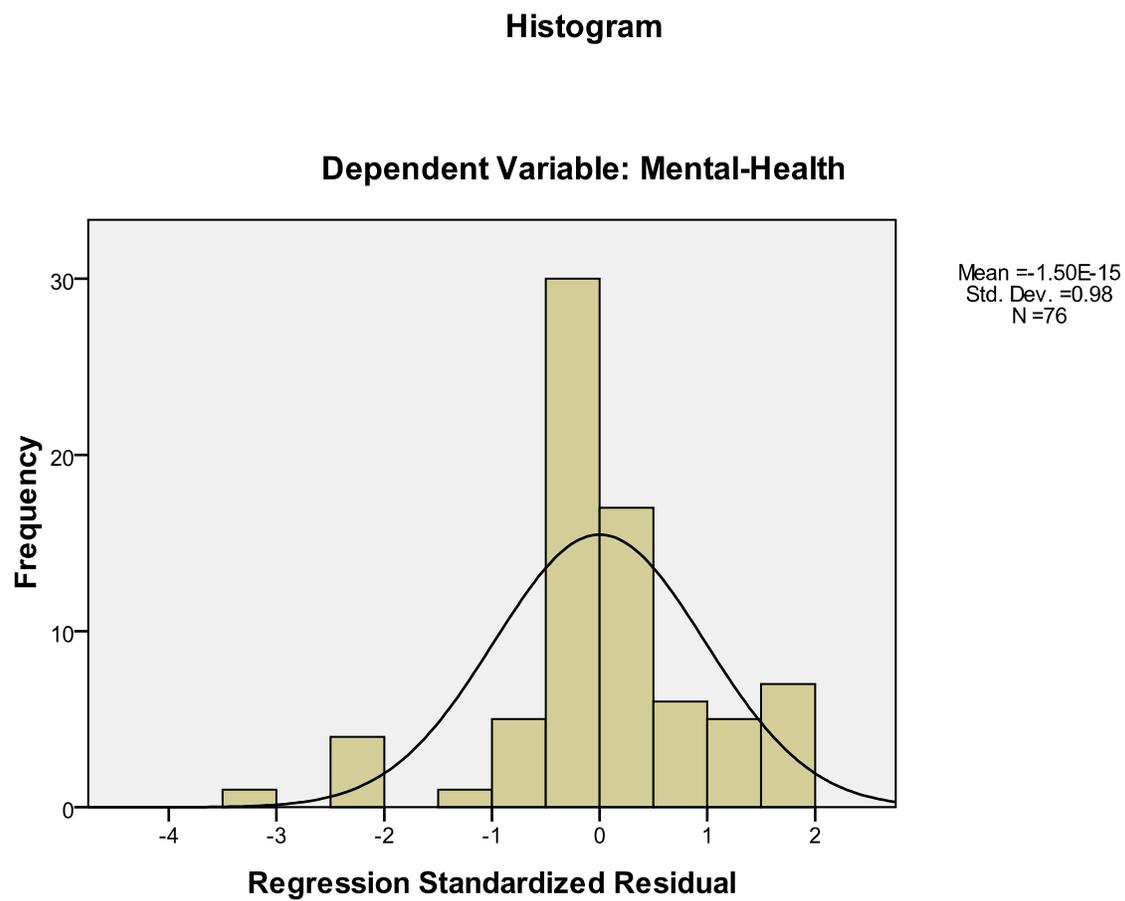
Model	<i>R</i>	R Square	Adjusted R Square	Std. Error
1	0.322 <sup>a</sup>	0.104	0.091	0.502
2	0.322 <sup>b</sup>	0.104	0.079	0.505
3.	0.399 <sup>c</sup>	0.159	0.124	0.493

a. Predictors: (Constant), Acculturation

b. Predictors: (Constant), Acculturation, Social Support

c. Predictors: (Constant), Acculturation, Social Support, Self-esteem

d. Dependent Variable: Mental Health



*Figure 1.* Mental health scores as reported by the participants ( $N=76$ ).



ANOVA which is actually the analysis of variance was used to test the hypotheses (Tabachnick, 2001). It assessed the overall significance of the model. Using the enter method produced a significant model  $F(3, 72) = 4.545, p = .006$ . ANOVA reveals the interaction for the three independent variables and the dependent variable.

Table 13

*ANOVA<sup>b</sup>*

Model	Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	Sig.
1. Regression	3.308	3	1.103	4.545	.006 <sup>a</sup>
Residual	17.468	72	.243		
Total	20.776	75			

a. Predictors: (Constant) Acculturation, Social Support, Self-esteem

b. Dependent Variable: Mental Health

In evaluating assumptions, the first step is to examine the normality of the dependent variable. If it is not normally distributed, or cannot be normalized with a transformation, it can affect the relationships with the other variables. Table 14 demonstrates the Standardized Beta coefficients which indicates the measure of the contribution of each variable to the model. The t-test was used in measuring the significance of the regression coefficient in the multiple regression model. Social support is not a significant predictor in this model. Stepwise multiple regression was used to retest the predictor variables to ensure that they were still included in the model. Stepwise multiple regression also referred as statistical regression is a technique in computing regression in stages and is used for prediction and theory testing (Tabachnick, 2001). It is important that the model be tested as the exclusion or inclusion of variables can affect the interpretation of the input of the dependent variable.

Table 14

*Coefficients<sup>a</sup>*

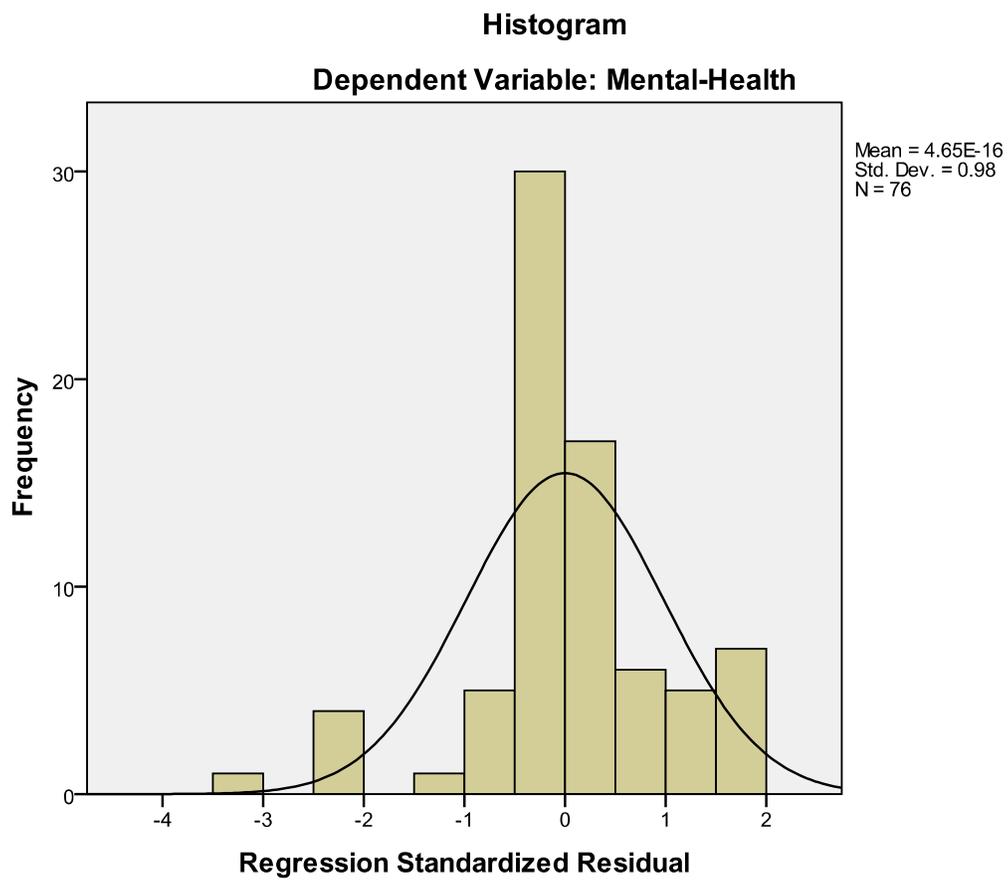
Model 1	Unstandardized Coefficients		Standardized Coefficients		
	Beta	Std. Error	Beta	<i>t</i>	Sig.
(Constant)	4.232	.472		8.966	.000
Acculturation	-.160	.108	-.187	-1.483	.143
Social support	-.002	.072	-.003	-.030	.977
Self-esteem	.366	.168	.271	2.182	.032

a. Dependent Variable: Mental Health

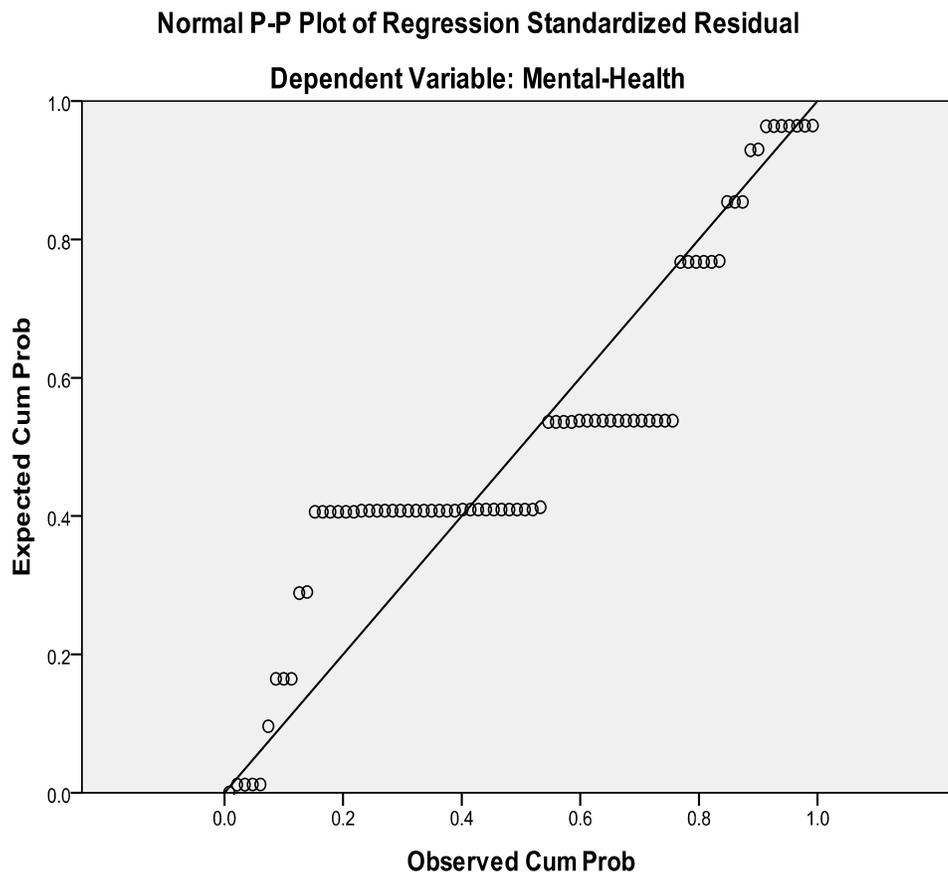
Normality of distribution occurred as shown in Figure 3. The data was skewed to the right and is said to be normally distributed. The mean mental health score was 4.65 with a standard deviation of 0.98. In addition, the residuals in the normal p-p plot of regression were found to be linear (Fig 4).

The independent variable, acculturation satisfies the criteria for both the assumption of normality and the assumption of linearity with the dependent variable mental health (Table 15). In evaluating normality, the skewness (-0.039) and kurtosis (-0.314) were both within the range of acceptable values from -1.0 to +1.0.

The independent variable, social support satisfies the criteria for both the assumption of normality and the assumption of linearity with the dependent variable mental health (Table 16). In evaluating normality, the skewness (-0.039) and kurtosis (-0.314) were both within the range of acceptable values between -1.0 to +1.0.



*Figure 3.* Mental health scores after log transformation ( $n=76$ )



*Figure 4.* Normal P-P Plot of Regression – Dependent Variable: LogMental

Table 15

*Normality of the Independent Variable: Acculturation*

Variable	Statistic	Std. Error
Acculturation Mean	3.07	0.071
95% Confidence Interval for Lower Bound	2.92	
Mean Upper Bound	3.21	
5% Trimmed Mean	3.07	
Median	3.00	
Variance	0.382	
Std. Deviation	0.618	
Minimum	2	
Maximum	4	
Range	2	
Skewness	-.039	0.276
Kurtosis	-.314	0.545

Table 16

*Normality of the Independent Variable: Social Support*

Variable	Statistic	Std. Error
Social Support Mean	2.34	0.093
95% Confidence Interval for Lower Bound	2.16	
Mean Upper Bound	2.53	
5% Trimmed Mean	2.32	
Median	2.00	
Variance	0.655	
Std. Deviation	0.809	
Minimum	1	
Maximum	5	
Range	4	
Skewness	0.221	0.276
Kurtosis	0.473	0.545

The independent variable self-esteem satisfies the criteria for the assumption of linearity with the dependent variable mental health, but does not satisfy the assumption of normality. (Table 17). In evaluating normality, the skewness (1.662) was outside the range, but the kurtosis (.783) fall between -1.0 and +1.0.

Table 18 depicts that the dependent variable mental health satisfies the criteria for a normal distribution. The skewness (0.184) and kurtosis (0.254) were both between -1.0 and +1.0. Three transformations for normality, homogeneity of variance and linearity were done. The distribution is skewed positively to the right (logmental = 0.70).

Table 17

*Normality of the Independent Variable: Self-Esteem*

Variable	Statistic	Std. Error
Self-Esteem Mean	1.18	0.045
95% Confidence Interval for Lower Bound	1.10	
Mean Upper Bound	1.27	
5% Trimmed Mean	1.15	
Median	1.00	
Variance	0.152	
Std. Deviation	0.390	
Minimum	1	
Maximum	2	
Range	1	
Skewness	1.662	0.276
Kurtosis	0.473	0.545

Table 19 displays mental health scores as predicted by acculturation constructs. An adjusted  $R^2$  of 0.264 indicated that the acculturation data represents 26.4% of the variation in the mental health scores in accordance with the responses made by the students. Acculturation was added to the stepwise regression analysis.

Table 20 displays the summary of mental health scores as regressed by social support constructs. The model had an adjusted  $R^2$  of 0.257 which represented 25.7% of the variation in the mental health scores. The results for this regression were not significant ( $p > .05$ ).

Table 18

*Normality of the Dependent Variable: Mental Health*

Variable	Statistic	Std. Error
Mental Health Mean	4.17	0.060
95% Confidence Interval for Lower Bound	4.05	
Mean Upper Bound	4.29	
5% Trimmed Mean	4.19	
Median	4.00	
Variance	0.277	
Std. Deviation	0.526	
Minimum	3	
Maximum	5	
Range	2	
Skewness	0.184	0.276
Kurtosis	0.254	0.545

Table 19

*Mental Health Scores from the Final Regression Model as Predicted by Acculturation Scores (adjusted  $R^2 = 0.264$ )*

Source	Unstandardized Coefficients		Standardized Coefficients		
	Beta	Std. Error	Beta	<i>t</i>	Sig. ( <i>p</i> -value)
(Constant)	5.011	0.293		17.106	.000
Language usage	-0.274	0.094	-0.322	-2.924	0.005
Perceived prejudice	-0.271	0.094	-0.319	-2.879	0.005
Acculturation	-0.242	0.097	-0.285	-2.510	0.014

Table 20

*Mental Health Scores from the Final Regression Model as Predicted by Social Support Scores (adjusted  $R^2 = 0.257$ )*

Source	Unstandardized Coefficients		Standardized Coefficients		
	Beta	Std. Error	Beta	<i>t</i>	Sig. (p-value)
(Constant)	5.136	0.533		9.629	.000
Companionship	-0.240	0.120	-0.037	-0.200	0.842
Appraisal	-0.001	0.128	-0.001	-0.005	0.996
Tangible	0.015	0.131	-0.023	-0.111	0.912

Table 21 displays the summary of mental health scores as regressed by self-esteem constructs. The model had an adjusted  $R^2$  of 0.427 which represented 42.7% of the variation in the mental health scores. Self-esteem was added to the Stepwise regression analysis. The results for this regression were not significant ( $p > .05$ ).

Table 21

*Mental Health Scores from the Final Regression Model as Predicted by Self-Esteem Scores (adjusted  $R^2 = 0.427$ )*

Source	Unstandardized Coefficients		Standardized Coefficients		
	Beta	Std. Error	Beta	<i>t</i>	Sig. (p-value)
Constant	3.590	0.182		19.727	.000
Feelings	0.491	0.146	0.364	3.361	0.001

Table 22 displays the summary of mental health scores as predicted by the student's length of stay in the US. The results of this regression were not significant ( $p = 0.413$ ).

Table 22

*Mental Health Scores from the Final Regression Model as predicted by Length of Stay in the US (adjusted  $R^2 = 0.004$ )*

	Unstandardized Coefficients		Standardized Coefficients		Sig.
	Beta	Std. Error	Beta	<i>t</i>	
(Constant)	4.288	0.154		27.824	.000
Length of stay	-0.010	0.012	0.095	0.824	0.413

Table 23 displays the summary of mental health scores as predicted by age of student.

The results of this regression were not significant ( $p = 0.160$ ).

Table 23

*Mental Health Scores from the Final Regression Model as predicted by Age of Student (adjusted  $R^2 = 0.013$ )*

	Unstandardized Coefficients		Standardized Coefficients		Sig.
	Beta	Std. Error	Beta	<i>t</i>	
(Constant)	4.530	0.260		17.439	.000
Age	-0.011	0.008	-0.163	-1.420	0.160

Table 24 displays the summary of mental health scores as predicted by gender of student.

The results of this regression were insignificant ( $p = 0.901$ ).

Table 24

*Mental Health Scores from the Final Regression Model as predicted by Gender of Student (adjusted  $R^2 = 0.013$ )*

	Unstandardized Coefficients		Standardized Coefficients		
	Beta	Std. Error	Beta	<i>t</i>	Sig.
(Constant)	4.140	-0.253		16.364	.000
Gender	-0.018	-0.140	0.015	-0.125	0.901

Table 25 displays the summary mental health scores as predicted by language spoken.

The results of this regression were insignificant ( $p = 0.676$ ).

Table 25

*Mental Health Scores from the Final Regression Model as predicted by Language Spoken (adjusted  $R^2 = 0.011$ )*

	Unstandardized Coefficients		Standardized Coefficients		
	Beta	Std. Error	Beta	<i>t</i>	Sig.
(Constant)	4.248	0.194		21.914	.000
Language	-0.035	0.084	0.049	-0.420	0.676

Table 26 illustrates the final model with an adjusted  $R^2$  of 0.638. This indicates that the model accounts for 63.8% of variance. Two constructs of social support variable was excluded from the model as they do not have a significant input on the model's ability to predict mental health. The model includes all three constructs of the acculturation scale (language usage, perceived prejudice, and acculturation), the companionship construct of the social support scale and the feelings construct of the self-esteem scale.

Table 26

*Mental Health Scores from the Final Regression Model as Predicted by Acculturation, Social Support and Self- Esteem Scores (n=76, adjusted R<sup>2</sup> =0.638)*

Model 1	Unstandardized Coefficients		Standardized Coefficients		
	Beta	Std. Error	Beta	<i>t</i>	Sig. ( <i>p</i> -value)
(Constant)	5.011	0.293		17.106	.000
Language usage	-0.242	0.097	-0.285	-2.510	0.014
Perceived prejudice	-0.246	0.099	-0.289	-2.480	0.016
Acculturation	-0.223	0.101	-0.262	-2.216	0.030
Companionship	-0.131	0.064	-0.176	-1.756	0.008
Feelings	0.428	0.185	0.317	2.325	0.024

Table 27

ANOVA Analysis

	Sum of Squares	<i>df</i>	Mean Squares	<i>F</i>	Sig
Between Groups	2.625	2	1.313	5.280	0.007
Within Groups	18.151	73	0.249		
Total	20.776	75			

The probability value between groups was (F=5.2804) with a p value of .007, is less than the alpha level of significance of 0.05 (Table 27). Since the value is less, then the effect is said to be significant. The null hypothesis that a linear regression model is appropriate is accepted. The research hypothesis that a linear regression model is appropriate is supported by this test. The assumption of linearity is satisfied.

## Summary

Seventy-six nursing students of African origin, natives of Nigeria with ages ranging between 19 and 51 completed the surveys. Factors such as age, gender, marital status, language spoken, participants who are parents, and those seen by a counselor in the US were used to predict scores on the SPSS using multiple regression. Pearson correlation was used to measure correlation between variables in the study. All the variables were correlated to some extent. There was a moderate positive correlation between self-esteem and mental health and negative significant relationship between acculturation and mental health but no significant correlation between social support and mental health. The research utilized regression models for testing the relationship among the constructs of each variable and found some significant findings among the independent variables acculturation and self-esteem and the dependent variable mental health.

## CHAPTER 5: SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

### Introduction

Chapter one addressed the research problem, purpose of the study, the research questions, and hypotheses. Chapter two included the review of literature on international students attending US colleges including African immigrants in regards to acculturation, social support, self-esteem and mental health. Chapter three discussed the research methodology, population, instrumentation, and data analysis. Chapter four included a detailed discussion of the participants and the results of the study. The purpose of this chapter is to discuss the results of the findings, social implications, and recommendations for further studies.

### *Summary of the Findings*

These results were obtained from Nigeria nursing students through an anonymous online survey. The data was stored in a secured database with login name and password. The students were from three universities within the DC metropolitan area. At the time of the survey, the participants had various lengths of stay in the US ranging from 4-29 years. The low alpha coefficient for acculturation is very significant which shows that the Nigerian students are still encountering difficulties in assimilating into the American culture as confirmed by the responses to survey questions. They still perceive themselves as strangers and, regardless of their level of success and contribution to the American society they will always be labeled as strangers. Ninety six percent of the participants agreed to the statement, “No matter how adjusted to American ways I may be, I will be seen as a ‘foreigner’ by Americans.”

The companionship subscale of the social support variable actually measures an individual's ability to be comfortable among others including those outside of the family. Zero percent responded to Americans only for friends with whom they are close, and more than 95% chose mostly family and some friends as people they trust and turn to when in need. In responding to the question "If I did not have some family members, or relatives, or some friends among people from my country living in the USA (or where I live in the USA), I would feel isolated, 83% agreed. In addition, 91% said they find Americans to be overly concerned with their personal needs and 77% felt they are ignored when with a group of Americans.

In response to the question, "If I needed some help in moving to a new house or apartment, I would have a hard time finding someone to help me," 92% responded false, but 76% reported that it would be difficult to find someone to look at their home if they had to be away for a few weeks. It shows the level of social support they received. It is apparent that there is no problem finding support that is casual, but it becomes difficult for them to find someone willing to make a commitment. Cultural infusion is a concern according to the response made in the survey. Ninety –seven percent of the participants responded that friends with whom they are close are mostly people from their country and some Americans. It can be clearly understood how self-esteem produced a substantial relationship with mental health, as 96 % of the participants responded that they believe selves to be individuals with many similarities with people from their country and 4% with Americans. Also, 94 % were in agreement with the statement, "no matter how adjusted to American ways I may be, I will be seen as a 'foreigner' by Americans." These responses from the participants do not correspond with the results obtained from the regression model in regard to social isolation (standardized beta coefficient = -0.003,  $p = .977$ ).

Seventy-five percent of the participants' age ranged between 18 and 39 years old, and spent just below ten years in the US. There were also 75% of female participants in the study. There was the same amount of participants married as those who are single. Just a few were divorced. Of the three languages spoken, 45% spoke in Igbo. Only 29% were seen by a counselor in the US.

#### *Hypothesis 1*

The null hypothesis states that acculturation has no impact on mental health among Nigerian nursing students. The regression model included language usage, perceived prejudice, and acculturation as independent variables and log of mental health as the dependent variable  $F(1, 74) = 8.551, p = 0.005, R^2 = 0.264$ . The null hypothesis was rejected based on the findings.

#### *Hypothesis 2*

The null hypothesis stated that social support has no impact on mental health among Nigerian nursing students. The regression analysis was conducted between companionship, appraisal, and tangible as independent variables and the dependent variable mental health. According to the findings, there is significant relationship between companionship construct and mental health but no significant relationship with regards to appraisal and tangible and mental health  $F(2, 73) = 4.219, p = 0.018, R^2 = 0.257$ . The researcher will reject the null hypothesis.

#### *Hypothesis 3*

The null hypothesis states that self-esteem has no impact on mental health among Nigerian nursing students. The regression model was conducted to test the relationship between the construct of self-esteem as independent variable and log of mental health as the dependent variable and yielded a significant relationship  $F(3, 72) = 4.545, p = 0.006, R^2 = 0.427$ . Based on

the findings, as self-esteem decreases among Nigerian nursing students, mental health levels will increase.

#### Interpretation of Findings

The purpose of this study was to examine the extent to which acculturation, social support and self-esteem predicts mental health among Nigerian nursing student. The Pearson coefficient indicated a significant correlation ( $p < .01$ ) between self-esteem and mental health, which was consistent with the findings. The research findings also suggested that the independent variable, social support, has a small significant relationship to mental health among Nigerian nursing students ( $p < .01$ ) consistent with the findings in response to the questions and the review of literature. This may be so as a result of a sub-culture, social network that provide support among individuals from their homeland in the absence or perceived absence of social support from the host culture. In addressing the statement, “When I need suggestions on how to deal with a personal problem, I know someone I can turn to,” 96 % agreed. Ninety-eight percent also responded “true” to the statement that if they wanted to have lunch with someone they could easily find someone to join them. The individuals are identified as relatives or belonging to the home culture and not the host culture.

The literature review revealed that social support is regarded as a predictor of high levels of psychological disorders among international students. According to Yeh and Inose (2003), the strong bond and connectedness of immigrants from Asia, Africa, and Latin America are very significant, so much so that their perception of self are determined by the validation from others they identify with. This is evident by the responses given to the statement, “People I trust and turn to when I need help are,” 96% chose mostly my family and 0% to mostly Americans and some family or Americans only. Seventy percent disagreed that they have more American

friends than friends among people from their country. Sixty- four percent believed it is more proper to marry someone from one's own nationality group than an American. This may be evident of self-imposed cultural isolation and a direct lack of interest in integrating to the host culture.

An analysis of variance of the mental health scores against demographic variables revealed significant differences in the mental health scores for age (mean score 32.45, standard deviation 7.750,  $p = 0.160$ ), length of stay in the US (mean score 11.42, standard deviation 4.908,  $p = 0.413$ ), and language spoken (mean score 2.18, standard deviation 0.725,  $p = 0.018$ ). The smaller the  $p$ -value, greater is the evidence against the null hypothesis, meaning the null hypothesis is rejected. The mental health scores were consistent with the findings. In response to the question, "During the past 30 days, about how often did you feel nervous," 75 % of the students chose some or a little of the time, and 73 % responded a little of the time to feeling hopeless during the past 30 days, and depressed that nothing could cheer them up. The students did not feel worthless but they did express frustration, much more effort needed to complete a task, sadness, and nervousness meaning that they do need some form of psychological counseling. Interestingly, 25% of the sample population has already retained counselors to obtain support for personal issues.

An analysis of variance of the self esteem mean scores indicated a significant relationship with mental health ( $p = 0.032$ ), with similar results for acculturation ( $p = 0.143$ ). As mentioned previously, acculturative stress and perceived minimal social support is known to have a negative connotation on mental health among immigrants. The literature was consistent with the research findings in regards to self-esteem and mental health. It is reported that mental health disorders could deprive the victims of self-esteem and self-worth which could result in isolation and

hopelessness (McAllister, 2008). Fitzroy (1999) also reported that mental health risk is highest among college students including nursing students especially during their training.

Log transformation was done due to weak correlations between the independent variables acculturation and social support. The dependent variable was transformed to satisfy normality assumption. Failing to satisfy the assumption may mean that the findings fail to report the strength of the relationship. The regression was found to be stronger.  $R$  square which is often referred to as the proportion of variances gives the effectiveness of the model.  $R^2$  coefficient determines how well the regression line confirms with the data. An  $R^2$  of 1.0 indicates that the regression line perfectly fits the data (Creswell, 2003). Adjusted  $R^2$  is a modification of  $R^2$  that is often less than or equal to  $R^2$ . It gives a more realistic measure of relationship. The adjusted  $R^2$  is best used for comparing models with different numbers of independent variables. An analysis of variance of the mental health scores by the demographic variables such as, length of stay in the US, age, gender, and language spoken revealed no significant differences in the mental health scores. The mental health scores as predicted by length of stay revealed no significant relationship ( $p=0.413$ , adjusted  $R^2 = 0.004$ ), same as the age of the participants ( $p=0.160$ , adjusted  $R^2 = 0.013$ ). There were 75 % of female participants as compared to male participants but there were no significant relationship to mental health as predicted by the overall gender of students ( $p=0.901$ , adjusted  $R^2= 0.013$ ). Though the participants spoke three different languages, the mental health scores as predicted by language spoken revealed no significant differences ( $p=0.676$ , adjusted  $R^2 = 0.011$ ).

Prior to any transformation of variables to satisfy the assumptions of multiple regression or removal of outliers, the proportion of variance in the dependent variable explained by the independent variables the adjusted  $R^2$  was 51.1%. After transformed variables were substituted to

satisfy assumptions and outliers were removed from the sample, the proportion of variance explained by the final regression model analysis was 63.8%, a difference of 12.7%.

### *Conclusions*

The data from this study suggested that each of the three predictor variables showed some degree of variance in the mental health of Nigerian nursing students though one of them, social support, was to a lesser degree but it was still considered significant. The data were taken anonymously, as such the researcher had no way of knowing who the participants were and from which university. This is an indication that the conditions are not confined to one university but rather generalized among the population studied. The sample selection method and freedom of subjects to participate may indicate a national consensus on these issues.

### *Acculturation and Mental Health*

The results revealed that acculturation is a significant predictor of mental health. After log transformation of the mental health scores, all three constructs remained in the final regression model. This implies that the characteristics of acculturation play a great role in an individual's mental health. Thus, the more acculturated the student is higher will be their mental health levels.

### *Social Support and Mental Health*

Only the companionship construct of social support was found to be a significant predictor of mental health. The other two constructs tangible and appraisal were dropped in the final regression model. The findings were consistent with the responses made by the students which implied low social functioning and adaptation within the host environment and increase bonding among people from their home culture. This implies that if the students have low social

support from individuals from their home culture it would have devastating impact on their mental health status regardless of how small it may be.

### *Self-Esteem and Mental Health*

Self-esteem was found to be a significant predictor of mental health such that if the Nigerian students display low self esteem then the chances of them having mental health issues will be increased. This is consistent with the responses to several questions. When the students compare themselves with others they feel good about themselves but when they internalize their feelings and self-worth, they have a negative self-concept. Ninety-four percent said they have a positive perception of self, but still 54% felt they are no good indicating that there is an ambivalent feeling of self. At one time they have a lot of self-worth then later they feel negative about themselves. This flip –flop of self concept is a troubling phenomenon that should be studied further.

### Implications for Social Change

As discussed earlier, there is no documentation on coping strategies for Nigerian nursing students for adaptation into the American society. The findings from this study will not only add to the literature but will also provide valuable information to improve the success of Nigerian nursing students and other international students. The results will delineate ways educators; faculty and staff can address mental health needs among African students completing nursing education. One of the findings revealed that they practiced social isolation due to lack of trust for the host culture. As a result of less interaction with peers especially from the host culture these students will take a longer time to assimilate into the American culture and improve English proficiency. The Nigerian students seem to have a self-imposed cultural group isolation mentality. The social implication is to enable them to gravitate from this mold so that they

become more comfortable in the host environment and fully integrated into the national healthcare providers' network. Integration into the network will aid in providing healthcare personnel towards alleviation of the nursing shortage being currently experienced. Schmitt et al (2003) postulate that membership in minority groups especially those that are victimized by prejudice and discrimination can lower self-esteem and create psychological problems. This practice could even reduce stress of foreign students and American students with poor language skills. As reported by Yeh & Inose (2003), English fluency and social support can have an impact on acculturative stress. The main challenges for the Nigerian students are adaptation into the American culture and gaining academic success as these lead to acculturative stress. Thus, it is imperative for mental health professionals including administrators, counselors, faculty and staff to be proactive in providing services for this group of students.

#### *Improvements to Individuals, Communities & Organizations*

There is need for culturally competent nurses to serve the American multicultural society. The findings from this study will promote the success of Nigerian nursing students and other international students, and facilitate the increase in retention rate for ethnic diverse nurses. There will be an increase availability of culturally competent nurses to improve the cultural infusion of service personnel in the healthcare industry.

The Nigerian nursing students need to assimilate into the cultural tradition and develop trust for the host society. There should be avoidance of a reclusive back seat approach to the diverse society but rather to become part of the forerunners and less dependent on their native language which will decrease their homeland bond. The aspiring nurses will ultimately have less perceived prejudice and more trust for the host culture.

### *Limitations*

Limitations of this study include the simple fact that these students were from a large metropolitan area so the results may be different from those found in a small rural area. Responses to some questions may be biased against the host culture and favored the home culture due to the participants' perception of their respective situation and experience. Social support may exclude interaction with the host culture as long those from the home culture are available.

### Recommendations for Action

The results of this study would foster the development of programs to assist in retention and success at the NCLEX –RN exam, and employment in the healthcare industry. The findings indicate that there is need for university commitment to increase acculturation, social support and self-esteem among foreign students in an effort to prevent mental health issues. This is consistent with research findings which indicate that acculturative stress correlates with social support resulting in a negative connotation (Paukert et al., 2006). The foreign students need programs to empower them to integrate more with students from their host culture in order to share experiences and increase communication among peers as well as educators.

Nursing students require more language skills necessary for critical thinking and decision making. Ninety –four percent of the participants responded that when they think, their ideas and images best operate with an infusion of their native language rather than English only, and 6% said English only. An important strategy is to implement prerequisite courses to improve the international students' language and coping skills such as a) English Language Learners (ELL)

Course to gain more insight of the language and enhance their reading, writing and comprehension of the language and b) Cultural Integration and International Relations to learn successful integration of subcultures into main stream cultures.

#### Recommendations for Further Study

Further studies should examine the correlation between the same variables used in the study for other ethnic groups and the American or host culture. A study should be conducted on social isolation of subcultures to improve acculturation and reduce incidence of low self-esteem among foreign students within the American society. The findings may be more applicable to females due to their subservient status imposed on them through their native cultural norms. Another interesting study is to examine how the Nigerian nurses adapt into the workforce to learn how they perform socially in their roles. According to the findings in this study, they are leaving the universities with perceived prejudice and lack of trust for individuals from the host culture. Could this lack of trust lead to medical errors?

In order to improve mental health status among international students more comprehensive research studies should be conducted to investigate and develop culturally sensitive programs and appropriate interventions to meet their needs. The results and recommendations from this study may not eliminate the stressors, but will definitely decrease the effects on the students.

#### Summary

As the nursing shortage continues, international students including African students will continue to migrate to the US and enroll in nursing programs throughout the country. Similarly, the challenges of acculturation and adaptation into the US college environment will also continue

to soar. The results from this study would enable college professors and clinical instructors to design recommended strategies to promote the success of foreign and international students and more specifically Nigerian nursing students as they integrate and provide professional nursing services to those in need.

The utilization of the design strategies would create positive social change for healthcare organizations and nurse educators due to perceived benefits. Society will benefit from a larger body of ethnically diverse cultural competent nurses available to serve the US multicultural population. The benefits are a threefold design programmed to (a) increase retention and graduation rate, (b) increase the pool of ethnic diverse nurses, and (c) improve the national nursing shortage with integration of the Nigerian and other international nurses into the US healthcare industry. In order to achieve the goal, it is imperative that the findings from this study be made known to all involved with this ethnic group of students so that the recommendations can be implemented. It should be clear that the most available natural resource of a nation is its people. The people provide the skills and knowledge to promote success of its economy. Healthy people make a healthy nation. However, a healthy nation needs fully staffed healthy healthcare personnel to accomplish the task.

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## **Appendix A: Recruitment Letter**

### **Dear Participants**

I am a doctoral candidate in the Community Health Promotion and Education program at Walden University conducting a research under the guidance of Dr. Manoj Sharma. You are invited to consider participation in a research study.

The purpose of this study is to investigate and report relevant information concerning the relationship among acculturation, social support and self-esteem in regards to mental health. The focus of the study is to accentuate this understudied population who are presumed as having the same stressors as other international students.

The criteria for participation include Nigerian students attending a Baccalaureate nursing program in the United States. As an international student studying in an American university your opinion and experiences are very important for this study.

Please be informed that there is no risk or discomfort involved in the participation of this study and is voluntary. Your name will remain anonymous and as such will not be a part of any publication nor be mentioned in the dissertation.

Should any questions arise, please feel free to contact the researcher (Verna LaFleur) at (301) 860-3211. Thanks in advance for your kind participation in this study.

## **Appendix B: Informed Consent**

You are invited to participate in a research study on the relationship of acculturation, social support, self-esteem and mental health of Nigerian nursing students in a Baccalaureate nursing program in America. You were selected as a possible participant in this study because of your affiliation, knowledge and experience of the topic.

Verna LaFleur, a doctoral candidate in community health promotion and education of Walden University will be conducting the research.

### **Background Information:**

The purpose of this study is to examine if acculturation, social support and self-esteem contribute to mental health and to what degree among Nigerian nursing students. The study involves nursing students of African origin primarily from Nigeria, an understudied population.

Participants must be of Nigerian origin enrolled in a Baccalaureate nursing program in an American university. Participants will be required to complete self-administered questionnaires under the different categories listed above including your length of stay in the United States and your primary language spoken. You must be over eighteen years and enrolled in a Baccalaureate nursing program. It should take about twenty minutes to complete.

This study is voluntary. There are no anticipated risks or discomforts to this study. There will be no face to face contact with the researcher and the participants and the researcher have no way of knowing who the participants are thus, no foreseeable conflict of interest. You may refuse to answer any question you have perceived as being invasive. Participants are free to withdraw at any time during the study as they desire. There is no compensation for participation in this study.

The information elicited could be used by college professors and clinical instructors to design strategies to decrease the number of stressors and anxiety in an effort to reduce stress and increase success for Nigerian nursing students. There is no information in the study that can be identified with you. You may keep a copy of the informed consent form.

### **Contacts:**

The researcher conducting this study is Verna LaFleur under the guidance of Dr. Manoj Sharma. If there are any questions about the study, please call at (301) 860-3211.

Walden University's approval number for this study is **09-15-09-0299030** and it expires on **September 14, 2010**.

### **Statement of Consent**

Your signature indicates that you have read the above information and have given consent to participate in the study described above.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

### Appendix C: Participant Questionnaire

**Date**\_\_\_\_\_

1. Date of Birth \_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_
2. Gender Male \_\_\_\_\_ Female\_\_\_\_\_
3. Place of Birth \_\_\_\_\_
4. Which year did you arrive in the US? \_\_\_\_\_
5. Age at time of entry \_\_\_\_\_
6. Marital status Married \_\_\_\_\_ Single\_\_\_\_\_ Divorce\_\_\_\_
7. Are you a parent? Yes \_\_\_\_\_ No \_\_\_\_\_
8. Which language do you speak? Hausa \_\_\_\_\_ Igbo \_\_\_\_\_ Yoruba \_\_\_\_\_
9. Have you ever seen a counselor since residing in the US? Yes \_\_\_\_\_ No \_\_\_\_\_

Appendix D  
**Instrumentation**

American-International Relations Survey (AIRS)

This questionnaire attempts to understand some experiences of people from different countries (e.g., international students, non –immigrant professionals, permanent residents, naturalized citizens, second generation immigrants, etc.) living in the United States.

**Please check the appropriate blank. Check only one blank per question, the one that you think describes you the best.**

The language(s) I speak well

1. English only
2. Mostly English, some my first language (mother tongue)
3. English and my first language equally well
4. Mostly my first language, some English
5. My first language only

When I am with people from my country I speak

1. English only
2. Mostly English, some my first language/national language
3. English and my first language/national language equally
4. Mostly my first language/national language, some English
5. My first language/national language only

Friends with whom I am close are

1. Americans only
2. Mostly Americans, some people from my country
3. Americans and people from my country equally
4. Mostly people from my country, some Americans
5. People from my country only

When I think, my ideas and images best operate

1. In English only
2. Mostly in English, some in my first language
3. In English and my first language equally
4. Mostly in my first language, some in English
5. In my first language only

People I trust and turn to when I need help are

1. American only
2. Mostly Americans, some my family
3. Americans and my family equally

4. Mostly my family, some Americans
5. My family only

I like to eat

1. Only American food
2. Mostly American food, some my country (or region) food
3. American and my country (or region) food equally
4. Mostly my country (or region) food, some American food
5. Only my country (or region) food

I believe my group identity to be related

1. Only to American society
2. Mostly to American society and some to the country/state I come from
3. To American society and to my country/state equally
4. Mostly to the country/state I come from, some to American society
5. Only to the country/state I come from

I believe myself to be an individual

1. With many similarities with Americans
2. With some similarities with Americans
3. Equally similar to Americans and to people from my country
4. With some similarities with people from my country
5. With many similarities with people from my country

**Mark each of the following statements according to how much you agree or disagree with it.**

There is no right or wrong answer. The best answer is your personal opinion. Please express what you actually believe to be true rather than what you wish was true. If you do not have a definite opinion about a statement, choose a degree of agreement or disagreement (from 6 agree strongly to 1 disagree strongly) that comes closest to what you think. Please respond to every statement. The numbers 6, 5,4,3,2, and 1 stand for the following:

**6- Agree strongly**

**5- Agree**

**4- Tend to agree**

**3- Tend to disagree**

**2- Disagree**

**1- Disagree strongly**

\_\_\_\_\_Americans try to fit me into the stereotypes that they have about my nationality group.

\_\_\_\_\_I find Americans overly concerned about their personal needs.

\_\_\_\_\_I find that when I am with a group of Americans, the Americans almost always talk to each other and ignore me.

\_\_\_\_\_If/when I don't dress in American fashions, Americans think I am odd, backward, or not to be taken seriously.

- 6- Agree strongly**  
**5- Agree**  
**4- Tend to agree**  
**3- Tend to disagree**  
**2- Disagree**  
**1- Disagree strongly**

\_\_\_\_\_ American institutions (e.g., professional associations, major universities or government agencies) are trying to place official or unofficial restrictions on me or people from my country gaining admission into educational, work, or professional areas in which my nationality group has achieved visible numbers and success.

\_\_\_\_\_ I resent that I am often overlooked for my recognition (e.g., an award for academic achievement), special projects, hiring, or promotion.

\_\_\_\_\_ No matter how adjusted to American ways I may be, I will be seen as a “foreigner” by Americans.

\_\_\_\_\_ If I did not have some family members, or relatives, or some friends among people from my country living in the USA (or where I live in the USA), I would feel isolated.

\_\_\_\_\_ My physical standards does not march the standards that Americans have about good looks.

\_\_\_\_\_ I believe Americans are only interested in me on the surface level (e.g., my national style of dress or when I came into this country)

\_\_\_\_\_ I prefer American music, films, dances, and entertainment to those of my country of origin.

\_\_\_\_\_ Americans think that I come from a country that has strange, primitive customs.

\_\_\_\_\_ Americans don't care to know about my religion, culture, national history, values or lifestyle.

\_\_\_\_\_ I have more American friends than friends among people from my country.

\_\_\_\_\_ I believe I will never fully understand how to function successfully in the American bureaucracy or “system” (educational, governmental, professional, or business operations).

\_\_\_\_\_ I adhere strictly to my religion and cultural values.

\_\_\_\_\_ I feel I am not fully accepted in organizations (e.g., private social clubs, professional associations, fraternities, sororities, or physical fitness clubs) which have a majority of American members.

- 6- Agree strongly**  
**5- Agree**  
**4- Tend to agree**  
**3- Tend to disagree**  
**2- Disagree**  
**1- Disagree strongly**

\_\_\_\_\_ Americans are too assertive and verbal for my liking.

\_\_\_\_\_ I celebrate American religious or social festivals more than I celebrate my country's religious or social festivals.

\_\_\_\_\_ I believe that the best way to appear less "different" to Americans is to become like American society and people.

\_\_\_\_\_ I seek the friendship and support of people from my country in the city/town I am living.

\_\_\_\_\_ The Americans I study or work with feel threatened by my strengths and successes (e.g., hard work and professional/academic progress).

\_\_\_\_\_ In my study or work environment I follow American ways and standards, but at home I follow many customs of my country of origin.

\_\_\_\_\_ Americans believe that my foreign accent, or nonfluent English, or lack of knowledge of American expressions is a sign of ignorance.

\_\_\_\_\_ I believe it is more proper to marry someone from one's own nationality group than an American.

\_\_\_\_\_ I am rarely invited to the homes or parties of my American classmates, colleagues, or neighbors.

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## ISEL-12

Instructions: This scale is made up of a list of statements each of which may or may not be true about you. For each statement circle "definitely true" if you are sure it is true about you and "probably true" if you think it is true but are not absolutely certain. Similarly, you should circle "definitely false" if you are sure the statement is false and "probably false" if you think it is false but are not absolutely certain.

1. If I wanted to go on a trip for a day (for example, to the country or mountains), I would have a hard time finding someone to go with me.

1. definitely false 2. probably false 3. probably true 4. definitely true

2. I feel that there is no one I can share my most private worries and fears with.

1. definitely false 2. probably false 3. probably true 4. definitely true

3. If I were sick, I could easily find someone to help me with my daily chores.

1. definitely false 2. probably false 3. probably true 4. definitely true

4. There is someone I can turn to for advice about handling problems with my family.

1. definitely false 2. probably false 3. probably true 4. definitely true

5. If I decide one afternoon that I would like to go to a movie that evening, I could easily find someone to go with me.

1. definitely false 2. probably false 3. probably true 4. definitely true

6. When I need suggestions on how to deal with a personal problem, I know someone I can turn to.

1. definitely false 2. probably false 3. probably true 4. definitely true

7. I don't often get invited to do things with others.

1. definitely false 2. probably false 3. probably true 4. definitely true

8. If I had to go out of town for a few weeks, it would be difficult to find someone who would look after my house or apartment (the plants, pets, garden, etc.).

1. definitely false 2. probably false 3. probably true 4. definitely true

9. If I wanted to have lunch with someone, I could easily find someone to join me.

1. definitely false 2. probably false 3. probably true 4. definitely true

10. If I was stranded 10 miles from home, there is someone I could call who could come and get me.

1. definitely false 2. probably false 3. probably true 4. definitely true

11. If a family crisis arose, it would be difficult to find someone who could give me good advice about how to handle it.

1. definitely false 2. probably false 3. probably true 4. definitely true

12. If I needed some help in moving to a new house or apartment, I would have a hard time finding someone to help me.

1. definitely false 2. probably false 3. probably true 4. definitely true

Scoring:

We are currently using a shorter version of the ISEL consisting of 3 subscales with 4 items in each. Please see the subscales below. To score, sum across all items (reverse- code items 1, 2, 7, 8, 11, 12).

Appraisal: item numbers 2, 4, 6, 11

Belonging: item numbers 1, 5, 7, and 9

Tangible: item numbers 3, 8, 10, 12

### Rosenberg Self-Esteem Scale (Rosenberg, 1965)

The scale is a ten - item Likert scale with items answered on a four point scale - from strongly agree to strongly disagree. The original sample for which the scale was developed consisted of 5,024 High School Juniors and Seniors from 10 randomly selected schools in New York State.

Instructions: Below is a list of statements dealing with your general feelings about yourself. If you strongly agree, circle SA. If you agree with the statement, circle A. If you disagree, circle D. If you strongly disagree, circle SD.

1.

On the whole, I am satisfied with myself.

SA

A

D

SD

2.\*

At times, I think I am no good at all.

SA

A

D

SD

3.

I feel that I have a number of good qualities.

SA

A

D

SD

4.

I am able to do things as well as most other people.

SA

A

D

SD

5.\*

I feel I do not have much to be proud of.

SA

A

D

SD

6.\*

I certainly feel useless at times.

SA

A

D

SD

7.

I feel that I'm a person of worth, at least on an equal plane with others.

SA

A

D

SD

8.\*

I wish I could have more respect for myself.

SA

A

D

SD

9.\*

All in all, I am inclined to feel that I am a failure.

SA

A

D

SD

10.

I take a positive attitude toward myself.

SA

A

D

SD

Scoring: SA=3, A=2, D=1, SD=0. Items with an asterisk are reverse scored, that is, SA=0, A=1, D=2, SD=3. Sum the scores for the 10 items. The higher the score, the higher the self esteem.

The scale may be used without explicit permission. The author's family, however, would like to be kept informed of its use:

The Morris Rosenberg Foundation

c/o Department of Sociology

University of Maryland

2112 Art/Soc Building

College Park, MD 20742-1315

## K6+ Self Report Measure

The following questions ask about how you have been feeling during the past 30 days. For each question, please circle the number (as per the following legend) that best describes how often you had this feeling.

- 1 — **all** of the time,
- 2 — **most** of the time,
- 3 — **some** of the time,
- 4 — **a little** of the time, or
- 5 — **none** of the time

Q1. During the past 30 days, about how often did you feel nervous?

- 1. ALL OF THE TIME
- 2. MOST
- 3. SOME
- 4. A LITTLE
- 5. NONE

Q2. During the past 30 days, about how often did you feel hopeless?

- 1. ALL OF THE TIME
- 2. MOST
- 3. SOME
- 4. A LITTLE
- 5. NONE

Q3. During the past 30 days, about how often did you feel restless or fidgety?

- 1. ALL OF THE TIME
- 2. MOST
- 3. SOME
- 4. A LITTLE
- 5. NONE

Q4. How often did you feel so depressed that nothing could cheer you up?

- 1. ALL OF THE TIME
- 2. MOST
- 3. SOME
- 4. A LITTLE
- 5. NONE

Q5. During the past 30 days, about how often did you feel that everything was an effort?

- 1. ALL OF THE TIME
- 2. MOST
- 3. SOME
- 4. A LITTLE

5. NONE

Q6. During the past 30 days, about how often did you feel worthless?

1. ALL OF THE TIME

2. MOST

3. SOME

4. A LITTLE

5. NONE

For scoring, add the numbers for each of the individual responses. The scores can range from a minimum of 6 – 30.

# Antioch New England GRADUATE SCHOOL

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Thank you for your purchase of the American-International Relations Survey (AIRS). I have enclosed the instrument for your use as outlined in the Agreement for Procedural Use.

For scoring purposes, we employed a Likert scale with values of 1 through 5 for item numbers 1 to 8, and with values of 1 through 6 for item numbers 9 to 34. Item numbers 19, 22, 27 and 28 are to be reversed. Listed below are the specific subscales and the items included in each:

Subscale one, Perceived Prejudice, consists of 20 items: 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 20, 21, 23, 25, 26, 30, 31, 32, 33, and 34.

Subscale two, Acculturation, consists of 11 items: 3, 5, 6, 7, 8, 19, 22, 24, 27, 28, and 29.

Subscale three, Language Usage, consists of 3 items: 1, 2, and 4.

Sincerely,

*Gargi Roysircar*  
Gargi Roysircar-Sodowsky  
Professor

6-11-09

*K wishes*

*I'm sorry about the delay. After a very busy semester, I took a break from my office for a mo. Your check, dated April*

Dear Ms. LaFleur,

Permission is granted at no cost for nonprofit research purposes. Attached is the 12 item ISEL. More information about the scale is at our website <http://www.psy.cmu.edu/~scohen> Once there, click on Scales.

Sincerely,

Department of Psychology  
Carnegie Mellon University

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**From:** Verna LaFleur [mailto:vlafleur@bowiestate.edu]  
**Sent:** Wednesday, January 14, 2009 1:29 PM  
**To:** conser@andrew.cmu.edu  
**Subject:** FW: Permission for ISEL instrument

Hello Helen

I am resending the request statement. I was told to send an email but have not received a reply yet. I tried calling and received the same response. I am kindly asking for an early response, thanks.

Verna

**Verna LaFleur MSN, RN.**  
**Bowie State University**  
**Department of Nursing,**  
**CLT Building, Rm 212**  
**301-860-3211**

**This is my desire: Psalm 139:14, "I will praise thee, for I am fearfully and wonderfully made; marvelous are thy works."**

**From:** Verna LaFleur  
**Sent:** Tuesday, January 06, 2009 12:09 PM  
**To:** conser@andrew.cmu.edu  
**Subject:** Permission for ISEL instrument

Hi Helen

I am a PhD candidate at Walden University and am developing a study on international students in the nursing program. I am also a lecturer in nursing at the university listed below. As per telephone conversation, I am requesting permission to use the 12- item version and a copy of the Interpersonal Support Evaluation List (ISEL) instrument by Dr. Cohen & Hoberman for my dissertation. Please inform me if there is a fee and I will gladly fulfill that obligation.

Thanks for your warm and prompt response.

Verna

Verna LaFleur, MSN, RN  
Bowie State University  
Department of Nursing  
CLT Building, Rm. 212  
301-860-3211

Humility is not thinking less of yourself; it is thinking of yourself less.

**From:** nathan jurgenson [nathanjurgenson@gmail.com]  
**Sent:** Monday, February 16, 2009 2:57 PM  
**To:** Verna LaFleur  
**Subject:** Re: Rosenberg Foundation

Verna LaFleur:

Sorry for the additional email, but would you like a hard-copy permission sent to you, or is the previous email sufficient?

On Mon, Feb 16, 2009 at 2:50 PM,  
Verna LaFleur:

First, apologies for the delayed response regarding your request. The beginning of the semester is a hectic time, as I'm sure you know.

Second, we are happy to grant permission for use of the Self-Esteem scale. Please share your results with us when you can. Best of luck with your research!

The Morris Rosenberg Foundation  
Feb 16th, 2009

The scale may be used without explicit permission. The author's family, however, would like to be kept informed of its use:

University of Maryland

2112 Art/Soc Building

College Park, MD 20742-1315

Dear Verna,

There are two versions of the K6/K10 instruments (self-administered and interviewer-administered) and you can access both of them at this website:

[http://www.hcp.med.harvard.edu/ncs/k6\\_scales.php](http://www.hcp.med.harvard.edu/ncs/k6_scales.php)

Please let me know if you have any additional questions or concerns.

Kind Regards,

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**From:** Kessler, Ronald  
**Sent:** Thursday, October 16, 2008 7:04 PM  
**To:** Verna LaFleur  
**Cc:** Nako, Entela  
**Subject:** RE: Permission to use Mental Health instrument

Verna - You have my permission to use the scale for your research. There is no charge. Entela will send you information about the scale. Good luck with your work. Ron Kessler

Entela - Please send the K6/10 materials to Verna. Thx. Ron

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**From:** Verna LaFleur [vlafleur@bowiestate.edu]  
**Sent:** Thursday, October 16, 2008 3:06 PM  
**To:** Kessler, Ronald  
**Subject:** Permission to use Mental Health instrument

Hello

I am a PhD candidate at Walden University and am developing a study for my dissertation on international students in the nursing program. I am also a lecturer in nursing at the university listed below. I am requesting permission to use the Kessler Psychological Distress Scale K-6 scale, K-10 scale to measure serious mental illness (SMI). Please inform me of the cost if any, and the link to the questions. Thanks for your prompt response.

Verna

**Verna LaFleur MSN, RN.**

**Bowie State University**

**Department of Nursing,**

CLT Building, Rm 212

301-860-3211

This is my desire: Psalm 139:14, "I will praise thee, for I am fearfully and wonderfully made; marvelous are thy works."

**IRB/Walden/OHE**

Sent by: Jenny Sherer

10/02/2009 08:15 AM

To vlaf001@waldenu.edu

cc Walden University Research/Walden/OHE@OHEMINNm,  
msharma@waldenu.eduSubj Notification of Approval to Conduct Research-Verna LaFleur  
ect

Dear Ms. LaFleur,

This email is to serve as your notification that Walden University has approved BOTH your dissertation proposal and your application to the Institutional Review Board. As such, you are approved by Walden University to conduct research.

Also attached to this e-mail is the IRB approved consent form. Please note, if this is already in an on-line format, you will need to update that consent document to include the IRB approval number and expiration date.

Please contact the Office of Student Research Support at [research@waldenu.edu](mailto:research@waldenu.edu) if you have any questions.

Congratulations!

Jenny Sherer  
Operations Manager, Office of Research Integrity and Compliance

Leilani Endicott  
IRB Chair, Walden University

*Verna LaFleur, MSN, RN*

**Bowie State University  
Department of Nursing**

Dear Administrator

Greetings! I am Verna LaFleur, doctoral candidate, and nursing faculty from Bowie State University. I am conducting a study on foreign-born nursing students using Nigerians for my sample population. The topic is acculturation, social, support, and self-esteem as predictors of mental health: a study of Nigerian nursing student.

I am requesting permission to invite your students for participation in my study at no risk to them. I am presently awaiting my IRB approval. A link is provided at the end of the consent form for the students to access the questionnaire online.

The purpose of the study is listed below. Attached, please find the recruitment letter, the consent form and the questionnaire to be forwarded to the students.

- This study aims at providing developmental programs to assist in retention, and success in attaining the NCLEX-RN exam. There is also a need to provide culturally competent health care to the culturally diverse population especially with the current diversity in America.
- The African students will not only be an asset to the pool of ethnic diverse nurses but will also address the national nursing shortage which continues to be out of proportion to the demand for skilled nursing personnel.

Thanks in advance for your kind cooperation and early response for this undertaking. The contact information for the Walden Research Participant Advocate is 800-925-3368, ext 1210. My contact information is listed below. Again, thank you.

**TELEPHONE: 301-860-3211**

**FACSIMILE: 301-893-0796**

**EMAIL: [VLAFLEUR@BOWIESTATE.EDU](mailto:VLAFLEUR@BOWIESTATE.EDU)**

## VERNA VERICA LAFLEUR

10954 Stella Court  
Waldorf, MD 20603  
301-893-0796  
vvlafleur@gmail.com

### EDUCATION

<p><b>Doctor of Philosophy</b> <b>Health Services</b> <b>Specialization in Health Promotion and Education</b> Dissertation: Acculturation, Social Support, and Self-Esteem as Predictors of Mental Health Among Foreign Students: A Study of Nigerian Nursing Students Walden University</p>	<p><b>Expected</b>      <b>May 2010</b></p>
<p><b>Master of Science in Nursing</b> School of Nursing University of Phoenix</p>	<p><b>October 2003</b></p>
<p><b>Bachelor of Science in Nursing</b> University of Maryland</p>	<p><b>May 2001</b></p>

### PROFESSIONAL EXPERIENCE

<p><b>Nursing Instructor</b> BOWIE STATE UNIVERSITY, Bowie MD Provides undergraduate students with theory in Pathophysiology, Fundamentals I &amp; II, Adult Practice, Care of Complex Clients &amp; Transcultural Health and Wellness Gives instruction and guidance to nursing students in clinical settings Supervise bedside procedures and medication administration Provides topical support on contents of present course material</p>	<p><b>2004-Present</b></p>
<p><b>Nursing Clinical Instructor</b> College of Southern Maryland, La Plata, MD Provided instruction and guidance to nursing students in clinical settings Supervised bedside procedures and medication administration Provided topical support on contents of present course material</p>	<p><b>2001-2004</b></p>
<p><b>Charge Nurse/Preceptor</b> Prince Georges Community Hospital, Cheverly, MD Precept new graduate nurses and new staff Resource nurse, prepared staff scheduling, and delegated nurse/patient assignments Provided high quality care for patients from ICU, ER, or direct transfers</p>	<p><b>2000- 2004</b></p>

Efficient in telemetry monitoring for cardiac patients with high acuity including, open hearts and transplant patients.

**Charge Nurse/Preceptor**

Southern Maryland Hospital, Clinton, MD **2000- 2001**  
 Precept new graduate nurses and new staff and nursing students  
 Resource nurse, delegated nurse/patient assignments  
 Provided high acuity care for patients from CCU, ER, and direct admission  
 Clinical Nurse, Intermediate Cardiovascular Unit

**Charge Nurse/Preceptor,**

Washington Hospital Center, Washington, DC **1997-2000**  
 Resource nurse, delegated staff assignments  
 Conducted presentations and in-services for nurses on the Telemetry unit  
 Three times recognition of Patient Satisfaction - 'Bravo' honor.  
 Provided high acuity care to patients on ventilators and tracheas  
 Spearheaded weekly discharge planning

**Peer Tutor,** English Department

Long Island University, NY **1993-1994**  
 Assisted English for Second Language (ESL) students in writing papers

**RESEARCH INTEREST**

Health Promotion and Education  
 Immigrant Health Issues with a focus on African students

**PROFESSIONAL HONORS AND RECOGNITION**

National League of Nursing Ambassador **2007 -2009**  
 One of 100 Extra Ordinary Nurses, Sigma Theta Tau **2005**  
 International Honor Society of Nursing  
 Sigma Theta Tau International Honor Society of Nursing **2001**

**PROFESSIONAL MEMBERSHIP**

Sigma Theta Tau International Honor Society of Nursing  
 National League of Nursing  
 Member of the Who Is Who Professional Organization  
 American Hearts Association, BCLS & CPR Instructor

**SELECTED CONFERENCES**

Nursing Forums 2007	<b>October 2007</b>
National League for Nursing	<b>September 2007</b>
National League for Nursing	<b>September 2006</b>
Mosby Faculty Development, Institute, Miami, Florida	<b>January 2006</b>

**PRESENTATIONS**

Infection Control, Uganda East Africa	<b>August 2006</b>
IV Insertion, Southern Maryland Hospital	<b>August 2002</b>
Diabetes Management, Southern Maryland Hospital	<b>July 2002</b>
Guest Speaker, Annual Graduation Banquet Ridgley Church of God in Christ	<b>June 2001</b>

**PROJECTS**

Designed a Quick Reference Guide to be used by New RNs and Agency Nurses, PG Hospital Center, MD	<b>July 2003</b>
Designed a Revised Instructor's Child Care Course Manual for American Red Cross, LaPlata, MD Chapter.	<b>May 2003</b>

**COMMUNITY INVOLVEMENT**

President of Nurses Unit, Ridgley Church of God in Christ	<b>2004-2009</b>
Nurse Volunteer Corps, Emergency Response Department of Health and Mental Hygiene	<b>2006-Present</b>
CPR Instructor	

**LICENSURE/ CERTIFICATES**

RN License in Maryland and the District of Columbia	<b>2010</b>
American Heart Association Basic CPR/AED/First Aid Instructor	<b>2010</b>