FACTORS AFFECTING THE RELOCATION AND TRANSITION OF INTERNATIONALLY EDUCATED NURSES MIGRATING TO THE UNITED STATES OF AMERICA

by

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Presented to the Faculty of the Graduate School of

The University of Texas at Arlington in Partial Fulfillment

of the Requirements

for the Degree of

DOCTOR OF PHILOSOPHY

THE UNIVERSITY OF TEXAS AT ARLINGTON

December 2010

ACKNOWLEDGEMENTS

While working on a dual MSN/MBA degree it occurred to me that I could obtain my MSN and move straight into a PhD in nursing program. I figured it would only be a few credit hours difference and a little more time investment. I am still smiling at my naivety, but well contented in this God-ordained venture. During my first semester, when asked why I was seeking a PhD in nursing, I spoke my passion, “So that I can be a part of redefining the nursing paradigm in the developing world.” My goal remains unchanged. The education and experiences of the past six years in the PhD nursing program strengthened and intensified my vision of a lifelong career within the global health arena.

Foremost, I thank my God for guiding my steps to the University of Texas at Arlington, where I encountered a long-cherished desire, a community of scholars and select mentors who explored varied paths of knowledge with me. From my first semester on, I marveled at the infinity of choice and the rippling effects of each decision made. Attending UT Arlington started me on this beguiling journey of research into factors affecting the relocation and transition of internationally educated nurses.

As the Zulus say, Umuntu Ngamantu Ngubantu. I am who I am because of my family and the friends in my life. I thank the following key people: My husband, Femi Ibitayo, who has always dreamed with me, thinks with me, fueling my heart with courage to do that for which I was born; my two sons, Tobeya and Yosef, who are my heroes marching boldly through life, unabashedly using the intellect and multiple talents bestowed them; my father and mother, Stan and Margot McMillen, for giving me my world view by raising their children in Papua New Guinea, Mexico, and Guatemala; and Rev. Panya Baba for facilitating our participation in Rescue Fellowship Nigeria, meeting the needs of the underserved Nigerian population.

Thanks to my fellow PhD students and graduates for their support: Dr. Susan Baxley for her steadfast friendship and ready laugh, Dr. Kathy Daniel for her unflappable attitude, Mei-

Yi Lee for my introduction to Taiwanese nursing and experiences at Kaohsiung Medical University's nursing college, Jakki Opollo for her passion on Kenyan healthcare, Lori Spies for her dry wit, and Dr. Gloria Carr for being my Thursday Buddy.

I thank my mentors for always believing in me and willingly sharing their expertise with me. Dr. Elizabeth Poster always gave me her time, listened to my ideas, and pleasantly debating them with me, thus solidifying or clarifying my thoughts. Proper statistical analysis is the heart of valuable research - thank you Dr. Daisha Cipher.

The three scholars on my dissertation committee are passionate about research and open in expressing their views on my dissertation topic. As iron sharpens iron, their experience and guidance was invaluable throughout this dissertation process. For her expert guidance on internationally educated nurses' research and her unwavering research commitment to East African nurses, I thank my dissertation chair, Dr. Jennifer Gray. The breadth of her ready intellect inspires me in my efforts. I thank all members of my dissertation committee for their unflagging support. Dr. Bond, thank you for generously supporting my dissertation research with the Mary Lou Bond Fellowship. I first became interested in UT Arlington because of the Hispanic Center Dr. Bond directs. How fitting it is that she consented to be on my dissertation committee. I thank Dr. Carolyn Cason for speaking words of truth that resonate with me to this day; your words are yours to share. I appreciate how she creatively in condenses and conveys research knowledge in various ways for recall according to each individual's learning style.

Finally, I am grateful to all of my gatekeepers for contacting internationally educated nurses to participate in this study. Their networks made this research possible. I thank all of the internationally educated nurses who participated in my study for sharing their relocation and transitions experiences with me. Their openness motivates me to continue researching IEN migration issues and assist IENs in their transition experiences.

November 8, 2010

ABSTRACT

FACTORS AFFECTING THE RELOCATION AND TRANSITION OF INTERNATIONALLY EDUCATED NURSES MIGRATING TO THE UNITED STATES OF AMERICA

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A paucity of research studies and systematic reviews have been conducted on IEN nurse migration experiences in the US. The number of IENs in the US RN workforce is projected to continue growing. Therefore, studies on nurse migration and IEN relocation and transition experiences are essential. This exploratory descriptive study on the transition conditions and professional satisfaction of nurses migrating to the US provides information on the complex pull and push factors affecting nurse migration.

This study described the push factors, pull factors, personal characteristics, motivation to migrate, transition conditions, family/social environment, work environment, and professional satisfaction of IENs in the US health care system. It also described the differences in these IENs across source countries by world region. This study's conceptual framework guided the data analysis and exploration of concepts.

Results for this study indicated the majority of IENs who received their basic nursing education across all WHO regions experienced high professional satisfaction on all items in the Professional Satisfaction subscale. Although unexpected, this finding may reflect the maturity of

the IENs, as they were not new nurses but filled out the instrument retrospectively. Their memory of their relocation and transition experiences may have lost its immediacy.

This research study added to the knowledge base on nurse migration issues by providing a greater understanding of foreign nurses' relocation and transition experiences in the US, and the successful integration of foreign nurses from around the world into the healthcare workforce. Several IEN participants indicated in their open-ended comments that they desired transition programs both in their source countries and their destination countries. Individualized IEN transition programs could be developed with modular components and content on clinical practice, organizational environment, and IEN specific issues such as state board registration and seminars on communication issues, workplace ethics, and how to handle workplace issues such as discrimination. It is hoped that as IENS relocate to the US and transition into the healthcare environment, they will experience increased professional satisfaction.

TABLE OF CONTENTS

LIST OF ILLUSTRATIONS

LIST OF TABLES

CHAPTER 1

INTRODUCTION

Internationally educated nurses (IENs) spend considerable personal resources migrating to the United States (US). Their skills are not fully utilized when they migrate and do not transition successfully or easily into the healthcare workplace. Some of these transition difficulties include language, failure to pass the National Council Licensure Examination (NCLEX) with a subsequent delay in acquiring US nurse licensure, adjustment to the destination country's culture, and adjustment to the workplace culture (Jerdee, 2004). Knowledge of the transition experiences of nurses immigrating to the US is needed to promote their successful integration into the workforce. Dependence on the migration of IENs to fill nurse vacancy in the US and other developed countries has resulted in unethical recruitment of nurses from low resource countries.

This research study adds to the knowledge base on nurse migration issues by providing a greater understanding of foreign nurses' relocation and transition experiences in the US. This study is consistent with the World Health Organization's (WHO) focus on better understanding of not only the collective nature of nurses and their motives for migrating, but also the motives of individual nurses (Stilwell et al., 2003).

Chapter 1 provides the background and significance of nurse migration and their transition experience. The conceptual framework, purpose, research questions, and assumptions for this study are also described.

Background and Significance

The term, internationally educated nurse (IEN), is synonymous with foreign educated nurse. Both are operationally defined as nurses who receive their basic nursing education and training outside of the destination country (Xu & Kwak, 2005). Foreign born people are defined

as “persons residing in the US who were not citizens at birth,” including legal immigrants, refugees, temporary residents and undocumented immigrants (U.S. Bureau of Labor Statistics, 2009, p. Technical Notes). A foreign nurse is operationally defined as a nurse who was born outside the destination country (Xu & Kwak, 2007), but the term does not imply nursing education was obtained outside the destination country. This study will use the terms source and destination countries except when making distinctions regarding economic state of countries.

Demographics of Migration

In 2008, foreign born people comprised 4.2 million (15.6 %) of the US civilian workforce (U.S. Bureau of Labor Statistics, 2009). Foreign born nurses accounted for about one third (30.5 percent) of growth in the US registered nurse workforce between the years 2002 and 2005 (Buerhaus, Auerbach, & Staiger, 2007). The percentage of foreign born nurses in the total US RN workforce increased from 9 percent in 1994 to 16.3 percent in 2008, with 10 percent having immigrated to the US in the last five years (Buerhaus, Auerbach, & Staiger, 2009). The need for Registered Nurses (RNs) in the US is projected to grow 23 percent between the years 2006 and 2016 (U.S. Bureau of Labor Statistics, 2009), generating continued demand for IENs.

The US imports the most IENs in the world, followed by the United Kingdom (Aiken, 2007). The United States and the United Kingdom recruit IENs primarily from India and the Philippines, two lower middle-income countries (Buchan, 2006). An underestimate of IENs in the US may exist if they enter the US under visas other than an occupational visa (Aiken, 2007). A proxy measure for the number of IENs in the US is the number registering for licensure (Vujicic, Zurn, Diallo, Adams, & Dal Poz, 2004). The difficulty with the proxy measure is that it does not include IENs still adapting to the destination country, those who are not yet in the workplace (Dovlo, 2007). Requests to regulatory agencies for credential verification has been used as a proxy (Little, 2007).

In the past, nurse migration patterns occurred intranationally, then in a north to north country pattern (Ireland to the UK) or south to south country pattern (Cuba to Nicaragua), but nurse migration patterns are changing (Kingma, 2006). The most common and most discussed nurse migration pattern at present is from developing country to developed country (McElmurry et al., 2006), such as sub-Sahara Africa to Canada (Labonté, Packer, & Klassen, 2006; McElmurry et al., 2006). Developed countries are defined as the industrialized countries in the world (high income countries), whereas developing countries are defined as countries that are the least economically developed in the world (low income or middle income countries) (World Bank, 2009). Other common nurse migration patterns include moving between Commonwealth countries (Kingma, 2006), and from one developed country to another (Hall et al., 2009; Sparacio, 2005). There will be a demand for IENs to meet US health workforce needs as long as the supply of trained nurses in the US continues to be insufficient to meet the demand (Brush, Sochalski, & Berger, 2004).

Process of Migration

IENs spend considerable personal resources and must undergo several processes before practicing in the US. To acquire a US occupational visa, IENs must first undergo federal screening for education and licensure compatibility with US educated nurses. The Commission on Graduates of Foreign Nursing Schools (CGFNS International) is a recognized authority on evaluating international nurses' credentials and verifying their education and licensure. In addition, IENs must demonstrate verbal and written English language proficiency with exception of some source countries for which the English language proficiency is waived. Prior to obtaining their occupational visa, they must also pass either the Qualifying Examination from CGFNS International or the U.S. National Council Nurse Licensing Examination (NCLEX-RN) (U.S. Bureau of Labor Statistics, 2009). An overview of several organizations involved in this process of nurse migration is provided in Table 1.

Since the US Illegal Immigration Reform and Immigrant Responsibility Act (section 343)

was passed in 1996, completion of screening programs to verify minimum eligibility standards is mandated for health care professionals (except for physicians) who wish to acquire certain occupational visas (Commission on Graduates of Foreign Nursing Schools, n.d.-a). The *VisaScreen* program is a federally approved program administered by the International Commission on Healthcare Profession (ICHP), a division of CGFNS International. The program screens health care professionals educated outside the US who are interested in acquiring either a US permanent occupational visa, a temporary visa, or a visa through the North American Free Trade Agreement (NAFTA), (Commission on Graduates of Foreign Nursing Schools, n.d.-a). The IEN must pass the NCLEX and be registered with a state board of nursing prior to practicing as a nurse in the US.

One reason researchers encounter difficulties acquiring the number of IENs within a destination country is the various ways an IEN can enter the country. For example, an IEN may obtain US permanent resident status “by a family member ‘s sponsorship, employment, or a job offer” (U.S. Citizenship and Immigration Services, n.d.-a). IENs may enter the US as a minor, as a tourist, on a student visa, or with a spouse and not list their occupation. In addition, an IEN may apply for permanent residency without a VisaScreen certificate if a spouse or minor of a US citizen or permanent resident. However, for employment as a nurse in the US, an IEN must contact the US Bureau of Citizenship and Immigration Services (BCIS) and provide a VisaScreen certificate obtained from CGFNS International/ICHP (Commission on Graduates of Foreign Nursing Schools, n.d.-b).

Table 1 Organizations Involved in Nurse Migration

Organization	Overall Function	Function related to Nurse Migration
CGFNS International	Evaluates credentials of health care professionals and validates education, registration, and licensure	Administers CGFNS Qualifying Exam of nursing knowledge and English language proficiency assessment
Licensing Authority	Licensing authority allowing nurse to practice in that country	Validates nursing registrations and all licenses to CGFNS/ICHP
Testing Agency	Provides English language proficiency test	Submits test scores to CGFNS/ICHP
High school (secondary school)	Provides secondary education	A copy of diploma or equivalent submitted by IEN
CGFNS/ICHP	Provides VisaScreen certificate for health professionals	Issues VisaScreen certificate to IEN for submission to consulate officer when issuing visa or to USCIS when adjusting status
Department of Labor (DOL)	Fosters and promotes the welfare of US workers, potential workers, and retirees; administers federal labor laws	"Registered nurse" is a precertified shortage occupation. DOL provides labor certification.
US Bureau of Citizenship and Immigration Services (USCIS) National Visa Center	Responsible for immigration services. Collects visa application fees and supporting documentation, provides visa immigration number	Manages immigration process that allows IEN to work in US. Notifies IEN when visa immigration number available
US Consulate	Interviews potential immigrants, and decides eligibility for immigrant visa	Issues VisaPacket to IEN to submit to customs office at port of entry
National Council of State Board of Nursing	Ensures licensed nurses provide safe, competent nursing care.	Oversees licensure exams for entry-level nursing competence: NCLEX-RN registered nurses and NCLEX-PN for licensed vocational/practical nurses
State Board of Nursing	State agency responsible for the regulation of nursing practice in that state	Issues RN or LVN/LPN nursing license to IEN

US State Boards of Nursing vary in the documentation they require from CGFNS International for IENs, although most require some type of certification from CGFNS International. They usually use one of these CGFNS International programs: Certification Program (CP), Credentials Evaluation Service (CES), VisaScreen program, or New York Credentials Verification Service (NYCVS) (Nichols, Davis, & CGFNS International, 2009). The IEN must request that required documentation be submitted directly to either CGFNS International or the International Commission on Healthcare Professions (ICHP), a division of CGFNS International. The documentation may include nursing registrations or licenses, English language proficiency test results, and secondary school diplomas. CGFNS International administers the CGFNS Qualifying Exam of nursing knowledge and assesses English language proficiency (Commission on Graduates of Foreign Nursing Schools, n.d.-b). The ICHP provides a VisaScreen certificate to the IEN to submit to the consular officer when issuing a visa or to the USCIS for a change in visa status. Sponsors such as recruiting employers must apply to the Department of Labor (DOL) for an IEN's labor certificate. In the US, the occupation of registered nurse is a precertified labor shortage, which is of benefit to IENs requesting occupational visas. The US Citizenship and Immigration Services (USCIS) oversee the immigration process which allows an IEN to work in the US. The National Visa Center collects fees and supporting documentation and notifies the IEN when a visa immigration number is available. The US Consulate in a source country interviews the IEN and determines visa eligibility (U.S. Citizenship and Immigration Services, n.d.-a).

When petitioning for an employment-based permanent visa, it typically takes at least one year for a US employer and IEN to complete the required immigration steps for a permanent visa (Jerdee, 2004). The required steps and approximate timeline are outlined in Table 2. First, the recruiting employer screens, interviews, and verifies IEN credentials. The recruiting employer then completes and submits labor certification documentation. When

received, the recruiting employer submits an employment-based permanent visa petition to the USCIS. The USCIS processes the application. Supporting documentation is sent to the National Visa Center. The IEN interviews at the US Consulate in the source country (U.S. Citizenship and Immigration Services, n.d.-a) and presents the VisaScreen certificate from CGFNS International when applying for the visa (Nichols et al., 2009).

Table 2 Approximate Immigration Timetable for Recruiting Employer and IEN

Process	Approximate Timeline in Months
Recruiting employer screens, interviews, and verifies IEN credentials.	Prior to decision to sponsor IEN
Recruiting employer completes and submits labor certification documentation.	2
Recruiting employer submits employment-based permanent visa petition to USCIS	2
Processing by USCIS	2 to 4
Submit documentation to National Visa Center	4 to 6
IEN interview at US Consulate in source country	2 to 4
IEN presents VisaScreen certificate from CGFNS International to consulate officer	-
Total	12 to18 months

Adapted from Jerdee (2004)

Other visa alternatives to a permanent immigrant visa include temporary non-immigrant visas such as the H-1B and TN NAFTA. The H-1C visa classification for recruiting nurses to federally designated health professional shortage areas was to expire June 15, 2005 (U.S. Citizenship and Immigration Services, n.d.-a), but is was extended and expired December 20, 2009 (Nichols et al., 2009). A provision of the H-1B visa has been made for specialized registered nurse positions that require a bachelors degree or higher, with the IEN required to already hold at least a bachelor's degree (Nichols et al., 2009). Because of The North America Free Trade Agreement, the TN NAFTA exists as a professional temporary visa for Canadian

and Mexican citizens who meet eligibility criteria (U.S. Citizenship and Immigration Services, n.d.-b). In the US, the National Council of State Boards of Nursing (NCSBN) oversees licensure exams for entry-level nursing competence, such as the NCLEX-RN and NCLEX-PN (The National Council of State Boards of Nursing, n.d.). Each State Board of Nursing regulates nursing practice in that state and issues an RN or LVN/LPN license to the IEN to practice in that state. It sets requirements regarding eligibility to take the licensure by examination: education level, completed application and fees, work visa, proof of immigration documents, criminal background check, and medical examination (L. H. Aiken, Buchan, Sochalski, Nichols, & Powell, 2004) .

Once arriving in a destination country, many foreign educated nurses fail to complete their requirements for licensure. In Canada, between the years 1999-2003, about 29% of applicants completed registration for nursing licensure, "a period in which more than 12,000 IENs failed to qualify and were subsequently not employed in nursing in Canada (Jeans, Hadley, Green, & Da Prat, 2005, p. 34). The result is a loss of human capital to the destination country's health care industry (Labonté et al., 2006). From IEN focus groups, Jeans et al. (2005) identifying two major reasons for failure to obtain licensure: difficulty obtaining documents required for the application from the source country and difficulty obtaining work visas. Employers indicated their top two barriers to hiring IENs were language and communication, as well as delays in obtaining immigration work visas.

Reasons for Migration

A monetary motivation of nurse migration includes increased personal income. It is the practice of many IENs to send money back to source countries (remittances) after obtaining employment. Remittances sent from IENs back to family members in source countries (such as in Sub-Sahara Africa) are typically more than the amount expended on the training of skilled health workers (Connell, Zurn, Stilwell, Awases, & Braichet, 2007). In many developing countries, remittances from abroad are needed to fund daily living expenses of family members

living in source countries, so families may willingly invest in nurse migration expenses (Kingma, 2006).

Few researchers have conducted rigorous studies on the push and pull factors of nurse migration (Buchan, Jobanputra, Gough, & Hutt, 2006). The term “push and pull factors” is used throughout the nurse migration literature to describe reasons nurses emigrate from their home or source countries (push factors) and the appeal of destination countries (pull factors) (Buchan, 2006; Kingma, 2006; Sparacio, 2005). Push and pull factors include income, job satisfaction, organizational environment and career opportunity, governance, protection and risk, social security and benefits (Haour-Knipe & Davies, 2008). The push and pull factors for health professionals may be viewed as stages (Dovlo & Martineau, 2004). They may also be categorized into six main categories: job security, working conditions, economic and political considerations, physical security, quality of life and education (Labonté et al., 2006).

Labonté et al. (2006) studied the migration of Sub-Sahara African foreign-trained health professionals, (especially physicians) to Canada. Respondents identified factors influencing nurse migration as both push factors and pull factors, as seen in the following examples. Job security is a push factor when there are no available jobs or promotions and there is the risk of losing one’s job. Job security becomes a pull factor when jobs are available in a destination country. Working conditions push a nurse towards emigration when there are low salaries, a deteriorating work environment, inadequate supplies, high stress, and high patient volumes; but working conditions pull nurses towards immigration when international salaries allow for savings, workloads and work conditions are reasonable. Economic and political considerations are a push factor when the country is economically depressed, experiencing political upheaval, and fraught with racial or gender discrimination, and a pull factor when a potential destination country is democratic and not corrupt. Physical security is a push factor when there is significant criminal activity, gender-based violence, and significant exposure to HIV, and a pull factor when the destination country is safe. Quality of life is a push factor when there are poor

accommodations, lack of transportation, and inability to have a decent life, whereas a pull factor when the destination country is multi-ethnic and has a good quality of life. Education is a push factor when there is a diminishing quality to children's education, and a pull factor when children have more opportunities in the destination country (Labonté et al., 2006). In summary, both push and pull factors must exist for nurse migration to occur (Mejia, 2004), and nurses migrate to improve their professional lives and standard of living (Kline, 2003).

Although a salary increase is a significant pull factor of nurse migration, it is not the only motivator (Kingma, 2006). Nurses also may migrate out of a desire for professional growth (Buchan et al., 2006). Another main driver may be having immigrants from the same country already residing in the destination country (Vujicic et al., 2004), Nurses migrate within their home country or to destination countries when nursing jobs unavailable, workplace safety issues proliferate, and professional development opportunities are scarce where they are (Kingma, 2006). The transition of an IEN to a destination country's workplace is individualized, dependant on the personal and professional climate the IEN encounters, including psychological, social, and environmental issues (Adams & Kennedy, 2006).

The complex push and pull factors have received little attention in the United States, other than related to IENs from the Philippines, Korea, and India. Gray and Johnson (2008) studied only African-educated nurses. Without an enhanced understanding of nurse migration conditions, health care systems and employers in source countries cannot create sustainable solutions to reduce IEN migration, while systems and employers in the US cannot create conditions to promote successful integration of IENs into the workplace.

Limited empirical research has been done on IEN migration and its effect on nursing (Bieski, 2007). Because limited empirical research has been done on the push and pull factors of nurse migration, countries cannot address the problem. Limited research has also been done comparing migration across source countries and if their transition experiences are specific to that source country. The focus of this study is the relocation and transition conditions of IENs

migrating to the US from various source countries. The findings will add to the knowledge of how to develop transition programs that assist IENs in successfully transitioning to the US culture and US healthcare workplace, thus promoting their retention in the US healthcare workforce.

Conceptual Framework

Migration from rural to urban areas in the 1950's and 1960's gave rise to migration theories such as the neo-classical theories: Dependency Theory, World Systems Theory, and Articulation Theory (Horevitz, 2009). The Transnational Theory was developed in the late 1980's and is popular today across disciplines, as it factors globalization, the fluidity of country borders, and immigrants' struggles with personal identities in new countries into an understanding of the migration process, including several sub-theories such as the Diaspora Theory, Border Theory, and Feminist Theory (Horevitz, 2009).

Because none of these theories specifically addressed relocation and transition, the Ibitayo (2009) conceptual model, Migration and Transition of Internationally Educated Nurses (Figure 1),was adapted from Gray and Johnson's (2008) conceptual map. Their conceptual map was synthesized from the nurse migration literature and the key concepts measured by the two surveys of nurse migration (Buchan et al., 2006; Nguyen et al., 2008). It provided the framework for this study and guided the review of pertinent literature in Chapter 2. Both push factors and pull factors interact with an IEN's personal characteristics to influence the motivation to migrate. After migrating, both the family/social environment and work environment in the destination country interact with the transition conditions to influence the IEN's professional satisfaction in the current job. Professional satisfaction indicates the end-stage of that individual's transition experience.

Conceptual Model

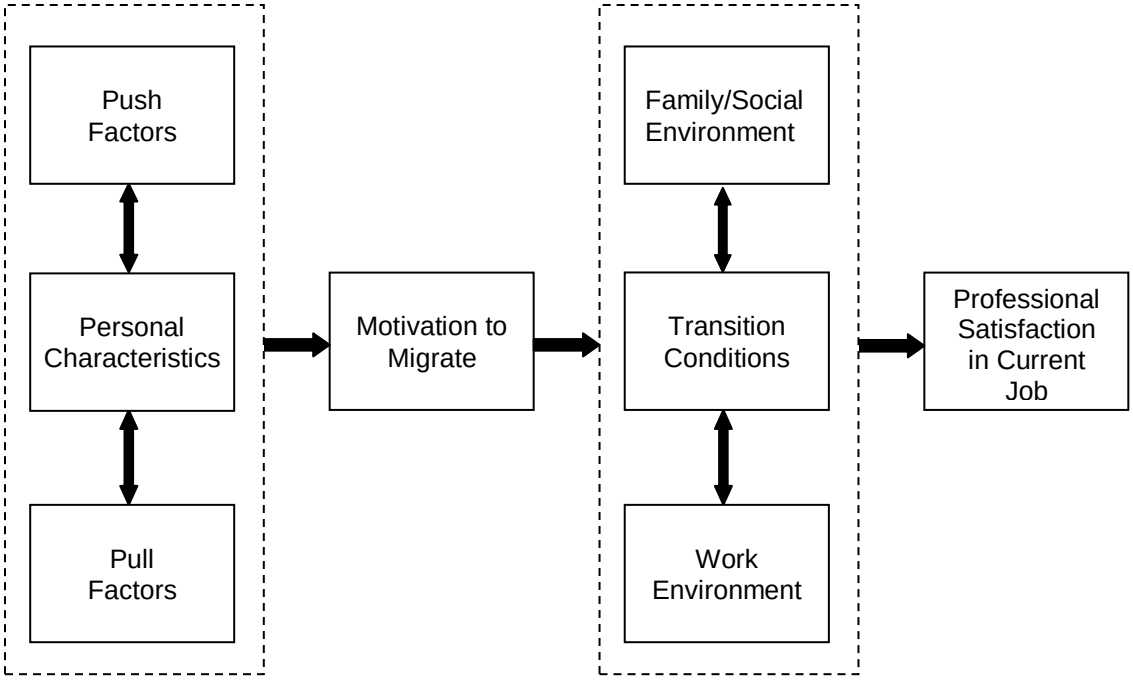


Figure 1. Ibitayo (2009) Migration and Transition of Internationally Educated Nurses

Conceptual Definitions

Push factors and pull factors work together with personal characteristics to influence an IEN's motivation to migrate. There is a symmetrical relationship between these three factors, with push factors originating from source countries, pull factors originating from destination countries, and personal characteristics from an individual's demographic and educational characteristics. An individual's personal characteristics also affect what push factors and pull factors influence the motivation to migrate.

Push Factors were conceptually defined as the "conditions and circumstances that encourage nurses to leave their country or location of work" (Kingma, 2006, p. 19). Nurses migrate within their home country or to destination countries when no paid nursing jobs are available, workplace safety issues proliferate, and professional development opportunities are scarce (Kingma, 2006).

Pull Factors were defined as the "conditions and circumstances in the destinations country that attract and facilitate the movement of nurses towards that country" (Kingma, 2006, p. 19). Push and pull factors include income, job satisfaction, organizational environment and career opportunity, governance, protection and risk, social security and benefits (Haour-Knipe & Davies, 2008). Push and pull factors may also be categorized into six main categories: job security, working conditions, economic and political considerations, physical security, quality of life and education (Labonté et al., 2006).

Personal Characteristics were defined as an individual's demographic characteristics and educational characteristics. Push factors, pull factors, and personal characteristics influence an individual's motivation to migrate.

Motivation to migrate was defined as the primary reason the nurse chose to leave the source country. An IEN's motivation to migrate is significantly influenced by multiple factors including "political forces, poverty, and the age of the migrant, past colonial and cultural ties and an existing émigré population in the destination country" (Kingma, 2006, p. 14).

In an IEN's relocation to a destination country, the family/social environment and the work environment affect the transition conditions experienced, and together all three factors influence the IEN's professional satisfaction in current job. The relationship among the three factors is symmetrical and two-way, so that transition conditions also affect the family/social environment and the work environment.

Transition Conditions were conceptually defined as the work conditions experienced during the first year after migration to a destination country. Some of these transitions difficulties include language, failing to pass the National Council Licensure Examination (NCLEX) with a subsequent delay in acquiring US nurse licensure, adjustment to the destination country's culture, and adjustment to the workplace culture (Nichols et al., 2009).

Family/Social Environment was defined as a nurse's cultural kinship group, family and social environment. The support of family and friends already in the destination country

encourages nurse migration (Kingma, 2006). Investing in family and work life increases job satisfaction and promotes adaption to a new environment (Hayne, Gerhardt, & Davis, 2009).

Work Environment was defined as the nurse's current work environment. The length of time it takes to adjust working in a US hospital is dependent on the individual and occurs in two stages, with initial adjustment taking 2 to 3 years, with an additional 5 to 10 years for full adjustment to the work environment (Yi & Jezewski, 2000).

Professional Satisfaction was defined as "career choice and meaningfulness of work within one's life goals" (Lynn & Redman, 2005, p. 266). An IEN's professional satisfaction occurs as a result of successful transition to the US workforce. Although a salary increase is a significant pull factor of nurse migration, (Kingma, 2006), nurses also migrate out of a desire for professional growth (Buchan et al., 2006).

Purpose of the Study

The purpose of this study was to describe the push factors, pull factors, personal characteristics, motivation to migrate, transition conditions, family/social environment, work environment, and professional satisfaction of IENs in the US health care system, and to describe the differences in these characteristics and factors of IENs across source countries by world region. The exploratory descriptive study on the transition conditions and professional satisfaction of nurses migrating to the US provides understanding of the complex pull and push factors affecting nurse migration. This study enhances the understanding of US IEN transition experiences so health care system administrators and employers can enhance the transition of IENs and successfully integrate and retain them in the health care workplace.

Research Questions

Using a sample of convenience, the study collected data on an available pool of IENs and described them in terms of the WHO region where they received their basic nurse education. The country of basic nursing education was identified by the participant and linked

to the WHO region by the investigator. Among IENs who received their basic nursing education in different countries:

1. What professional satisfaction is experienced in their current job?
2. What are their perceptions about transition conditions, their family/social environment, and their current work environment?
3. What is the primary motivation to migrate: personal, professional, financial, or social reasons?
4. What push factors, pull factors, and personal characteristics were present prior to migration?
5. Are there differences in professional satisfaction, transition conditions, family/social environment, work environment, motivation to migrate, push factors, and pull factors?

Assumptions

The theoretical assumptions for this study were:

1. IEN's migrate to the US for personal and professional reasons known to them.
2. IENs experience both push and pull factors when motivated to migrate.
3. IENs experience transition conditions during the migration process.

Chapter Summary

Nurse migration will continue until both developing and developed countries successfully create a national sustainable professional nursing workforce (Brush, 2008). Professional nurses who migrate may choose to remain employed long-term in the destination country, relocate to another country, or return to their source country (Buchan et al., 2006). This study increases understanding of foreign nurses' relocation and transition experiences in the US, facilitating successful integration of nurses migrating to the US for employment in the healthcare workforce.

CHAPTER 2

REVIEW OF RELEVANT LITERATURE

The complex phenomenon of nurse migration occurs in the context of a global nursing shortage. National leaders must focus on creating and retaining their country's professional nurse workforce without looking to nurse migration to fill nurse vacancies (Brush, 2008). Since nurse migration exists, national leaders should collaborate internationally on ethical nurse recruitment (Brush, 2008; Buchan & Sochalski, 2004). Because internationally educated nurses (IENs) spend considerable personal resources migrating to the United States (US) (Nichols et al., 2009), their skills are not fully utilized if these nurses migrate and do not transition successfully into the healthcare workplace. Some of these transitions difficulties include language difficulty, failing to pass the National Council Licensure Examination (NCLEX) with a subsequent delay in acquiring US nurse licensure, adjustment to the destination country's culture, and adjustment to the workplace culture (Jerdee, 2004; Nichols et al., 2009). Knowledge of the transition experiences of nurses immigrating to the US is needed to promote their retention.

This chapter will provide background information on nurse migration, including a statistical overview of the phenomenon. The contributions of nurse migration thought leaders will be followed by a review of relevant findings. A summary of what is known and what is not known will conclude this chapter.

Background

There is a global nursing shortage (Sparacio, 2005) and an increase in nurse migration (Kingma, 2007). Changes in family structures occur with nurse migration. Although the support of family and friends already in the destination country encourages nurse migration, families of nurse immigrants are often caught in the middle, with nurses choosing to either emigrate with their immediate family members or place their children in the care of a relative in the source

country (Kingma, 2006). In their study, Buchan et al. (2006) found one third of emigrating nurses with children had to leave their children in the source country. Countries from which nurses emigrate are source countries, and destination countries are countries to which they immigrate. Some countries, such as the Philippines and India, have an oversupply of nurses, which is created by an intentional overproduction of nursing graduates (Brush, 2008; Buchan, 2006; Muncada, 1995; Stilwell et al., 2003). The paradox of having high nurse vacancies due to a lack of government funding while having an oversupply of nurses, drives nurses to either migrate to other countries or seek employment outside of nursing (Kingma, 2006).

Statistical Picture

Destination countries with the highest employment of foreign nurses are (in order from largest to smallest): United States (US), United Kingdom (UK), Australia, Ireland, and Norway (Sparacio, 2005). The US civilian workforce was composed of 4.2 million (15.6%) foreign born (country of birth) people in 2008 (U.S. Bureau of Labor Statistics, 2009). In the US registered nurse (RN) workforce, foreign born nurses accounted for one third of the RN growth between the years 2002 and 2005 (Buerhaus et al., 2007). Ten percent of the foreign born nurses immigrated to the US within the past five years (Buerhaus et al., 2009). Xu and Kwak (2005) conducted a secondary data analysis of the 2004 National Sample Survey of Registered Nurses (NSSRN) in the US, which indicated about 100,000 (3.7 %) nurses were IENs. In the US, the projected need for RNs will increase 23 % between the years 2006 and 2016 (U.S. Bureau of Labor Statistics, 2009). Until the US successfully trains and retains its national professional nursing workforce, IENs will likely continue migrating to the US for nursing employment.

Between 2001 and 2008, one third of the increase in the US registered nurse (RN) workforce was foreign-born (155,000), with the largest increase in 2008 (48,000) (Buerhaus et al., 2009). In 1994, foreign-born nurses were 9% of the total RN workforce, increasing to 16.3% by 2008 (an approximate of 400,000 full-time equivalent nurses) (Buerhaus et al., 2009).

The US is the destination country with the most IENs, followed by the United Kingdom (UK) (Aiken, 2007). Both the US and the UK recruit IENs primarily from India and the Philippines, two lower middle-income countries (Buchan, 2006). IENs may enter the US under other types of visas, instead of occupational visas, resulting in an underestimation of the number of IENs in the US (Aiken, 2007). A proxy measure for the number of IENs in the US is the number registering for licensure (Vujicic et al., 2004).

Ethics of Nurse Migration

Debates on global nurse migration include ethical concerns and the effects of nurse migration on the developing world, but ultimately it is an individual's right to choose migration (Kingma, 2006). It is also the right of an individual to practice nursing in his/her home country (Buchan, 2006). Nations attempt to maintain their country's nurse labor supply by developing policies and regulations to control the push and pull factors of nurse migration (Buchan & Sochalski, 2004).

Although codes of ethical practice are available to destination countries for guiding foreign nurse recruitment practices, such as Canada's *Canadian Commonwealth Code of Practice for the International Recruitment of Nurse,* and the *Melbourne Manifest,* they are seldom used (Labonté et al., 2006). In 2001 England introduced the first country level code for ethical nurse recruitment, the Department of Health Code of Practice on International Recruitment, which was implemented in the UK. The code's actual impact on a source country's nurse migration cannot be determined due to a lack of comprehensive monitoring and available databases (Buchan, McPake, Mensah, & Rae, 2009). Buchan et al. also caution that implementation of a global code will also be hampered without changes in this monitoring.

Adequate monitoring of nurse migration is a problem of global nurse migration (Ross, Polsky, & Sochalski, 2005). This makes it difficult to obtain statistical data for research studies (Buchan et al., 2009). This lack of data is problematic as monitoring a country's inflow and outflow of nurses identifies the positive and negative implications of nurse migration (Ross et

al., 2005). On May 21st, 2010, the Sixty-third World Health Assembly unanimously passed a resolution adopting the WHO Global Code of Practice on the International Recruitment of Health Personnel. They committed themselves "to the voluntary principles and practices for the ethical international recruitment of health personnel taking into account the responsibilities and rights of source and destination countries, other stakeholders, and those of the migrant health personnel themselves (World Health Organization, 2010)

Nurse Migration Thought Leaders

Nurse migration is a multi-faceted issue, and different thought leaders have explored various issues relating to nurse migration. A thought leader is a published author in the field of nurse migration whose publications continue to influence those studying various aspects of nurse migration. This study focuses only on those nurse migration issues which relate to the study's conceptual map: push factors, pull factors, personal characteristics, motivation to migrate, transition conditions family/social environment, work environment, and professional satisfaction. In order to understand the context of nurse migration, the work of thought leaders in this field and some of their work are highlighted in this section.

Brush

A classic reference in nurse migration literature is Brush's (1994) dissertation, *Sending for nurses: Foreign nurse immigration to American hospitals*. Her study provided an excellent background to nurse migration in the US after World War II, as she studied foreign nurse recruitment practices of US hospitals and their employment of foreign nurses between 1945 and 1980. After the war, the demand for nurses grew, creating a nursing shortage because of inability to meet the demand for nurses. Licensed vocational/practical nurse programs, associate degree programs, and hiring foreign nurses were attempts to curb the US nursing shortage (Brush, 1994). Brush continues publishing in the field of nurse migration, such as on the need for each country to build its own nursing capacity without resorting to foreign nurse migration (Brush, 2008).

Kingma

Kingma is an international consultant on nursing and health policy for the International Council of Nurses (ICN). Kingma's (2006) book, *Nurses on the move: Migration and the global health care economy,* is a seminal book on nurse migration, presenting a comprehensive picture of this field of study. Authors consistently cite Kingma's work, usually in the background section of their papers. Kingma continues to publish in the nurse migration field, covering different aspects of nurse migration such as on "brain circulation", where foreign educated nurses returning to their source country with acquired knowledge from practice in a destination country (Kingma, 2008).

Buchan

Buchan publishes work on the global effect of nurse migration on health systems (Buchan et al., 2006), the need for coordinated global nurse migration policies, and the need for national governments to focus on why nurses choose not to remain in the health workforce, (Buchan & Aiken, 2008). Buchan has also done extensive research within England on the ethical code of practice in IEN recruitment (Buchan et al., 2009) and IEN's career plans (Buchan et al., 2006).

Aiken

Aiken et al. (2001) studied the quality of nursing care in hospital work environments in 711 hospitals in the United States, Canada, England, Scotland, and Germany. In their study, 40% of the sampled US nurses experienced job dissatisfaction, which was more often related to work conditions than salaries. In all the countries studied, from one-third to more than two-thirds of the nurses reported they were performing more non-professional tasks and getting fewer of their basic nursing functions completed, such as skin care, oral hygiene, patient teaching, and comforting patients (Aiken et al.,2001). Aiken's current work includes studying nurse migration trends in the US, analyzing data from the National Council of State Boards of Nursing (NCSBN)

to estimate that around 219,00 IENs (8%) are in the US registered nurse workforce, and that number is increasing (Aiken, 2007).

Buerhaus

Buerhaus is director of the Center for Interdisciplinary Health Workforce Studies, based in the Institute for Medicine and Public Health at Vanderbilt University Medical Center. He publishes extensively on economic analyses of the US registered nurse workforce, including employment trends and the number of foreign born nurses (Buerhaus et al., 2007). Although the data from the Current Population Surveys (CPS) used by Buerhaus and colleagues did not provide information on whether foreign-born nurses were IENs, they predicted that future employment of registered nurses will increasingly be composed of older nurses and foreign-born nurses (Buerhaus et al., 2007). The current recession eased the shortage of nurses in many parts of the US, however, long-term shortages of nurses are still possible unless more nursing schools can educate more future nurses (Buerhaus et al., 2009). Although many IENs may encounter difficulties communicating cross-culturally, there is a gap in knowledge related to the effect of cross cultural communication on patient safety outcomes (Buerhaus et al., 2009).

Stilwell

Stilwell has published extensively on health worker migration and its impact on developing countries and was one of the principal authors for WHO's *World health report 2006: Working together for health.* In 2000, almost 175 million people (2.9%) of the world's population lived outside their country of birth more than one year (Stilwell et al., 2003; Stilwell et al., 2004). Although nurse migration is a personal decision, structural components also influence nurse migration, so a better understanding of why health workers migrate is needed for policymakers to make effective decisions on the recruitment and retention of health workers (Stilwell et al., 2004). Research on the behaviors and attitudes of individual IENS would increase understanding of the push factors and pull factors effects on migration (Stilwell et al., 2003)

Blythe and Baumann

Blythe's work includes providing a workforce profile of IENs in Canada included the fact that more than half worked in the province of Ontario (Blythe & Baumann, 2009). Since the majority of IENs do not enter Canada on professional visas, the exact number of IENs in Canada is unknown (Blythe & Baumann, 2009). Canada's 2006 adoption of a baccalaureate four-year degree as a criterion for licensure may make nurse migration less attractive to IENs. This restriction may pose eligibility challenges for IENs already in Canada with diploma degrees who must either expend more effort to become eligible or decide not to pursue nursing licensure and nursing practice (Blythe & Baumann, 2009). IENs with families and financial barriers have greater difficulties bridging educational requirements, and as more time passes, the possibility of them leaving nursing increases (Blythe, Baumann, Rhéaume, & McIntosh, 2009).

Historical Patterns of Nurse Migration

The majority of researchers who studied nurse migration patterns and trends at the national level used single or multiple sources of secondary data from either a country's professional nurse registry, state or province regulatory agencies, national credentialing agencies such as CGFNS International, governmental agencies that provide work permits, national nurse surveys, and international data sources such as those available from WHO. Table 3 provides a listing of US datasets used in these studies.

Table 3 United States Datasets and Dataset Purpose by Study

Datasets	Agency and Dataset Purpose	Study
National Sample Survey of Registered Nurses (NSSRN), datasets	Health Resources and Services Administration, Comprehensive survey every 4 years of actively licensed RNs	Xu and Kwak's (2005), Xu and Kwak (2007), Hall et al. (2009), Lee (2007)
US Census 5% Public Use Microdata Sample files	US Census Bureau, Population and housing unit responses from individual American Community Survey questionnaires	Polsky et al. (2007)

Table 3 - *Continued*

Datasets	Agency and Dataset Purpose	Study
Immigration and Naturalization Service (INS)	US Citizenship and Immigration Service (USCIS), Information on immigration to the US	Muncada (1995)
National Council of State Boards of Nursing (NCSBN)	NCSBN , Data related to NCLEX-RN test takers	Aiken (2007)
Current Population Surveys (CPS)	Census for the Bureau of Labor Statistics, Monthly survey of about 50,000 households on labor force characteristics	Buerhaus et al. (2007)
Practice and Professional Issues Surveys (PPI)	National Council of State Boards of Nursing (NCSBN), Data from nurses during their first 6 months of practice on nursing activities performed and practice issues	Crawford (2004)

United States

In the US, the National Sample Survey of Registered Nurses (NSSRN) was used as the data source for four published studies (Hall et al., 2009; Lee, 2007; Xu & Kwak, 2005, 2007). Xu and Kwak's (2005) secondary data analysis used datasets from the 2000 NSSRN to compare the characteristics of IENs (N=1300) to US educated nurses. They found no significant differences in job satisfaction (no t value reported, p=0.28), but found significant differences in both annual gross salaries from primary nursing positions (t=--11.36, p=0.00) and annual income from secondary nursing positions (t=-5.15, p=0.00). IENs had higher salaries and incomes, worked longer hours, and had more nursing experience. The top four US source countries for IENs migrating to the US were the Philippines (38.9%), Canada (17.5%), India (10.9%) and the United Kingdom (8.9%) (Xu & Kwak, 2005).

In Xu and Kwak's study (2005), the profile of a typical IEN was an unmarried female between the ages of 30 and 40 who worked as a staff nurse on a medical-surgical or intensive

care unit in an urban hospital. IENs as a group earned more than US educated nurses, worked full-time and longer hours, were more experienced, and had a diploma or baccalaureate degree as their basic nursing education. Xu and Kwak (2005) found that IENs average gross annual primary nursing salaries was $6,446 more than US educated nurse, and their average income from secondary nursing positions was $4,745 more than US educated nurses. They attributed these salary and income difference to the IENs having more nursing experience and working more hours. IENs may work longer hours because of their desire to send remittances back to source countries. In addition, since IENs primary work settings were in the hospital, salaries may be higher, while working on night shifts would result in larger shift differentials (Xu & Kwak, 2005).

Xu and Kwak (2007) used NSSRN 1977–2000 datasets for another study, examining the characteristics of IENs and US educated nurses. Their findings were similar to their 2005 study. They found IENs in the US were younger, received a higher nursing education, worked longer hours, were more likely staff nurses, and were employed predominantly in urban hospitals. As the nursing profession worldwide is predominately female, the majority of nurses migrating were female. They predicted IENs would likely have more productive careers and had already made an important contribution to the US nursing shortage, with an impact especially on older Americans and people in the inner cities.

NSSRN datasets have also been used to study IENs from a specific country (Hall et al., 2009; Lee, 2007; Polsky et al., 2007). Hall et al. (2009) conducted a secondary analysis using the NSSRN datasets from 1996 (*N*=235), 2000 (*N*=222), and 2004 (*N*=249) to study the behaviors of Canadian-educated nurses who had emigrated to the US. Findings suggested that the majority of nurses emigrated to obtain full-time work and better professional education opportunities. The authors identified a major limitation of this study was its inability to study individual behavior over time.

Lee (2007) performed secondary data analysis using NSSRN datasets from 1980 to 1990 to examine the affect of IENs on the RN job labor market for US educated nurses. Findings showed the majority of IENs (75%) came from four source countries: the Philippines, Canada, India, and the UK, and the remaining 25% IENs came from developing countries. Lee concluded that if 2% of the US's inactive domestic nurses reentered the workforce (1% of the full-time nurses), there would be no RN shortage.

Another large dataset that has been used is from the US Census. Polsky et al. (2007) studied the entry of IENs into the US RN workforce force (*N*=40827) using 1990 and 2000 US Census 5% Public Use Microdata Sample files to compare the characteristics of IEN to US educated nurses and identify common trends in source countries. Findings from 1990 to 2000 included: IENs growth from 8.8% of the RN workforce to 15.2%, and a doubling of IENs from low-income countries (21%). This study was limited by use of self reported RN licensure data and by the level of foreign IEN training being inferred by age, education, and year of entry into the US (Polsky et al., 2007).

In Muncada's (1995) exploratory study of labor migration and the immigration of Filipino IENs, secondary data were used from the Immigration and Naturalization Service (INS) and was combined with multiple data sources including interviews and field work in the Philippines. The author found high vacancy rates of US RN positions correlated negatively with the immigration of Filipino nurses. This study was limited by the lack of available data from INS on work visas for Filipino IENs.

Choy (1998) used archival research and in-depth interviews (*N*=43) with Filipino IENs in the US. Choy analyzed the development of this workforce, finding nurse emigration from the Philippines did not begin after 1965, but instead began with American imperialism and the colonization of the Philippines. Nurse migration is now a part of Filipino nurse psyche as a way for socio-economic progress (Choy, 1998).

Other Countries

Three relevant studies have been conducted on IEN trends and patterns in nurse migration in other countries. Buchan (2007) synthesized nurse migration flows in and out of the UK using the nurse registration data, finding that in the early 1990's, 1 in 10 new registrants were IENs, but until 2005, 40-50% of the new registrants each year were IENs. New requirements implemented since September 2005, such as English proficiency, may restrict IEN applicants, but even with an increase in nurses educated in the UK, other nurses will retire, and the long-term demand for IENs may still exist (Buchan, 2007).

Ross et al. (2005) used country-level data (*N*=98) from sources such as the World Bank, International Monetary Fund (IMF) and WHO, and UK IEN registration data on these countries (between 1998 and 2002) from the Nursing and Midwifery Council, to develop and test a regression model predicting the number of UK registered IEN inflows based on the characteristics of source countries. Major findings indicate IENs from English speaking low-income countries with bilateral trade agreements are more likely to emigrate to the UK, and other causes of nurse migration may have more influence than wages.

Blythe and Baumann (2009) used published literature and secondary data to profile IENs in Ontario Canada (*N*=21,295). Findings showed that many groups of IENs worked more fulltime hours, most IENs came from the Philippines and India, and although national changes in educational and professional standards made a big impact on IENs, generalizations about IENs cannot be made.

Motivation to Migrate

Individual decisions to migrate are driven by push factors and pull factors, which comprise the motivation to migrate. Buchan et al. (2006) used registration data from the Nurses and Midwives Council (NMC) to select a random sample of international nurses working in London (*N*=380), for a survey study. They mailed questionnaires that included questions as to why these nurses came to the UK and what they intended to do in the future. Major findings

indicated 60% planned to stay in the UK for at least five years, while 25% planned to stay two to five years. When asked about relocation to another country, 43% indicated they were thinking about it, with the majority considering a move to the US. After a pilot test of the survey for cultural and language relevance, minor modifications were made of the questionnaire, assessing demographics, motivations, experiences and career plans of IENs. Although representing the majority of IENs, the study's main limitation was including only IENs who were members of the professional association, the Royal College of Nursing (RCN) (Buchan et al., 2006). Selected questions from the questionnaire were used in the development of the NIRTQ2, the instrument for this proposed study.

The motivation to migrate has also been studied with African educated IENs. Nguyen et al. (2008) studied a convenience sample of nursing students enrolled in two Ugandan universities (*N*=139) using a questionnaire to explore their intentions to migrate. The questionnaire included questions on "demographics, stability and safety of the country, finances, sense of professional pride and obligation, future plans and outlook of working conditions" (Nguyen et al., 2008, p. 3). The authors also conducted two focus groups at only one university. Findings showed that 70% of the student participants intended to migrate from Uganda (with the US or Canada as the primary destination country), and 76% of these intended to return to Uganda. Additional findings indicated increased income was the most important push and pull factor, as in Uganda nurses earn less than $100 monthly, whereas in the US they can earn $3000 monthly (Nguyen et al., 2008). The study's limitation was lack of information on the student's level of training (Nguyen et al., 2008).

Labonté et al (2006) used semi-structured interviews with a purposive sample of leaders to study health professionals migration from Sub-Sahara Africa to Canada. Respondents identified six main categories of push factors and pull factors: job security, working conditions, economic and political considerations, physical security, quality of life and education. Findings showed that the principal reason IENs migrate is source country push

factors (Labonté et al., 2006). An interesting finding was the respondent identification of a new push factor, gender discrimination/violence (Labonté et al., 2006).

In Canada, between the years 1999-2003, about 29% of applicants completed registration for nursing licensure, “a period in which more than 12,000 IENs failed to qualify and were subsequently not employed in nursing in Canada (Jeans et al., 2005, p. 34). The result is a loss of human capital to the destination country’s health care industry (Labonté et al., 2006).

Vujicic et al. (2004) examined wage differential data from source countries and destination countries to examine the relationship between wage and desire to migrate. Findings suggested that increasing source country wages would not decrease the supply of nurse migrants because the difference in wages between destination countries and sources countries is so large. Instead, source countries should place emphasis on changing the reason nurses are leaving their home countries, as this would have a greater impact on retaining nurses in their home countries (Vujicic et al., 2004).

Work Satisfaction and Employment Setting

Although improving income is a major pull factor to destination countries, professional satisfaction is also cited as an important reason for nurses to migration. IENs desire a sense of professional satisfaction within the workplace which includes recognition for work experience and nursing skills. Nurse retention is also affected by work satisfaction experienced in IEN employment settings.

Three studies compared US educated nurses to IENs related to professional workplace issues with mixed results. Crawford (2004) compared practice setting data of IENs who had successfully passed the NCLEX-RN with US educated nurses, finding only 46% of the IENs entered the US to work as a nurse. Liou and Cheng’s (2009) compared perception of practice in the US with Asian IENs and Asian nurses educated in the US, finding supportive managers, a safe working environment, and collegial relationships with staff and physicians positively influenced perception of practice. McCloskey and Aquino’s (1988) study of IENs and US

educated nurses indicated there was no difference in job effectives between the two groups. Perhaps a more positive perception of practice leads to an IEN's increased professional satisfaction in the US healthcare system, and job effectiveness does not differ between IENs and US educated nurses since both groups work in similar healthcare environments. If an IEN did not enter the US with the intent to practice nursing, yet was seeking employment as a nurse, perhaps their professional satisfaction would be negatively affected.

In Crawford's (2004) secondary analysis of 2003's Practice and Professional Issues Surveys (PPI), IENs (*N*=401) who had passed the NCLEX-RN were compared with US educated nurses (*N*=570) to learn about IENs processes for acquiring US licensure and to compare practice setting data between IENs and US educated nurses. Findings from the IEN sample included: only 46% entered the US with the primary intent of seeking employment as a nurse, it cost the IEN an average total of $2513 to obtain RN licensure, which was $700 more than for IENs using a recruiter, and IENs were less likely to work in rural settings (6.7%), as compared to US educated nurses (12.7%). The study's limitation was sample selection from only candidates who successfully passed the NCLEX-RN.

Liou and Cheng's (2009) tested the reliability and validity of Practice Environment Scale of the Nursing Work Index (PES-NWI) with Asian nurses educated in the US and Asian IENs' (*N*=230) to study their perception of practice in the US (81.3% were IENs). Cronbach's alpha for the entire PES-NWI was.96 and a range from.49 to.79 for item-total correlation coefficients. Five factors explained 59% of variance in their perception of the practice environment: 1) nurse participation and development; 2) nurse manager ability, leadership, and support of nurses; 3) nursing foundations for quality of care; 4) staffing and resource adequacy; and 5) collegial nurse-physician relations (Liou & Cheng, 2009). The study's major limitation was the sample contained only Asian nurses who worked in hospitals, and were recruited through snowball sampling.

In McCloskey and Aquino's (1988) study, IENs (*N*=41) job effectiveness was compared with US educated nurses (*N*=199) using secondary data from the researcher's previous study, with findings indicating the two groups variances were not unequal, and there were no significant differences in job effectiveness. McCloskey and Aquino identified the study's major limitation was using secondary data which did not have some of the variables needed for this study.

IENs may face discrimination in the destination country's workplace when co-workers resent additional transition packages of IENs, such as housing, cultural transition classes, language classes, and nursing test preparation classes. Discrimination may occur when resentment builds over communication difficulties IENs experience and the US educated nurse takes on extra duties, such as answering the telephone or calling health care providers for the IEN. Some IENs may also experience racism (DiCicco-Bloom, 2004). On the other hand, IENs may have a positive experience in the work environment when co-workers are friendly and supportive (Liou & Cheng, 2009) or transition programs exist in their new workplace.

Transition Experiences

When IENs experience optimum transition conditions, their professional capabilities are maximized. Several studies have shown that having family (Ryan, 2007) and social support systems (Blythe et al., 2009) in the US assist IENs in successfully transitioning into the US culture and US healthcare system. This study's family/social environment concept is a part of the transition process. Xu's (2007) metasynthesis had several findings similar to DiCicco-Bloom's (2004) case study, including IENs experiencing marginalization and discrimination. These relate back to this study's concept of work environment, which is a part of the successful transition process into professional satisfaction. Charest's (1992) study showed that professional collaboration with fellow staff members was crucial to a successful transition. Without it, both the IEN and their US educated peers experienced frustration in the work environment during the transition period. Sherman and Eggenberger's (2008) study showed that

unit managers were also crucial to the IEN's successful transition into the work environment and achievement of professional satisfaction. Yi and Jezewski's (2000) identified the initial adjustment phase of an IEN to a US hospital took two to three years to complete, however, in Charest's (1992) study, after just two years only 19 of the 37 recruited Filipino IENs remained with the medical center. This suggests those IENs who left may still have been in the adjustment phase of their transition experiences.

Hayne, Gerhardt and Davis (2009) studied Filipino nurses in the US (*N*=15) and key stakeholders using the Nursing Work Index-Revised and Occupation Stress instruments, finding that investing in the family and work life of Filipinos increased job satisfaction and promotes adaption to a new environment. The study's major limitation was its small sample size.

In another study of Filipino nurses, Lopez (1990) described IENs and their acculturation into US nursing practice (*N*=78). Lopez used a triangulation method of in-depth interviews, observations, collaboration inquiry, and a survey questionnaire. This definition of acculturation was used by Lopez (1990): "the process of change which occurs when groups of nurses having two different cultures come into continuous first hand contact with each other" (p. 6). The acculturation frameworks of Berry, Dyal and Dyal, and Taft were used to interpret study findings. Findings showed that common difficulties included difficulties with technical equipment, initial communication problems because of American expressions, supervising nurse aides, and passing the nursing licensure exam. However, adjustment to a new culture was facilitated with social support networks, religion, and diversionary activities. Lopez (1990) recommended having nursing preceptors and transition programs that address cross cultural issues would facilitate the integration of IENS into the US health workplace. A limitation of this study is the sample of IENs studied were from only three northeastern US cities.

Sherman and Eggenberger's (2008) qualitative study described the transition experiences and challenges of IENs in the US using semi-structured interviews with a purposive sample of IENs from seven countries (*N*=21), nurse managers with experience managing IENs

(N=10), and 2 experts. Four themes emerged from the nurse leaders: cultural challenges during transition; significance of leadership support; orientation needs of recruited nurses; and contributions that internationally recruited nurses make to their nursing units. Three themes emerged from the IENs: differences in nursing practice; challenges with transitioning to a different culture; and educational needs during orientation. The biggest transition challenge for IENs was "the fear of lawsuits and litigation" (Sherman & Eggenberger, 2008, pp. 540-541).

In another qualitative study, Yi (1993) interviewed Korean IENs in New York City (*N*=12) about their experiences adjusting to US hospitals, using grounded theory to discover the emerging major category of "adjustment to U.S. professional nursing practice" and five sub-categories: language barrier, differences in nursing care, differences in interpersonal relationships, culture shock, social support, and major strategies. Findings showed that Korean IENs adjusted better to US hospitals if they had: more than one year of nursing experience in Korea but less than six years, experience working with a heterogeneous group of nurses, and a support system of other Korean nurses. A limitation of this study was that the sample came from one ethnic group within one city in the US (Yi, 1993).

Yi and Jezewski's (2000) exploratory study used grounded theory methodology to describe Korean IEN's (*N*=12) experiences in US hospitals. The core category that emerged was "adjustment to USA hospitals," which contained five sub-categories of coping strategies separated into two stages: the initial adjustment phase which requires 2-3 years to complete and the second phase which takes 5-10 more years to complete. The study's limitation was the sample was comprised of one ethnic group.

Case study methodology was used by two researchers to explore IEN transition experiences. DiCicco-Bloom (2004) used semi-structured in-depth interviews of IENs in the US who were born in Kerala, India (*N*=10), to explore race, gender, and immigration in their personal and work lives. Four of the participants were between the ages of 40 to 44, and six participants were between the ages of 45-50. The dominant themes that emerged were cultural

displacement, racial experiences/alienation in the workplace and home, and being a non-White, immigrant female nurse (DiCicco-Bloom, 2004). This study was limited by studying only women from one locale in India.

In Charest's (1992) case study on the socialization experiences of Filipino graduate nurses (*N*=37) into one US medical center from 1987 to 1989, major findings indicated staff nurses were not a part of the initial orientation and socialization process of these IENs into the US workplace culture. Staff floor nurses became frustrated and regarded the IENs and their education and training preceptors as disruptions to a unit's already busy routine. Since clinical preceptorship by floor staff nursing was delayed, IENs formed professional relationships with the education and training staff and bonded with them, which minimized the effectiveness of the clinical preceptors. Charest (1992) findings indicated many IENs did not pass the NCLEX-RN initially, which further exacerbated the tension between staff nurses and IENs, as the IENs could not fulfill the reason they were hired, to fill the medical center's nursing vacancies. After two years, only 19 of the Filipino IENs remained at the medical center. The study was limited by the convenience sample of IENs who were recruited for a specific nursing shortage.

Relevant syntheses of the literature about IEN transitions were published in 2007 and 2009. From Xu's (2007) metasynthesis of 14 empirical studies on Asian nurses working in Western countries, four main themes emerged: communication as a daunting challenge; differences in nursing practice; marginalization, discrimination, and exploitation; and cultural differences. Limitations of this synthesis include its focus on using only studies from the UK and including non-research publications (Xu, 2007).

Lin' s (2009) synthesized literature on the employment of Asian IEN's in the US and their adjustment to the US and the US health system, identifying eight empirical studies that met inclusion criteria. Lin grouped findings into 6 categories: a) overcoming language barriers, (b) dealing with discrimination (c) adopting U.S. nursing practices, (d) adjusting to the U.S. social customs, (e) becoming accustomed to the U.S. culture, and (f) reconciling work ethics.

For female immigrants, successful transition in destination countries may require membership in not only ethnic networks, but also local networks with practical information about local neighborhoods, childcare, and the workplace (Ryan, 2007). For successful integration into the health workforce, access to information, support and resources are essential throughout the migration process (Blythe et al., 2009).

In Zizzo and Xu's (2009) systematic review of 20 IEN post-hire transitional programs, 13 focused on IEN transition conditions and adaption issues. The only government mandated injunction for a formal IEN transition program post-hire was in the United Kingdom, where the transition of IENs into their professional workplace are facilitated (Zizzo & Xu, 2009). Six of the of 20 articles contained either expert opinions or future program proposals, and were not research based. The remaining 14 articles discussed transition programs implemented for IENs, and three of these articles had no empirical data (Zizzo & Xu, 2009). From the research-based articles, Zizzo and Xu constructed a profile of 10 transition programs, with each program containing either none or some of these success indicators:1) buddy support system, 2) logistic support, 3) registration, 4) fitness for practice, 5) reduce vacancy factor, 6) equality of opportunity, 7) valuing culture, 8) mentorship, 9) prepared for practice, 10) training course, 11) study days, 12) professional identity and commitment to work, 13) all IENs registered, and 14) higher job satisfaction with better communication skills and few complaints. Since patient safety and quality of care are patient care priorities, it is ironic that few IEN transition programs exists, especially since IENs cannot be expected to be fully integrated into the healthcare system immediately (Zizzo & Xu, 2009).

Although Lin' s (2009) synthesis focused on Asian IENs, the findings may be relevant to other cultural groups and the design of effective IEN transition programs, as Lin synthesized information from several studies on specific IEN adaption needs such as: language barriers, discrimination, US social culture, US nursing practice, and US work ethics. These identified IEN needs could become the foundation for content areas of a successful transition program.

Summary of Literature Review

There is a paucity of research studies and systematic reviews on IEN nurse migration experiences in the US. The UK had been a primary destination country for nurse migration, either as a final destination or as a stepping stone for migration to other countries, while Canada also served as a popular destination country for IENs migrating to North America. Since both of these countries are also developed countries like the US, there is a similarity in the IEN relocation and transition experiences to those countries. Therefore, those pertinent research studies add valuable insight to the complex phenomenon of global nurse migration. Secondary data analysis and surveys were the most common study method, however only one survey in this review of relevant literature had a sample of IENs other than Asians. Asian IENs have been the major focus of research performed in the US; however the US IEN RN workforce is also composed of other ethnic groups. Therefore, not only is continued research on the migration experiences of Asian IENs needed (Lin, 2009), but also research conducted with other ethnic groups of IENs in the US. The number of IENs in the US RN workforce is projected to continue growing. Because of this trend and the knowledge gaps identified in this review, current information on the migration experiences of IENs is needed. This national exploratory descriptive study addresses the nurse migration experiences of IENs in the US who have migrated from countries around the world.

CHAPTER 3

METHODS AND PROCEDURES

This study on the transition conditions and professional satisfaction of nurses migrating to the US provided understanding of the complex pull and push factors affecting nurse migration. This chapter describe the research design, sample, and setting. This study obtained and analyzed data using an instrument questionnaire completed by participants. The procedures will be described including ethical considerations and delimitations.

Research Design

The study used an exploratory descriptive research design to describe the push factors, pull factors, personal characteristics, motivation to migrate, transition conditions, family/social environment, work environment, and professional satisfaction of IENs in the US health care system, It also described the differences in these IENs across source countries by world region. There are six WHO regions in the world comprised of both developed and developing countries: African Region, Regions of the Americas, South-East Asia Region, European Region, Eastern Mediterranean Region, and Western Pacific Region.

Sample

The target population was IENs who migrated to the US. Inclusion criteria for IENs in this study were licensed vocational/practical nurses and registered nurses licensed in the US who migrated to the US after they received their basic nursing education in any country other than the US. Exclusion criteria were IENs who had not yet obtained their professional license. Recruitment was not limited to any specific ethnic population.

The sample was a non-random convenience sample of IENs. Because the *Nurse International Relocation and Transition Questionnaire 2* (NIRTQ2) is a new instrument with an unknown effect size, the effect size for the purposes of power analysis was estimated using preliminary findings of Gray and Johnson's ongoing study of African IENs. The probability for

the power analysis was set at p=.05, with a nominal power of .8. The power analysis results indicated 16 subjects were needed for each of the World Health Organization regions (6 x 16 =96 for the total sample) to minimize the risk of Type II error. Sampling was intended to yield 16 subjects from each WHO region, and was a key factor in guiding selection of gatekeepers.

The setting was the professional community of nurses in the United States. Participants were recruited through key gatekeepers. These key gatekeepers were officers in national nursing associations in the US, nurse leaders in seven of the large health care systems or hospitals in the Dallas/Fort Worth area, and published experts in this field who reside in the US.

Sampling Method and Key Gatekeeper Characteristics

Potential IENs were identified through key gatekeepers. Gatekeepers were individuals with the following identifying characteristics: 1) a president or executive director of a professional organization, a health care leader in a position of power, or a recognized expert in the field of nurse migration; and 2) having the ability to identify and contact potential study participants who may be difficult to contact if they are members of hidden populations.

Subject recruitment was done using the following method:

- The majority of subject recruitment was done by e-mail announcements (Appendix D) to IENs identified by key gatekeepers. The investigator requested that the key gatekeepers email information to their network (members of a professional organization, employed nurses, or IEN colleagues) about this study, including a link to the online electronic survey. Of the 7 large hospital systems or hospitals contacted in the Dallas/Fort Worth metropolis, 6 agreed to participate in this study. Out of 13 nursing associations contacted, 8 agreed to participate. Out of 4 nursing migration experts, 1 agreed to assist in recruiting participants for this study. Appendix E identifies key gatekeepers in nursing associations, hospitals, and experts that the investigator contacted. Other individual key gatekeepers who do

not fit in these categories but who had access to hidden populations of IENS are not on the list provided in Appendix E.

- If the key gatekeepers declined emailing study announcements to their members, they were asked to post an announcement of this study on their organizational webpage with a link to the electronic survey for subject recruitment. One hospital did this.
- Published experts on nurse migration were contacted by the investigator for distribution of this study's information via either a flyer and/or and or an email with a link to the electronic survey. One expert agreed to distribute this study's information via listserv email.

Measurement Methods

One data source was used to answer the research questions, the NIRTQ2, which has empirical indicators for each key concept in this study's conceptual map. Based upon a thorough review of literature, Gray and Johnson (2008) adapted items from two existing instruments (Buchan et al., 2006; Nguyen et al., 2008) to form their instrument, the NIRTQ2.

Buchan et al.'s (2006) questionnaire was used to describe the career path of their participants using nominal data. It contained 58 items divided into seven sections: nursing qualifications, before you came to the UK, after you arrived in the UK, supervised practice/adaption courses, nursing in the UK, your background, and further research. Two questions, 6 and 39, were used in the NIRTQ2. Buchan et al.'s instrument does not have published content validity and reliability information.

Nguyen et al's (2008) questionnaire had a medical focus and used a combination of likert scales, forced choice questions, and open-ended questions. It contained 39 items and is divided into three sections: general opinions, future plans, and background information. The frequency, percentage, and summary of the means for each of these categories were reported. Nguyen et al's questionnaire does not have published content validity and reliability information.

A major finding was 70% of the participants desired to migrate from Uganda (Nguyen et al., 2008).

The NIRTQ2 questionnaire contains 54 items extracted primarily from Nguyen's questionnaires. The 54 items were selected to measure the concepts on the conceptual map and describe personal information of respondents. The NIRTQ2 assesses the transition and relocation experiences of IENs in the health care workforce.

Instrument Validity

An expert panel of professional migration experts (*N*=6) evaluated the instrument's content validity (Gray & Johnson, 2008). A Content Validity Index (CVI) was calculated for each item. A scale has excellent content validity when the items have CVIs of at least .78, and a scale CVI average of at least .90 (Polit, Beck, & Owen, 2007).

Only two items on the NIRTQ were revised for the NIRTQ2 due to receiving a low CVI below the criteria of 76% (Gray & Johnson, 2008). Gray and Johnson's (2009) NIRTQ content validity results with item CVIs, subscale CVIs, and scale CVI are summarized in Table 4. The Push Factors Subscale (Items 1-6) item CVIs ranged from .66 to 1.0. Original item 6 had a CVI of .66 and two reviewers provided suggestions related to effective patient care. The Transition Conditions Subscale (Items 14-19) item CVIs ranged from .66 to 1.0. Original item 16 also had a CVI .66; the item addressed expectations and other items in that section addressed work conditions and experiences. Original item 16 was omitted and a new item suggested by a reviewer was substituted. The NIRTQ Scale CVI was .92.

Table 4 Nurse International Relocation and Transition Questionnaire (NIRTQ) Content Validity Index Results (Gray & Johnson, 2009)

Original Item	NITRTQ Subscale	N of ratings that subscale items were relevant	N of total ratings	Item CVI Ranges for subscales	Subscale CVI and Scale CVI
Items 1-6	Push Factors	34	36	.66 to 1.0	.94
Items 7-12	Pull Factors	32	35	.83 to 1.0	.91

Table 4 - *Continued*

Original Item	NITRTQ Subscale	N of ratings that subscale items were relevant	N of total ratings	Item CVI Ranges for subscales	Subscale CVI and Scale CVI
Items 14-19	Transition Conditions	31	35	.66 to 1.0	.88
Items 20-25	Professional Satisfaction	35	36	.83 to 1.0	.97
Items 26-32	Family/Social Environment	32	36	.83 to 1.0	.88
Items 33-38	Work Environment	33	36	.83 to 1.0	.91
	NIRTQ Scale	197	214		.92

Instrument Reliability

Reliability is the extent "any measuring procedure yields the same results on repeated trials" (Carmines & Zeller, 1979, p. 11). Because the Gray and Johnson study is ongoing, no reliability estimates are available for the NIRTQ2. Instrument reliability in this study was evaluated using Cronbach's alpha for each subscale to assess for internal consistency. Cronbach's alpha is a reliability estimate of the expected correlation between one test and a hypothetical test with the same number of items (Carmines & Zeller, 1979).

Sources of Data

A copy of the NIRTQ2 instrument is in Appendix A. The concepts measured in this study and their empirical indicators are provided in Table 5. The empirical indicator(s) for each concept are included, grouped according to the concept they measure. The subscale scores were computed by adding the item responses in each subscale and dividing the sum by the number of items. The Personal Characteristics section of the NIRTQ2 elicited participant demographic information and educational information.

Table 5 Subscales and Empirical Indicators in NIRTQ2 Instrument

Subscale	Response Set Scoring	Empirical Indicators	Example
Push Factors	All items scored 1=Strongly Disagree to 5=Strongly Agree	Subscale Score for Items 1-6	I was motivated to migrate from my country because my pay was too low.
Pull Factors	All items scored 1=Strongly Disagree to 5=Strongly Agree	Subscale Score for Items 7-10	I was motivated to move to the US because several family members had already moved here.
Motivation to Migrate	Personal, Professional, Financial, Social	Primary Reason Selected for Item 11	Before coming to the US, which of the following most influenced your decision to move to US to work as a nurse?
Transition Conditions	Items 13,16-17 scored from 1 to 5. Items 12,14-15 Reverse scored from 5=Strongly Disagree to 1=Strongly Agree	Subscale Score for Items 12-17	I experienced language barriers when communicating with patients and staff.
Professional Satisfaction	All items scored 1=Strongly Disagree to 5=Strongly Agree	Subscale Score for Items 18-23	I currently have a job that matches my level of nursing skill
Family/Social Environment	All items scored 1=Strongly Disagree to 5=Strongly Agree	Subscale Score for Items 24-30	During my first year in the US, I had a group of nurses from my home country as friends.
Work Environment	Items 31, 35-37 scored from 1 to 5. Items 32-34 Reverse scored from 5=Strongly Disagree to 1=Strongly Agree	Subscale Score for Items 31-37	The nurses I work with support each other and me.
Personal Characteristics	Combination of open ended questions and single response questions	Items 38-54	In what country did you receive your basic nursing training?

Procedure

Data collection was conducted using an electronic copy of the NIRTQ2 hosted on an internet based survey program, SurveyMonkey. The program was password protected and

allowed the investigator to create an electronic survey, select the option to collect data from respondents anonymously, and create a specific survey link with those collector settings and restrictions. This specific survey link could be emailed or placed on a webpage, with all responses combined in SurveyMonkey into one results summary. The investigator and Institutional Review Board's (IRB) contact information were included in the email. The email stated that a subject's agreement to participate in the study was determined by activation of the electronic link to the NIRTQ2 questionnaire (Appendix A) on SurveyMonkey. IENs that met the inclusion criteria and completed the online NIRTQ2 were included in the study. Inclusion criterion of IEN status was verified by item 45 in the NITRQ2, "In what country did you receive your basic training?"

Flow Chart of Data Collection Process

Data were collected following the steps outlined in a flow chart of the data collection process (Appendix F). The investigator requested key gatekeepers email the study information and electronic link to the NIRTQ2 on SurveyMonkey to potential IEN participants. The email script and electronic link was provided by the investigator (Appendix D). If the key gatekeeper declined sending emails to potential participants, the investigator requested the key gatekeeper post the study information and the electronic link on their organizational webpage. The investigator also contacted published experts in this field to distribute fliers or email potential participants study information and the NIRTQ2 electronic link. The IEN participant agreed to participate in this study by activating the electronic link to the NIRTQ2 instrument on SurveyMonkey.

The same study information contained in the emails, web pages, or flyers was also visible for the participant to read immediately after accessing the survey online (Appendix D). This text was on the page preceding the NIRTQ2. Data from all study participants were collected anonymously in SurveyMonkey.

Flow Chart of Data Preparation Process

Data were cleaned and prepared for analysis following the steps outlined in a flow chart of the data preparation process (Figure 2). Only the investigator downloaded the NIRTQ2 questionnaire source data from SurveyMonkey (which is provided in Excel format) into the software program, Statistical Package for the Social Sciences (SPSS) version 16. Missing data were left blank. If the case had more than 10% total missing data in the subscales of the NIRTQ2 or missing the country of basic nursing education, listwise deletion in SPSS was done (*n*=28).

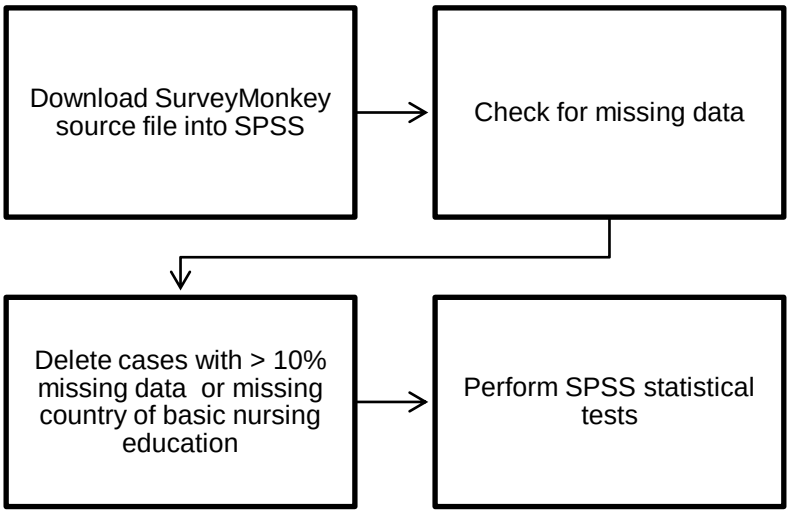


Figure 2 Flow Chart of Data Preparation Process

Ethical Considerations

Review Process

The investigator submitted an application for exempt status to the University of Texas at Arlington's Institutional Review Board (IRB), based on no use of identified data or identification of human subjects in this study. The risk to human subjects was the potential for loss of confidentiality. To minimize this risk, no written documentation of informed consent was obtained from participants, so no link to name and response was obtained. The research

presented no more than minimal risk of harm to subjects and involved no procedures for which written consent is normally required outside of the research context. The respondents' agreement to participate in the study was determined by voluntary activation of the SurveyMonkey web page link to the NIRTQ2 questionnaire. Once study approval was obtained from the University of Texas at Arlington's IRB, the investigator contacted either the nursing executive in the nursing education or nursing research department at seven of the large hospital system or hospitals in the Dallas Fort Worth area. Several sites indicated IRB approval from that institution was required. In addition, one national nursing association required approval by their research committee. Where required, once IRB approval and/or research committee approval was obtained from thirteen organizations (Appendix G), data collection from that organization or association began.

Risk/Benefit Ratio

This study posed minimal risks to individuals as personal identifiers from emails generated were separate from the anonymous NIRTQ2 data collected on SurveyMonkey. The key gatekeepers contacted potential IENs study participants via email, organizational web pages or flyers. Emails to participants were not sent by the investigator, could not be linked to the data, and were not used in data analyses or any report generated from this study. All data collected from SurveyMonkey were anonymous. All electronic data were safeguarded by using anonymous data from respondents. Any records relating to the data collection process (contact information for key gatekeepers, emails to gatekeepers) were deleted or shredded after the study findings were reported.

Statistical Analyses Used for Sample Description

IENs who immigrated to the US provided the country of basic nurse training information and the investigator coded the WHO region based on the region of that country's location. There are six WHO regions: African Region, Regions of the Americas, South-East Asia Region, European Region, Eastern Mediterranean Region, and Western Pacific Region. Data for each

case were identified and reported by the WHO region of the IEN's country of basic nurse training. The data were displayed using these WHO regions. The number of IENs responding from each region was reported.

Items eliciting the personal characteristics of the participants provided the data for describing the demographic characteristics of the sample. Statistical analyses were performed using SPSS to obtain frequency distributions and measures of central tendency.

Data Analyses Used to Answer Research Questions

Scoring of Quantitative Items

Of the 37 items on the NIRTQ2, 6 were reverse scored. IEN responses to items 1-10, 13, 16-31, and 35-37 of the NIRTQ2 were scored using a 5 point likert scale on all items from Strongly Disagree to Strongly Agree, scored from 1 to 5 respectively. IEN responses to items 12, 14-15, and 32-34 were reverse scored using a 5 point likert scale on all items from Strongly Disagree to Strongly Agree, scored from 5 to 1 respectively.

Performance of Instrument

Cronbach's alpha was obtained for each subscale to which participants responded on a Likert scale and for the combination of these subscales to assess instrument reliability. The personal characteristic items (demographic characteristics) and Item 11 (primary motivation for migrating) were not included.

Descriptive Analyses

To answer the research questions, descriptive analyses of IEN responses to items 1-37 of the NIRTQ2 were analyzed using item frequencies and percentages to determine which item was selected most frequently as the most important factor. A total frequency and total percentage for each subscale was obtained by taking each item's frequency and percentage and dividing by the number of items in each subscale.

Items 1-10 and 12-37 were analyzed using item means and standard deviations to determine the average item response. A total subscale mean for each subscale was calculated

by adding each subscale's item means and dividing that score by the number of subscale items. A total subscale standard deviation for each subscale was calculated by adding each subscale item's standard deviation and dividing that score by the number of subscale items (Tables 15-20).

Open Ended Questions Analysis

At the end of each subscale for items 1-37, an open ended question allowed the participant to provide additional information. These data were analyzed for pertinent findings related to each subscale using line by line content analysis (Weber, 2006). Items 38-54 captured IEN responses using a combination of open-ended questions and single choice questions to obtain participant personal characteristics (demographic information),

Analyses of Research Questions

All research questions except for research question 3 were analyzed using Kruskal-Wallis Tests with Post-hoc analyses using Mann-Whitney U tests. Kruskal-Wallis Tests were used to examine differences in IEN responses across WHO regions on the instrument's subscales (push factors, pull factors, transition conditions, professional satisfaction, family/social environment, and work environment). A significant result of the Kruskal-Wallis Test "indicates there is a significant difference between at least two of the sample medians in the set of *k* medians. As a result of the latter, the researcher can conclude there is a high likelihood that at least two of the samples represent populations with different median values" (Sheskin, 2004, p. 757).

The differences in motivation to migrate were described using frequencies and percentages. Due to unequal group sizes with one of the WHO regions containing only two participants, the planned Chi-Square Test of Independence could not be run on the motivation to migrate factor. Instead, frequencies and percentages were used to describe motivation to migrate.

Delimitations

The delimitation of this study was the use of a convenience sample of IENs who have migrated to the US and were/are employed as registered nurses or licensed vocational/practical nurses who elected to respond. Findings from this study cannot be generalized to all IENs who have migrated to the US.

Chapter Summary

In summary, data were collected from a sample of IENs in the US to examine relationships in the conceptual map and answer the research questions. A procedure for checking the data for accuracy was described. This chapter described the methods used to conduct this exploratory descriptive study on the relocation and transition experiences of IENs who have migrated to the US, using an ethically sound and rigorous approach.

CHAPTER 4

FINDINGS

The purpose of this chapter is to present the findings of a study conducted with internationally educated nurses describing their relocation and transition experiences when migrating to the US. This chapter contains descriptive statistics summarizing sample characteristics and participant responses to the study's instrument. Percent of responses to each item were calculated based on the number of responses to that item. Throughout this chapter, statistical results for each research question are presented.

Sample Description

Using a sample of convenience, the study collected data on an available pool of IENs and described them in terms of the WHO region where they received their basic nurse education. Data here are presented by WHO regions, and differences among IENs will be discussed later in the chapter.

Data were collected from 157 internationally educated nurses (IENs) who received their basic nursing education outside the US (Table 6). Data from 28 potential participants were excluded due to missing data (*n*= 24) or the country of basic nursing education being the US itself (*n*= 4). The IEN's country of basic nursing training was coded into one of the six WHO regions.

Table 6 Number of IEN Participants Completing the NIRTQ2 by WHO Region (*N*=157)

WHO Region	*N*
African Region	16
Region of the Americas	17
South-East Asia Region	37
European Region	24

Table 6 – *Continued*

WHO Region	*N*
Eastern Mediterranean Region	2
Western Pacific Region	6

The mean age of IENs in this study was 46.62 (*SD* = 10.51). The majority of participants were females (92.3%). Most nurses received their basic nurse training in English (89.6%), and the highest nursing degree held was a bachelor's degree was the (51.9%). The majority of participants had been in the US 19.95 years. Findings showed that the principal reason IENs migrate is source country push factors.

Performance of Instrument

Cronbach's alpha was obtained for each of the six subscales to which participants responded on a Likert scale and for the combination of these subscales to assess instrument reliability (Table 7). The assessment of internal consistency did not include personal characteristic items (demographic characteristics) and Item 11 (primary motivation for migrating). Two of the subscales had Cronbach's Alphas lower than .70, Transition Conditions and Work Environment. These subscales had 6 items that were reverse scored, which may have introduced measurement error. The remaining four subscales were greater than .70, indicating good internal consistency for those subscales. The value of Cronbach's alpha ranges from 0 and 1, and although "reliabilities should not be below .80 for widely used scales" (Carmines & Zeller, 1979, p. 51), a reliability coefficient of .70 or greater is considered acceptable for a new scale (Nunnally, 1978).

Table 7 Subscale Reliability Statistics

Subscales	Mean	*SD*	Number of Items	Cronbach's Alpha
Professional Satisfaction	4.34	.27	6	.786

Table 7 - *Continued*

Subscales	Mean	*SD*	Number of Items	Cronbach's Alpha
Transition conditions	3.50	.69	6	.605
Family/Social Environment	4.08	.37	7	.702
Work Environment	3.63	.60	7	.681
Push Factors	2.70	.53	6	.795
Pull Factors	2.90	.22	4	.783

Participant Responses on the NIRTQ2

The least variation in participants responses were on the Pull Factors subscale (Total *M*=2.90, *SD*=.22) and the Professional Satisfaction subscale (Total *M*=4.34, *SD*=.27). The Transition Conditions subscale had the most variation (Total *M*=3.50, *SD*=*.69*).

Professional Satisfaction

Research Question 1

What professional satisfaction is experienced in their current job?

All but 10 participants either agreed or strongly agreed that their current job matched their skill level (Table 8). For all of the items on the professional satisfaction subscale, the majority of respondents answered either agree or strongly agree, suggesting a high level of professional satisfaction.

One participant's open-ended comment indicated a high level of professional involvement. "I am always working at improving myself personally and professionally. I am active at professional organizations and maintain several professional memberships" (Western Pacific Region). One participant said there were "more opportunities to learn more and more" (South-East Asia Region), however while "the opportunities are at all levels, but you need to grab them as soon as you can and take advantage of each of them" (Region of the Americas).

Several participants commented on their adjustment experience taking at least several months. “It took several months to adjust, hated it at first, was going to leave after 6 months” (European Region). “I believe we have adapted and assimilated - myself and other Filipino nurses I worked with - in a short period of time” (Western Pacific Region).

Table 8 Professional Satisfaction Subscale (*N*=157)

Professional Satisfaction	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Item
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%) Mean *(SD)*
Current job matches level of nursing skill	2 (1.3%)	3 (1.9%)	5 (3.2%)	75 (48.1%)	71 (45.5%)	156 (100%) 4.35 (.75)
Satisfied with current job	2 (1.3%)	2 (1.3%)	7 (4.5%)	73 (46.5%)	73 (46.5%)	157 (100%) 4.36 (.74)
Work as a nurse in US personally rewarding	3 (1.9%)	0	1 (.6%)	84 (53.8%)	68 (43.6%)	157 (100%) 4.37 (.69)
Salary equal to peers	7 (4.5%)	13 (8.4%)	26 (16.8%)	64 (41.3%)	45 (29%)	155 (100%) 3.82 (1.08)
Adjusted to US nursing practice	0	1 (.6%)	0	70 (44.9%)	85 (54.5%)	156 (100%) 4.53 (.54)
Opportunities to increase knowledge and grow as a nurse	1 (.6%)	0	2 (1.3%)	58 (37.2%)	95 (60.9%)	156 (100%) 4.58 (.59)
Total *M*(*SD*)						4.34 (.27)

Note: Percentages may vary in the cell within each table due to missing data.

Transition Conditions

Research Question 2

What are their perceptions about transition conditions, their family/social environment, and their current work environment?

The majority of respondents were surprised by the difference in American culture (Table 9). They did know who to contact with questions however, and indicated nurse co-workers respected their education and experience. Few respondents felt they were not fully utilizing skills, education and experience in their jobs.

In their open-ended comments, several participants in this study experienced communication difficulties due to perceived regional colloquialisms, accents, and discrimination:

"It's more of the way people speak/accent is the biggest adjustment I had to make" (Western Pacific Region). "Each time I am talking to patient and staff, it is a different language or version of English. I am just getting used to English, but which one?" (Western Pacific Region). "I thought English was said all the same but apparently not here in Texas" (Western Pacific Region).

"They always say that we do not speak English and that they do not understand me, they were so prejudiced and so much discrimination up till this moment" (African Region).

In this study, several participants indicated a desire for transition programs, both in source countries and a six-month program in destination countries. These participants had received their basic nursing education in different WHO regions, indicating the perceived need for transition programs may be common to IENs across IEN regions.

"There should be an agency from home countries, professionals who are already established, whose role will be to fully orient the new ones before they start work" (African Region). "Assistance with relocation and talking with nurses from my home country help facilitate my transition" (Region of the Americas). "Foreign educated nurses need comprehensive orientation and support during the first 6 months particularly of their arrival in the US. The culture shock of these nurses is something that recruiters and nursing organizations need to be aware of" (Western Pacific Region).

Table 9 Transition Conditions Subscale (*N*=157)

Transition conditions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Item
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Mean *(SD)*
Language barriers	25 (16%)	54 (34.6%)	17 (10.9%)	46 (29.5%)	14 (9%)	156 (100%) 3.19 (1.27)
Nurse co-worker respect for education and experience	8 (5.1%)	10 (6.4%)	27 (17.2%)	81 (51.6%)	31 (19.7%)	157 (100%) 3.75 (1.01)
Job not fully utilize skills, experience, and education	30 (19.1%)	84 (53.5%)	20 (12.7%)	17 (10.8%)	6 (3.8%)	157 (100%) 3.73 (1.02)
Surprised by difference in American culture and own culture	6 (3.8%)	20 (12.7%)	25 (15.9%)	62 (39.5%)	44 (28%)	157 (100%) 2.25 (1.11)
Orientation prepared for working independently	2 (1.3%)	14 (8.9%)	16 (10.2%)	90 (57.3%)	35 (22.3%)	157 (100%) 3.90 (.890)
Knew who to ask or where to get answers to questions	1 (.6%)	4 (2.5%)	6 (3.8%)	102 (65%)	44 (28%)	157 (100%) 4.17 (.672)
Total *M*(*SD*)						3.50 (.69)

Note: Percentages may vary in the cell within each table due to missing data.

Family/Social Environment

For all of the items on the professional satisfaction subscale, the majority of respondents answered either agree or strongly agree, suggesting a high level of family/social environment support (Table 10).There were no strongly disagree responses for these three

items: family supportive of being a nurse, made new friends, and enjoy living in the US. Overall, the responses suggest that although the majority of IENs had friends from their home country at work and at home, about 25% of the IENSs did not experience these friendships.

Several open-ended comments from participants highlighted the need for support from family, community, and church:

"Because of immediate family and kids, most probably will settle down here in US" (South-East Asia Region). "We have social gatherings about 2-3 times a year. One of them is an RN. I still miss home" (European Region). "I consider myself a true American, but I still adhere to many of the Philippine culture, traditions, and superstitions" (Western Pacific Region). "I cannot imagine one with no support from church in this culture" (Western Pacific Region).

Table 10 Family/Social Environment Subscale (*N*=157)

Family/Social Environment	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Item
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Mean *(SD)*
Group of nurses from home country as friends	20 (12.8%)	19 (12.2%)	14 (9%)	56 (35.9%)	47 (30.1%)	157 (100%) *3.58 (1.37)*
Many friends in community from home country	16 (10.2%)	23 (14.6%)	16 (10.2%)	67(42.7%)	35 (22.3%)	155 (100%) *3.52 (1.27)*
Family supportive of being a nurse	0	2 (1.3%)	12 (7.6%)	64 (40.8%)	79 (50.3%)	157 (100%) *4.40 (.69)*
Made new friends from other Countries	0	3 (1.9%)	9 (5.8%)	83 (53.5%)	60 (38.7%)	155 (100%) *4.29 (.66)*

Table 10 – *Continued*

Family/Social Environment	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Item
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Mean *(SD)*
Found a place to worship and practice my religion	3 (2%)	1 (.7%)	15 (9.9%)	61 (40.1%)	72 (47.4%)	152 (100%) *4.30 (.83)*
Enjoy living in US	0	1 (.6%)	13 (8.3%)	78 (49.7%)	65 (41.4%)	157 (100%) *4.32 (.65)*
Feel safe living in US	1 (.6%)	2 (1.3%)	22 (14%)	78 (49.7%)	54 (34.4%)	157 (100%) *4.16 (.76)*
Total *M* (*SD*)						4.08 (.37)

Note: Percentages may vary in the cell within each table due to missing data.

Work Environment

The majority of respondents selected either agree or strongly agree on the item about being protected from injury in current job (Table 11). Similarly, the participants believed both supervisors and physicians valued their experience and education. A slight majority of the respondents (52.5%) experienced racism in the US workplace.

In their open-ended comments participants had varied experiences in the work environment. A participant from the European Region experienced respect, “The nursing education we got in the UK was very good and has been respected by US nurses and medical staff.” However, a participant from the African Region had a different experience, “I feel that my experience and education is felt to be inferior and is undermined” (African Region). One participant commented on a mixed experience, “There are physicians who value my experience and education and there are those who don’t” (Western Pacific Region).

Participants described their experiences of discrimination in the US work environment vividly, such as “remembering the experience causes nightmares” (African Region). Another commented that the experience was “stressful because Black American nurses and some other

nurses see you as a threat to take their job" (African Region). Not all discrimination occurred at the beginning as noted by one nurse who wrote, "Experienced discrimination from some staff members and my nurse manager who was initially nice to me" (Western Pacific Region). One participant experienced overt racism: There is "always racism, look and laugh then talk back" (South-East Asia Region). In this study, discrimination was experienced by IENs from different WHO regions.

Table 11 Work Environment Subscale (*N*=157)

Work Environment	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Item
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Mean *(SD)*
Can protect from injury in current job	1 (.6%)	1 (.6%)	11 (7%)	94 (59.9%)	50 (31.8%)	157 (100%) 4.22 (.65)
Patient load in current job too heavy	19 (12.3%)	49 (31.8%)	49 (31.8%)	25 (16.2%)	12 (7.8%)	154 (100%) 3.25 (1.11)
Experienced racism in workplace in US	18 (11.5%)	29 (18.6%)	27 (17.3%)	59 (37.8%)	23 (14.7%)	156 (100%) 2.74 (1.25)
Nurses more respected in home country than in US	19 (12.2%)	51 (32.7%)	34 (21.8%)	28 (17.9%)	24 (15.4%)	156 (100%) 3.08 (1.27)
Nurses work with support each other and me	2 (1.3%)	3 (1.9%)	21 (13.4%)	90 (57.3%)	41 (26.1%)	157 (100%) 4.05 (.77)
Supervisor values my experience and education	1 (.6%)	6 (3.8%)	13 (8.3%)	82 (52.2%)	55 (35%)	157 (100%) 4.17 (.79)

Table 11 - Continued

Work Environment	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Item
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Mean *(SD)*
Physicians value my experience and education	3 (1.9%)	8 (5.1%)	22 (14.1%)	83 (53.2%)	40 (25.6%)	156 (100%) 3.96 (.88)
Total *M*(*SD*)						3.63 (.60)

Note: Percentages may vary in the cell within each table due to missing data.

Motivation to Migrate

Research Question 3

What is the primary motivation to migrate: personal, professional, financial, or social reasons?

The most frequently selected motivation to migrate (item 11) was Personal Reasons (32.3%), while the motivation selected least frequently was Social Reasons (18.7%) (Table 12). However, a Chi-Square Test ($x^2(3)=5.80$, ns) revealed no significant difference in motivation to migrate responses.

Table 12 Motivation to Migrate Factors (*N*=155)

Motivation to Migrate Factors	Yes Response
Personal reasons	50 (32.3%)
Professional reasons	37 (23.9%)
Financial reasons	39 (25.2%)
Social reasons	29 (18.7%)
Total	155 (100%)

Across all WHO regions, the European Region had the highest percentage of responses in one category; 79.2% (n=19) motivated for Personal Reasons (Table 13). The

largest group of IENs, those receiving their basic nursing education in the Western Pacific Region, indicated financial reasons as their primary motivation. In the South-East Asia region, 41.7% indicated their strongest motivator was Social Reasons (*n* = 15).

In their open-ended comments, participants had different reasons for migrating. One participant in this study said “higher pay was my motivational factor” (South-East Asia Region), while another participant “moved to this country to join my husband” (South-East Asia Region). A participant from the European Region migrated for “travel, adventure, wanted to do something different.” Also, several participants migrated to support family:

“I am one of the many who left my country because I have to support my brothers and sister, though I was not really forced by my family to do it, but because I am the eldest” (Western Pacific Region). “It will allow me to sponsor my siblings to US for better education and career” (South-East Region).

Table 13 Comparison of Motivation to Migrate across WHO Regions (*N*=157)

WHO Region	Personal Reasons Frequency (%)	Professional Reasons	Financial Reasons	Social Reasons	Total IENs per region
African Region	4 (25.0%)	4 (25.0%)	5(31.3%)	3 (18.8%)	16 (100%)
Region of the Americas	4 (25.0%)	8 (50.0%)	2 (12.5%)	2 (12.5%)	16 (100%)
South-East Asia Region	5 (13.9%)	8 (22.2%)	8 (22.2%)	15 (41.7%)	36 (100%)
European Region	19 (79.2%)	1 (4.2%)	NA	4 (16.7%)	36 (100%)
Eastern Mediterranean Region	NA	1 (50.0%)	NA	1 (50.0%)	2 (100%)
Western Pacific Region	18 (29.5%)	15 (24.6%)	24 (39.3%)	4 (6.6%)	61 (100%)
Total (*N*=157*)*	50 (32.3%)	37 (23.9%)	39 (25.2%)	29 (18.7%)	155 (100%)

Push Factors

Research Question 4

What push factors, pull factors, and personal characteristics were present prior to migration?

On the Push Factors subscale, the majority of respondents either agreed or strongly agreed that low pay was a push factor for migrating (Table 14). On the other hand, jobs were available. Similarly, the majority of respondents indicated working conditions, not having enough nurses, and not having enough medicine, supplies, or staff were not push factors for migration. However, the majority of IENs either agreed or strongly agreed that a desire for additional opportunities for nursing education was a motivator. Overall, the responses suggest the strongest push factors are low pay and additional opportunities for nursing education.

In this study an open-ended comment by one participant from the Western Pacific Region supports the availability of jobs, “There are a lot of nurses available to work in hospitals but hospitals refuse to pay them,,.nurses are the ones actually paying the hospitals to get experience.” Participants experienced varied work-related push factors in their source countries such as: “the work environment is “very appalling and discouraging” (African Region), “nurses do not have a role in decision making” (Western Pacific Region). “One participant from the Western Pacific Region indicated in the US there are “better educational and economic opportunities for my children.”

Table 14 Push Factors Subscale (*N*=157)

Push Factors	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Item
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%) Mean *(SD)*
Pay too low	25 (15.9%)	26 (16.6%)	19 (12.1%)	45 (28.7%)	42 (26.8%)	157 (100%) 3.34 (1.44)

Table 14 - *Continued*

Push Factors	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Item
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%) Mean *(SD)*
Lack of available nursing jobs	41 (26.1%)	63 (40.1%)	13 (8.3%)	19 (12.1%)	21 (13.4%)	157 (100%) 2.46 (1.35)
Additional opportunities for nursing education	19 (12.2%)	24 (15.4%)	27 (17.3%)	47 (30.1%)	39 (25%)	156 (100%) 3.40 (1.34)
Working conditions not safe for nurses	50 (31.8%)	57 (36.3%)	18 (11.5%)	15 (9.6%)	17 (10.8%)	157 (100%) 2.31 (1.31)
Not enough nurses and too much work	48 (30.6%)	64 (40.8%)	16 (10.2%)	20 (12.7%)	9 (5.7%)	157 (100%) 2.22 (1.18)
Not enough medicines, supplies, and staff	45 (28.8%)	48 (30.8%)	27 (17.3%)	21 (13.5%)	15 (9.6%)	156 (100%) 2.44 (1.30)
Total *M(SD)*						2.70 (.53)

Note: Percentages may vary in the cell within each table due to missing data.

Pull Factors

For the majority of participants, political stability was not a pull factor (Table 15). However, for the majority of respondents, a better education and job opportunities for family was a strong pull factor Overall, making money to send home did not influence the IENs either way.

Interestingly, several participants in this study indicated in their open-ended comments that political stability was a pull factor for them. There is “stability within the political parties, safety and security in all spheres of life” (African Region). “The time I left there was no true

freedom" (Western Pacific Region). Financial stability was also a pull factor for several participants. There is "extremely high crime in my country, high unemployment, a lot of poverty" (African Region). I "came here to improve financial status only" (South-East Asia Region).

Table 15 Pull Factors Subscale (*N*=157)

Pull Factors	Strongly Disagree Frequency (%)	Disagree Frequency (%)	Neutral Frequency (%)	Agree Frequency (%)	Strongly Agree Frequency (%)	Item Mean *(SD)*
Live in a country with greater political stability	32 (20.8%)	42 (27.3%)	19 (12.3%)	41 (26.6%)	20 (13%)	154 (100%) 2.84 (1.37)
Better education and job opportunities for family	32 (20.9%)	25 (16.3%)	13 (8.5%)	46 (30.1%)	37 (24.2%)	153 (100%) 3.20 (1.50)
Several family members already moved to US	40 (26%)	37 (24%)	24 (15.6%)	39 (25.3%)	14 (9.1%)	154 (100%) 2.68 (1.34)
Make money to send home	38 (24.5%)	28 (18.1%)	22 (14.2%)	40 (25.8%)	27 (17.4%)	155 (100%) 2.94 (1.46)
Total *M*(*SD*)						2.90 (.22)

Note: Percentages may vary in the cell within each table due to missing data.

Personal Characteristics

The mean age of IENs in this study was 46.62 (*SD* = 10.51), with the average age of the participants from the Region of the Americas being younger and the oldest being from the European Region (Table 16). Of the total 12 male IENs in this study, 6 were from the Western Pacific region, accounting for 10% of IENs from that region. After the bachelor's degree, the diploma degree was the highest nursing degree held (51.9%). The bachelor's degree was most frequent among IENs from the Western Pacific region (75.4%), and lowest in the African Region

(25%). The diploma degree was highest in the Region of the Americas (43.8%), followed by the European Region (37.5%). The Associate degree was highest in the European Region (25%) and lowest in the Western Pacific Region (3.3%). The ten nurses holding doctorate degrees were split evenly between DNP and PhD degrees. Three of the PhD graduates had received their basic nurse training in the Western Pacific Region, while four of the DNP nurses had received their basic nurse training in South-East Asia Region.

Table 16 Personal Characteristics of Age, Gender, and Basic Nurse Training per Region

WHO Region	Age	Gender	Training in English	Highest nursing degree	Highest nursing degree
	Mean, *SD*	Frequency (%)	Frequency (%)		Frequency (%)
African Region *(n*=16*)*	45.64*(8.00)*	Male= 1 (6.3%), Female=15 (93.8%)	16 (100%)	Diploma Associate Bachelors Master's PhD	4 (25%) 2 (12.5%) 4 (25%) 5 (31.3%) 1 (6.3%)
Region of the Americas *(n*=17*)*	41.27 (*7.71*)	Male=1 (5.9%), Female=16 (94.1%)	14 (82.4%)	Diploma Associate Bachelors Master's	7 (43.8%) 3 (18.8%) 5 (31.3%) 1 (6.3%)
South-East Asia Region *(n*=37*)*	42.11 (*9.99*)	Female=37 (100%)	37 (100%)	Diploma Associate Bachelors Master's DNP PhD	9 (24.3%) 2 (5.4%) 17 (45.9%) 4 (10.8%) 4 (10.8%) 1 (2.7%)
European Region *(n*=24*)*	53.95 (*7.38*)	Male=3 (12.5%), Female=21 (87.5%)	19 (79.2%)	Diploma Associate Bachelors Master's	9 (37.5%) 6 (25%), 8 (33.3%) 1 (4.2%)
Eastern Mediterranean Region *(n*=2*)*	46 (*9.90*)	Male=1 (50%), Female=1 (50%)	1 (50%)	Bachelors Master's	1 (50%) 1 (50%)

Table 16 - *Continued*

WHO Region	Age	Gender	Training in English	Highest nursing degree	Highest nursing degree
	Mean, *SD*	Frequency (%)	Frequency (%)		Frequency (%)
Western Pacific Region *(n*=61*)*	47.62 (*11.35*)	Male=6 (10%), Female=54 (90%)	51 (87.9%)	Diploma Associate Bachelors Master's DNP PhD	1 (1.6%) 2 (3.3%) 46 (75.4%) 8 (13.1%) 1 (1.6%) 3 (4.9%)
Total *(N*=157*)*	46.62 *(10.51)* *n=130*	Male=12 (7.7%), Female=144 (92.3%) *n=156*	138 (89.6%) *n*=154	Diploma Associate Bachelors Master's DNP PhD	30(19.2%) 15 (9.6%) 81 (51.9%) 20 (12.8%) 5 (3.2%) 5 (3.2%) *n*=156

Note: Percentages may vary in the cell within each table due to missing data.

The majority of IENs were married or had a partner (89%), and the partner lived with the IEN in the US (97.2%) (Table 17). Half of the IENs had children under age 18 (*n* = 77, 50%). The majority of IENs had children under and older than 18 living with them (*n* = 86, 86%). IENs in four of the six WHO regions reported having children living with them more than they reported having children under age 18. These responses could mean the IENs have children over age 18 living with them, but the data were difficult to interpret.

Table 17 Personal Characteristics of Marital Status and Children Living Arrangements

WHO Region	Married or partner	Partner living with you in US	Have children under age 18	Children living with you in US
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)
African Region *(n* = 16*)*	15 (93.8%)	14 (93.3%)	11 (73.3%)	14 (100%)
Region of the Americas *(n* = 17*)*	11 (64.7%)	12 (92.3%)	9 (56.3%)	10 (90.9%)

Table 17 - *Continued*

WHO Region	Married or partner Frequency (%)	Partner living with you in US Frequency (%)	Have children under age 18 Frequency (%)	Children living with you in US Frequency (%)
South-East Asia Region *(n* = 37*)*	37 (100%)	37 (100%)	20 (55.6%)	23 (82.5%)
European Region *(n* = 24*)*	19 (82.6%)	20 (100%)	4 (16.7%)	4 (66.7%)
Eastern Mediterranean Region *(n* = 2*)*	2 (100%)	2 (100%)	1 (50%)	1 (100%)
Western Pacific Region *(n* = 61*)*	54 (90%)	53 (96.4%)	32 (52.5%)%)	34 (82.9%)
Total *(N* =157*)*	138 (89%) *n* =155	138 (97.2%) *n* = 142	77 (50%) *n* = 154	86 (86%) *n* = 100

Note: Percentages may vary in the cell within each table due to missing data.

Excluding the Eastern Mediterranean Region which had only 2 participants, the length of time in years from basic training to immigration was longest for IENs who received their basic training in the African Region (*M*=8.93, *SD*=8.13); and shortest for IENs who received their basic training in the Region of the Americas (*M*=3.46, *SD*=3.41). The length of time in years from immigration to employment in the US was longest for IENs who received their basic training in the African Region (*M*=1.21, *SD*=.98), and shortest for IENs who received their basic training in the Western Pacific Region.

Data used for analysis in Table 18 were from participants who provided data for all 3 time fields (years since basic training, years since arrival in US, and years since employment in US). Using the present year of 2010, the mean and standard deviation for the number of years since basic training were calculated (*M*=26.33,*SD*=10.78). Using the present time of 2010, years since arrival in US was calculated (*M*=19.95, *SD*=11.71). Using the present time of 2010, the number of years since employment was also calculated (*M*=19.41, *SD*=12.02). Years from basic training to immigration were calculated subtracting years since arrival in US from years

since basic training. Years from immigration to employment were calculated subtracting years since employment in US from years since arrival in US. Data from two additional cases were not used in the analysis, as the year of Basic Training was greater than the year of immigration to the US, thus for the analysis *n*=142. The number of Years from Basic Training to Immigration was *M*=6.38 (*SD*=5.51). The number of Years from Immigration to Employment was *M*=.54, (*SD*=1.12)).

Table 18 Years since Basic Training, Immigration, and Employment

WHO Region	Years Since Basic Training Mean *(SD)*	Years Since Arrival in US Mean *(SD)*	Years Since Employment in US Mean *(SD)*	Years From Basic Training to Immigration Mean *(SD)*	Years From Immigration to Employment Mean *(SD)*
African Region *(n* = 16*)*	24. 29 (9.12)	15.36 (7.81)	14.14 (7.56)	8.93 (8.13)	1.21 (.98)
Region of the Americas *(n* = 17*)*	21.85 (8.10)	18.38 (8.42)	17.69 (8.85)	3.46 (3.41)	.69 (2.21)
South-East Asia Region *(n* = 37*)*	22.62 (10.49)	16.68 (11.28)	16.18 (11.42)	5.94 (4.29)	.50 (.62)
European Region *(n* = 24*)*	33.71 (5.82)	27.14 (9.72)	26.71 (10.79)	6.57 (6.26)	.43 (1.54)
Eastern Mediterranean Region *(n* = 2*)*	24.50 (10.61)	13.00 (12.73)	12.00 (11.31)	11.50 (2.12)	1.00 (1.41)
Western Pacific Region *(n* = 58*)*	27.40 (11.90)	20.97 (12.91)	20.57 (13.14)	6.43 (5.34)	.40 (.77)
Total *(N* =142*)*	26.33 (10.78) *n* = 142	19.95 (11.71) *n* = 142	19.41 (12.02) *n* = 142	6.38 (5.51) *n* = 142	.54 (1.12) *n* = 142

Note: Data for this table is only from responses where all 3 time fields were provided and immigration year was greater than year basic training completed.

The majority of IENs (79.8%) obtained their basic nursing education from five countries: the Philippines, India, Nigeria, Canada, and England (Table 19). Out of the total sample (*N*=157), The Philippines was the most frequent country of basic nursing education. Although England had the lowest frequency (6.4%) in this top five list, the United Kingdom was selected by 6 other participants as their country of basic nursing education, while two other UK countries (Scotland and Ireland) were selected by three participants. If these other responses had been included in the analysis, the frequency for the combined UK countries would have been much higher than England by itself (*n*=19, 12.1%).

Table 19 Countries of Basic Nursing Education (*N* =157*)*

Country	Frequency (%)
Philippines	51 (32.5%)
India	37 (23.6%)
Nigeria	14 (8.9%)
Canada	13 (8.3%)
England	10 (6.4%)
Total	125 (79.7%)

Most of the participants were employed and working full-time (91.7%) (Table11). The highest frequency of fulltime workers had received their basic nursing education in the Region of the Americas (100%), while the lowest frequency of full-time employed IENS was in the Western Pacific Region (88.5%) (Table 20). The remaining participants were employed part-time (3.8%), self-employed (2.5%), or other (1.9%). No participants were unemployed or employed and on leave.

Table 20 Description of Current Employment Situation *(N* =157*)*

WHO Region	Full-Time Frequency (%)	Part-Time Frequency (%)	Self-Employed Frequency (%)	Other Frequency (%)
African Region *(n* = 16*)*	12 (75%)	1 (6.3%)	3 (18.8%)	0
Region of the Americas (*n* = 17*)*	17 (100%)	0	0	0

Table 20 - *Continued*

WHO Region	Full-Time Frequency (%)	Part-Time Frequency (%)	Self-Employed Frequency (%)	Other Frequency (%)
South-East Asia Region *(n* = 37*)*	36 (97.3%)	1 (2.7%)	0	0
European Region *(n* = 24*)*	23 (95.8%)	1 (4.2%)	0	0
Eastern Mediterranean Region *(n* = 2*)*	2 (100%)	0	0	0
Western Pacific Region *(n* = 61*)*	54 (88.5%)	3 (4.9%)	1 (1.6%)	3 (4.9%)
Total	144 (91.7%)	6 (3.8%)	4 (2.5%)	3 (1.9%)

Note: Percentages may vary in the cell within each table due to missing data.

Most of the participants were Staff Nurses (*n = 88,* 56.1%), followed by those in Leadership positions (*n* = 39, *SD* = 24.8%) (Table 21). The category of "other" originally contained a total of 22 responses (14%), however all but two of these descriptions were either recoded into existing variables, subsumed into the renamed variable of "leadership" (containing nursing supervisor/manager/administrator, charge nurse, or head nurse), or recoded into a new variable such as educator/faculty, infection control, informatics, research, and consultant.

Table 21 Description of Main Job (*N*=157)

WHO Region	Job Title	Frequency (%)
African Region *(n=16)*	Staff Nurse	7 (43.8%)
	CNS/NP/Midwife	3 (18.8%)
	Leadership	5 (31.3%)
	Educator/Faculty	1 (6.3%)
Region of the Americas *(n=17)*	Staff Nurse	8 (47.1%)
	CNS/NP/Midwife	1 (5.9%)
	Leadership	6 (35.3%)
	Educator/Faculty	1 (5.9%)
	Informatics	1 (5.9%)

Table 21 - *Continued*

WHO Region	Job Title	Frequency (%)
South-East Asia Region	Staff Nurse	24 (64.9%)
(n=37)	CNS/NP/Midwife	6 (16.2%)
	Leadership	4 (10.8%)
	Educator/Faculty	1 (2.7%)
	Research	1 (2.7%)
	Other	1 (2.7%)
European Region	Staff Nurse	13 (54.2%)
(n=24)	CNS/NP/Midwife	1 (4.2%)
	Leadership	8 (33.3%)
	Infection Control	1 (4.2%)
	Research	1 (4.2%)
Eastern Mediterranean Region	Leadership	1 (50%)
(n=2)	Educator/Faculty	1 (50%)
Western Pacific Region	Staff Nurse	36 (59%)
(n=61)	CNS/NP/Midwife	2 (3.3%)
	Leadership	15 (24.6%)
	Educator/Faculty	5 (8.2%)
	Informatics	1 (1.6%)
	Consultant	1 (.6%)
	Other	1 (1.6%)
All countries	Staff Nurse	88 (56.1%)
(N=157)	CNS/NP/Midwife	13 (8.3%)
	Leadership	39 (24.8%)
	Infection Control	1 (.6%)
	Educator/Faculty	9 (5.7%)
	Research	2 (1.3%)
	Informatics	2 (1.3%)
	Consultant	1 (.6%)
	Other	2 (1.3%)

Note: Percentages may vary in the cell within each table due to missing data.

The majority of IENs worked in an acute care hospital (86.5%), followed by other health care organizations (7.1%) (Table 22). IENs who received their basic nursing education from the African Region were either employed at an acute care hospital (40%), other health care organization (40%), or home health agencies (20%). In the distribution of nurses across employment settings for nurses, IENs educated in the African Region differed in employment from nurses in the other regions. Of the five IENs working in a home health agency, three were

educated in the African Region.

Table 22 Description of Work Setting

WHO Region	Work Setting	Frequency (%)
African Region *(n=16)*	Acute care hospital Home health agency Other health care organization	6 (40%) 3 (20%) 6(40%)
Region of the Americas *(n=17)*	Acute care hospital Other health care organization Not working in health care	14 (82.4%), 2 (11.8%), 1 (5.9%)
South-East Asia Region *(n=37)*	Acute care hospital	37 (100%)
European Region *(n=24)*	Acute care hospital Home health agency	23 (95.8%) 1 (4.2%)
Eastern Mediterranean Region *(n=2)*	Acute care hospital	2 (100%)
Western Pacific Region *(n=61)*	Acute care hospital Nursing home Home health agency Other health care organization Not working in health care	53 (86.9%) 1 (1.6%) 1 (1.6%) 3 (4.9%) 3 (4.9%)
All countries *(N=157)*	Acute care hospital Nursing home Home health agency Other health care organization Not working in health care *n* = 156	135 (86.5%) 1 (.6%), 5 (3.2%), 11 (7.1 %), 4 (2.6%)

Note: Percentages may vary in the cell within each table due to missing data.

The majority of IENs plan to stay in the US permanently (*n* = 129, 83.8%) (Table 23). Among the 25 IENs planning to leave the US, most planned to stay at least five more years (*n* = 20, 80%). Of IENs who received their basic nursing education in the African Region, 10 participants planned to stay in the US, while 5 planned to leave sometime after 5 years. Similarly, in the Region of the Americas, 13 participants planned to stay in the US permanently, while 5 participants planned to leave the US.

Table 23 Descriptions of Plan to Stay or Leave US (*N*=157)

WHO Region	Plan to stay in US permanently Frequency (%)	When plan to leave US Frequency (%) *
African Region *(n=16)*	10 (62.5%)	Sometime after 5 years=5 (100%)
Region of the Americas *(n=17)*	13 (76.5%)	Within next 1-2 years=1 (20%), Sometime after 5 years=4 (80%)
South-East Asia Region *(n=37)*	32 (86.5%)	Within next 3-5 years=1 (20%), Sometime after 5 years=4 (80%)
European Region *(n=24)*	21 (91.3%)	Within next 3-5 years=1 (50%), Sometime after 5 years=1 (50%)
Eastern Mediterranean Region *(n=2)*	2 (100%)	Not applicable
Western Pacific Region *(n=61)*	51 (86.4%)	Within next 3-5 years=2 (25%), Sometime after 5 years=6 (75%)
All countries *(N=157)*	129 (83.8%)	Within next 1-2 years=1 (4%), Within next 3-5 years=4 (16%), Sometime after 5 years=20 (80%)

*Notes: Percentages may vary in the cell within each table due to missing data. * Percent of those planning to leave the US*

Subscales by WHO Region

In all WHO regions, the Professional Satisfaction subscale had the highest mean, while the Push Factors and Pull Factors subscales had the lowest mean across all WHO regions except for the African Region (Table 24). For IENs educated in the African Region, Transition Conditions had the lowest mean. IENs educated in the Region of the Americas, the European Region, and the Eastern Mediterranean Region responded similarly, with Professional Satisfaction having the highest means and Pull Factors having the lowest means. Whereas, IENs educated in the South-East Asia Region and the Western Pacific Region had similar responses, with Professional Satisfaction having the highest mean and Push Factors the lowest means. Professional Satisfaction had the highest subscale mean, which may be associated with the convenience sampling method of professional nurses.

Table 24 Item Means of Subscales by WHO Region

WHO Region	Push Factors Item Mean *(SD)*	Pull Factors Item Mean *(SD)*	Transition conditions Item Mean *(SD)*	Professional Satisfaction Item Mean *(SD)*	Family/ Social Environ-ment Item Mean *(SD)*	Work Environ-ment Item Mean *(SD)*
African Region	3.30 (.95)	3.48 (.74)	3.10 (.71)	4.27 (.61)	4.01 (.57)	3.13 (.61)
Region of the Americas	2.34 (.77)	1.92 (.98)	3.90 (.65)	4.54 (.43)	3.78 (.53)	3.73 (.67)
South-East Asia Region	2.60 (.79)	3.16 (.89)	3.33 (.39)	4.19 (.47)	4.13 (.46)	3.53 (.58)
European Region	1.78 (.58)	1.44 (.55)	3.74 (.56)	4.38 (.57)	3.84 (.56)	3.81 (.59)
Eastern Mediterranean Region	2.25 (1.53)	2.00 (0)	3.17 (.24)	4.08 (.35)	3.43 (0)	3.43 (.40)
Western Pacific Region	3.09 (.83)	3.42 (.81)	3.50 (.56)	4.40 (.53)	4.25 (.57)	3.72 (.47)

Differences among Countries of Basic Nursing Education by WHO Region

Research Question 5

Among IENs who received their basic nursing education in different countries,

Are there differences in professional satisfaction, transition conditions, family/social environment, work environment, motivation to migrate, push factors, and pull factors?

Professional Satisfaction

For IENs who received their basic nursing education in any of the six WHO Regions, the Professional Satisfaction subscale had the highest item mean on the NIRTQ2 subscale (Table 24). A Kruskal-Wallis test was computed to compare the six WHO regions on Professional Satisfaction (Table 25). Results revealed no significant differences existed across WHO regions (X^2 (5) = 8.43; ns).

Table 25 Summary of Kruskal-Wallis Tests of NIRTQ2 Subscales

Subscale	*N*	Mean	*SD*	Significance
Push Factors	155	2.70	.93	.000
Pull Factors	151	2.90	1.10	.000
Transition Conditions	156	3.50	.59	.000
Professional Satisfaction	151	4.34	.53	.134
Family/Social Environment	149	4.08	.56	.007
Work Environment	151	3.63	.58	.006

Transition Conditions

IENs who received their basic nursing education in the Region of the Americas had the highest item mean on the Transition Conditions subscale, while the African Region had the lowest item mean (Table 24). A Kruskal-Wallis test was computed to compare the six WHO regions on Transition Conditions (Table 25). Results revealed that significant differences exist across WHO regions in Transition Conditions (X^2 (5) =25.38; $p < .05$). Mann-Whitney U tests were subsequently computed for pair-wise comparisons of regions.

The Region of the Americas had significantly higher responses than the Africa Region ($z = -3.18$; $p < .05$), but the European Region did not significantly differ from the Region of the Americas ($z = -.96$; ns). The European Region had significantly higher responses than the African Region ($z = -2.97$; $p < .05$), but the Eastern Mediterranean Region did not significantly differ from the European Region ($z = -1.65$; ns). The Region of the Americas had significantly higher responses than the South-East Asia Region ($z = -3.60$; $p < .05$), but the Eastern Mediterranean Region did not significantly differ from the South-East Asia Region ($z = -.77$; ns). The Western Pacific Region did not significantly differ from the South-East Asia Region ($z = -1.83$; ns). The Region of the Americas had significantly higher responses than the Western Pacific Region ($z = -2.72$; $p < .05$). The European Region had significantly higher responses

than the Western Pacific Region (z = -2.12; p < .05), but the Eastern Mediterranean Region did not differ significantly from the Western Pacific Region (z = -1.22; ns*).*

Family/Social Environment

IENs who received their basic nursing education in the Western Pacific Region had the highest item mean on the Family/Social Environment subscale, while the Eastern Mediterranean had the lowest item mean (Table 24). A Kruskal-Wallis test was computed to compare the six WHO regions on Family/Social Environment (Table 25). Results revealed that significant differences exist across WHO regions in Family/Social Environment (X^2 (5) =16.11; p < .05). Mann-Whitney U tests were subsequently computed for pair-wise comparisons of regions.

The South-East Asia Region had significantly higher responses than the Region of the Americas (z = -2.27; p < .05), but the African Region did not significantly differ from South-East Asia Region (z = -.81; ns). The Western Pacific Region had significantly higher responses than the Region of the Americas (z = -2.99; p < .05), and the Western Pacific Region had significantly higher responses than the European Region (z = -2.69; p < .05). There were no other significantly higher responses comparing the Family/Social Environment across the six WHO regions.

Work Environment

IENs who received their basic nursing education in the European Region had the highest item mean on the Work Environment subscale, and the African Region had the lowest item mean (Table 24). A Kruskal-Wallis test was computed to compare the six WHO regions on Work Environment (Table 25). Results revealed that significant differences exist across WHO regions in Work Environment (X^2 (5) = 16.13; p < .05). Mann-Whitney U tests were subsequently computed for pair-wise comparisons of regions.

The African Region had significantly higher responses than the Region of the Americas (z = - 2.62; p < .05), but the South-East Asia Region did not significantly differ from the Region

of the Americas (z = -2.24; ns). The African Region had significantly higher responses than the South-East Asia region (z = - 2.24; p < .05), the European Region (z = - 3.10; p < .05), and the Western Pacific Region (z = - 3.35; p < .05). There were no other significant responses in Work Environment across WHO Regions.

Push Factors

IENs who received their basic nursing education in the African region had the highest item mean on the Push Factors subscale, and the European Region had the lowest item mean (Table 24). A Kruskal-Wallis test was computed to compare the six WHO regions on Push Factors (Table 25). Results revealed that significant differences exist across WHO regions in Push Factors (X^2 (5) = 44.79; p < .05). Mann-Whitney U tests were subsequently computed for pair-wise comparisons of regions.

The African Region had significantly higher responses than the Region of the Americas (z = -2.88; p < .05), but the South-East Asia Region did not significantly differ from Region of the Americas (z = -1.25; ns), nor did the Eastern Mediterranean Region differ significantly from Region of the Americas (z = -.134; ns). The African Region had significantly higher responses than the South-East Asia Region (z = -2.63; p < .05), but the South-East Asia Region did not differ significantly from the Eastern Mediterranean Region z = -.328; ns). The African Region had significantly higher responses than the European Region (z = -4.50; p < .05), but the European Region did not differ significantly from the Eastern Mediterranean Region z = -.53; ns). The Region of the Americas had significantly higher responses than the European Region (z = -2.23; p < .05). The Western Pacific Region had significantly higher responses than the Region of the Americas (z = -3.16; p < .05). The South-East Asia Region had significantly higher responses than the European Region (z = -3.90; p < .05). The Western Pacific Region had significantly higher responses than the South-East Asia Region (z = -2.31; p < .05) and the European Region (z = -5.88; p < .05).

Pull Factors

IENs who received their basic nursing education in the African region had the highest item mean on the Pull Factors subscale, and the European Region had the lowest item mean (Table 24). A Kruskal-Wallis test was computed to compare the six WHO regions on Pull Factors (Table 25). Results revealed that significant differences exist across WHO regions in Pull Factors (X^2 (5) = 63.25; $p < .05$). Mann-Whitney U tests were subsequently computed for pair-wise comparisons of regions.

The African Region had significantly higher responses than the Region of the Americas (z = -3.71; $p < .001$) but the European Region did not significantly differ from Region of the Americas (z = -1.39; ns). The Eastern Mediterranean Region also did not significantly differ from Region of the Americas (z = -.42; ns). The African Region had significantly higher responses than the European Region (z = -4.95; $p < .05$) but the Eastern Mediterranean Region did not significantly differ from the European Region (z = -1.21; ns). The Region of the Americas had significantly higher responses than the South-East Asia Region (z = -3.67; $p < .05$) but the European Region did not significantly differ from the Eastern Mediterranean Region (z = 1.21; ns). The Western Pacific Region had significantly higher responses than the Region of the Americas (z = -4.53; $p < .05$) but the South-East Asia Region did not significantly differ from the Western Pacific Region (z = -1.31; ns). The South-East Asia Region had significantly higher responses than the European Region (z = -5.56; $p < .05$). The Western Pacific Region had significantly higher responses than the European Region (z = -6.52; $p < .05$)

Chapter Summary

This chapter described the data analyses used to conduct this exploratory descriptive study on the relocation and transition experiences of IENs who had migrated to the US using an ethically sound and rigorous approach. There was not a significant difference in the IENs primary motivation to migrate. The majority of IENs in this study experienced a high level professional satisfaction. Among IENs who received their basic nursing education in different

WHO regions, there were no significant differences in professional satisfaction. However, there was a difference among IENs in different WHO regions in transition conditions, family/social environment, work environment, motivation to migrate, push factors, and pull factors.

CHAPTER 5

DISCUSSION

The purpose of this chapter is to provide a discussion on findings of this research study on the relocation and transition experiences of internationally educated nurses migrating to the US. The need for enhanced understanding of the complex pull and push factors affecting nurse migration provided direction for this study.

Participant Responses by WHO Region

The intention was to recruit participants who received their basic nurse education from all six WHO regions; however there was a lack of response from some gatekeepers and it became a challenge to obtain participants from all WHO regions. Therefore, a sample of convenience was used.

There was some variation in responses on the NIRTQ2 by WHO region. Professional Satisfaction had the highest mean across all WHO Regions. Push Factors had the lowest mean across all WHO Regions, with IEN respondents from the European Region having the lowest item mean for both Pull Factors and Push Factors. The Region of the Americas had the highest mean for Transition Conditions, while Africa had the lowest mean, indicating a more positive transition experience for IENs from the Region of the Americas. There was little variation in the item means across WHO Region for both Family/Social Environment and Work Environment.

IENs who received their basic nursing education in the Region of the Americas had the highest item mean on transition conditions, while the Africa Region had the lowest item mean. This indicates IENs who migrated from countries such as Canada experienced more positive transition conditions than IENs migrating from African countries. IENs from the Western Pacific Region had the highest item mean for Family/Social Environment, followed by the South-East Asia Region. A high value is placed on family and social connectedness by IENs. IENs from the European Region had the highest item mean for Work Environment, while the African Region

had the lowest item means. This indicates IENS from the European Region had positive, supportive experiences in their places of employment, whereas IENs from the African Region did not have as positive experiences (such as reflected in discrimination). The African Region had the highest item mean for push factors and pull factors than IENs from other regions. This indicates there were factors in both their source country and their destination country which motivated them to migrate. IENs from the Western Pacific Region and the South-East Asia Region also had a high item mean for pull factors, indicating there were factors in the US motivating their migration.

Professional Satisfaction

Based on items in the Professional Satisfaction subscale, the majority of IENs in this study experienced a high level of professional satisfaction. In fact, they were high on every item, such as adjustment to US nursing practice and satisfaction with current job. These finding are similar to Buchan et al.'s (2006) findings where nurses migrate for professional growth, as early as 1988 McCloskey and Aquino found positive perceptions of the practice environment lead to increased IEN professional satisfaction.

In this study, subjects were recruited by individual professional nurses and professional organizations, which may have influenced the high level of IEN professional satisfaction found. Buchan et al (2006) had similar findings and identified a major limitation of their IEN UK study was including only members of the professional association, the Royal College of Nursing.

Yi and Jezewski (2000) found adjusting to work in a US hospital typically occurs in two stages, with initial adjustment taking 2 to 3 years, and an additional 5 to 10 years for full adjustment to the work environment. In this study, all but one of the IENs responded they had adjusted to US nursing practice, most likely due to the length of time they had been in the US. None of these IENs had been in the US less than 3 years, 28.1% had been in the US between 3 and 10 years, and the majority of participants (77.7%) had been in the US more than 10 years.

The finding of high levels of professional satisfaction may also be due to the short time between immigration to employment for all IENs in this study (*M*=.54 years).

These findings of high levels of professional satisfaction were unexpected. This may be attributed to the maturity of the IENs, as they were not new nurses but filled out the instrument retrospectively. Their memory of their relocation and transition experiences may have lost its immediacy.

Transition Conditions

Based on items in the Transition Conditions subscale, the majority of IENs did not experience language barriers and knew who to contact for questions, however they were surprised by differences in the American culture. Co-workers respected their education and experience, and IENs felt their jobs utilized their skills, education, and experience. These findings are different than Lin's (2009) finding on IEN adaption needs (language barriers, discrimination, US social culture, US nursing practice, and US work ethics). This finding on differences in American culture is similar to both Xu's (2007) findings on cultural differences and Lopez's (1990) findings on initial communication problems because of American expressions.

Family/Social Environment

Based on items in the Family/Social Environment subscale, such as having fellow nurses and friends in the community who are from their home country, having a place to worship and practice religion, and feeling safe living in the US, the majority of IEN respondents had a positive family/social environment. This is similar to findings in other studies where having family and friends from the IEN's home country (Hayne et al., 2009; Lopez, 1990; Ryan, 2007) and social support systems (Blythe & Baumann, 2009) contributed positively to IEN relocation experiences in a new country.

Work Environment

Based on items in the Work Environment subscale, the majority of IENs felt safe on their current job, had a workload that was not too heavy, and worked with supportive fellow

nurses. The majority of IENs also believed nurses were more respected in the US, and that supervisors and physicians valued their experiences and education. However, the majority of IENs also experienced racism in the workplace. This finding on racism is similar to other studies findings on racism (DiCicco-Bloom, 2004; Xu, 2007) and discrimination (Xu, 2007). The findings on staff support, supervisor support, and physician support are similar to other studies (Liou & Cheng, 2009; Sherman & Eggenberger, 2008), indicating these support mechanisms increase professional satisfaction. The finding on supportive fellow nurses differs from Charest's (1992) study, where fellow nurses were not supportive of the IENs. Charest's data were collected in one institution with one group of IENs who were recruited specifically to fill the institution's nursing shortage.

Motivation to Migrate

In this study, the highest factor for motivation to migrate was for Personal Reasons. Similarly, in Buchan et al.'s study (2006), the authors found that IENs in the UK who had migrated from Australia, New Zealand, or the US chose "personal reasons" as their main motivator to migrate.

Push Factors

Based on items in the Push Factors subscale, low pay was the strongest push factor for the majority of IENS in this study, which differs from Vujicic et al.'s (2004) study, which cautions that changes in a source country's working conditions and living conditions will have a bigger influence on decreasing nurse migration than increasing wages. IENs in this study did not experience a lack of nursing jobs in their home countries, which differs from other studies where an oversupply of nurses is created (Brush, 2008; Buchan, 2006; Muncada, 1995; Stilwell et al., 2003). Another strong push factor for IENs in this study was advancing their nursing education, similar to Labonté et al.'s (2006) findings.

Pull Factors

Based on items in the Pull Factors subscale, remittances did not influence IENs either way, which differs from studies where IENs worked longer hours to send remittances home (Xu & Kwak, 2005, 2007). The strongest pull factor was obtaining a better education and job opportunities for the family, similar to findings in other studies (Choy, 1998; Hall et al., 2009). Political stability was not a strong pull factor, unlike Labonté et al's. (2006) Canadian study.

Personal Characteristics

The distribution of IENs across WHO regions by country of basic nurse training in this study was similar to findings of IEN source countries in large datasets including IENs who migrated to Canada (Blythe et al., 2009). The largest number of IENs migrated from the Western Pacific region (Xu & Kwak, 2005). Eighty percent of the IENs in this study received their basic nursing education from five countries: the Philippines, India, Nigeria, Canada, and England. The same groups of top source countries were in other IEN studies, with the exception of Nigeria (Lee, 2007; Xu & Kwak, 2005).

IENs in this study were predominantly female and married, similar to finding in other studies (Hall et al., 2009; Lee, 2007; Xu & Kwak, 2005, 2007). Fifty percent of IENs in this study had children, compared to 40% in Xu & Kwak's study (2005). IENs were younger (mean age of 37) in Polsky et al's study (2007). In this study, 86 percent of IENs with children had children living with them in the US, whereas in Buchan et al.'s (2006) UK study, one third of IENs with children had to leave their children in the source country. This difference may be due to the length of time IENs in this study have spent in the US.

The highest basic nursing education received by 52% of IENs in this study was a bachelor's degree, similar to findings from other studies (Lee, 2007; Polsky et al., 2007; Xu & Kwak, 2007). This differs from studies where the majority of IENS received a diploma degree as their basic nursing education (Hall et al., 2009; Xu & Kwak, 2005). Although language barriers were not an issue for IENs in this study, Buerhaus et al. (2009) found many IENs may

encounter difficulties communicating cross-culturally. There is a gap in knowledge related to the effect of cross cultural communication on patient safety outcomes.

Employment

The typical IEN in this study was employed fulltime, a staff nurse, and worked in a hospital, similar to finding in other studies (Hall et al., 2009; Lee, 2007; Polsky et al., 2007; Xu & Kwak, 2005, 2007). However, the high frequency of IENs in this study holding leadership positions (25%) differs from Xu and Kwak's study (2005), where 9% of IENs held leadership positions.

The mean of years from basic training to immigration was 6.38. The mean of years from immigration to employment was .54, indicated the IENs in this study were employed within half a year of arrival in the US. This short time until employment may be attributed to this study's sampling method of nurses from professional organizations and professional healthcare settings. This study did not address if IENs were recruited by healthcare organizations or received employment assistance upon arrival in the US.

Plan to Leave or Stay in the US

In this study, the majority of IENs planned to stay in the US (84%). Of those planning to leave the US, 80 percent plan to do so sometime after 5 years. Because of this IEN stability, it is worth investing effort in the IEN transition period to the US healthcare system. Similarly, in Buchan et al.'s (2006) study, the majority of IENs planned to stay in the UK at least 5 years. In Nguyen et al.'s (2008) study of Ugandan student nurses, the majority planned to migrate to either the UK or US, however the majority of those planned to return to Uganda. This difference may be due to IENs coming to stay in the US, so are established and reflect professional maturity, while students who had not yet migrated from Uganda could not imagine not returning to their home country.

Limitations

Limitations of this study included self reported data and potential bias introduced by IENs when completing the NIRTQ2. Initial content validity of the study has been established by Gray and Johnson in the Nurse International Relocation and Transition Questionnaire 2 (NIRTQ2). As a new instrument, however, reliability assessment is ongoing in their study of African IENs. The number of respondents from source countries was dependent on which IENs responded. Utilizing self reported data such as in questionnaires was limited by accuracy of the data reported by the IEN.

One of this study's limitations was the sample method of convenience sampling, which may have resulted in a high number of respondents being from professional organizations and professional nursing associations who have been in the US longer. Therefore, they may have responded more positively on the Professional Satisfaction subscale. This study's results are specific to the sample studied and cannot be generalized to the entire population of IENs who have migrated to the US.

Performance of Instrument

In this study, the instrument's (NIRTQ2) performance was adequate and served as a valuable guide to collect IEN data. Since the instrument's initial development and content validity focused on nurses from the African region, the investigator will suggest possible instrument revisions to the developers of the NIRTQ2. These suggestions will include conducting content validity with representatives of the other WHO regions and revision of the reverse scored items within the instrument's subscales. Additional suggestions will include modifying wording on one item which may be difficult to understand, modifying "lack of job availability" to "no jobs available." In the demographic section age wording needs to be added to the follow up question on children, "If you answered YES, are your children currently: Living with you in the US…" It is recommended that there be an age match in the two questions, as IENs in this study reported having more children living with them than they had reported for the

question, “Do you have children under the age of 18 years?” It would also be beneficial to add two questions to the demographic section, indicating whether the IEN’s immigration was sponsored by an employer, and whether the IEN is a member of a professional association.

This study’s findings on the transition and relocation experiences of IENs provided support for the validity of the Ibitayo (2009) model, Migration and Transition of Internationally Educated Nurses. The Ibitayo model provided the desired endpoint of the transition experience, professional satisfaction, and was useful in guiding this study’s data analysis and discussion of findings. Since the majority of this study’s participants had been in the US for several years and had experienced high professional satisfaction, the model’s endpoint was achieved by the majority of the participants. The other concepts of the model provided a schema for discovering what IEN experiences and personal characteristics contributed to the high professional satisfaction.

Implications for Nursing

The relocation and transition experiences of IENs needs to be studied in order to fully integrate IENs who have migrated to the US into the healthcare system. Although this study’s result cannot be generalized to the entire population of IENs who have migrated to the US, it may be of interest to health care organizations in the US who are considering development of an IEN transition program. This study’s findings indicated IENs remain in the US for a long period of time and are a long-term investment for healthcare organizations. Healthcare organizations and educational institutions recruiting IENs may want to advertise employment benefits such as education and increased professionalism. IENs in the US healthcare workforce are reflective of the various patient populations they serve. In addition, IENs serve as a resource for future IENs as they relocate and transition into the US healthcare environment.

Many new graduate nurses have internships in health care organizations on specific nursing units or in specialty service lines, thus ensuring their successful transition into the role of a professional nurse and integration within that facility’s corporate mindset. Organizations

that make this type of commitment to new nurses and that are considering employing IENs to meet their nursing needs should be receptive to a transition program for IENs who migrated to the US. An envisioned transition program would have a structure similar to the internship model in regards to generic nursing practice and knowledge specific to that organization. However, time needs can be added for several other components specific to IENs, such as successful registration with state boards of nursing and seminars on communication skills and cultural practices as a nurse in the US healthcare system. This study's findings indicate a beneficial seminar would be on workplace ethics and how to handle workplace issues such as discrimination. The transition program could be from 2 to 9 months in length and constructed in modules (Jeans et al., 2005) specific to individual IEN needs. Healthcare organizations that include cultural competency content in new employee orientation programs (Nichols et al., 2009) should be receptive to a modified transition program specific to IENs from different cultural groups.

An IEN transition program should include as many of these ten success indicators identified by Zizzo and Xu (2009) as possible: 1) buddy support system, 2) logistic support, 3) registration, 4) fitness for practice, 5) reduce vacancy factor, 6) equality of opportunity, 7) valuing culture, 8) mentorship, 9) prepared for practice, 10) training course, 11) study days, 12) professional identity and commitment to work, 13) all IENs registered, and 14) higher job satisfaction with better communication skills and few complaints.

Transition programs need to be evidence-based in order to effectively meet the needs of IENs from different WHO regions. The significant differences in the transition experiences of nurses from WHO regions revealed by this study indicate a need for program developers to take into account an IEN's source country or WHO region when designing IEN transition programs. Also, open-ended comments show individual IENs are interested in transition programs, both in source countries and destination countries.

Future Recommendations

Future studies include using a phenomenological qualitative approach to explore the initial relocation and transition experiences of IENs who have been in the US less than one year. Since information on IEN employment agencies was not collected in this study, a future study might explore whether the relocation and transition experiences of IENs differ when using an employment agency, compared to IENs migrating to the US on their own initiative.

Another potential future study is forming a research team that includes the NIRTQ2 instrument developers and a statistician to conduct secondary analysis of this study's data, using multiple regression statistical analysis to further examine the contribution of each of the factors to IENs' professional satisfaction. The instrument developers organized the NIRTQ2 items according to the definitions of the concepts in the initial Gray and Johnson model. To estimate construct validity of the instrument, factor analyses need to be done to make sure the items in each subscale actually measure the designated concept for that subscale. The results of a factor analysis may indicate the need to revise the instrument and to refine the Ibitayo model.

There are few research based IEN transition programs; however, there is a need for transition programs to assist health care organizations in meeting patient safety and quality of care priorities. This is important since IENs cannot be expected to be fully integrated into the healthcare system immediately (Zizzo & Xu, 2009).

Conclusion

There are issues surrounding global nurse migration and the ethical recruitment of IENs. Therefore, studies on nurse migration and IEN relocation and transition experiences are essential. This study contributed to the understanding of the complex pull and push factors affecting nurse migration, and the IEN relocation and transition experiences in the US.

Results for this study indicated the majority of IENs across all WHO regions (by country of basic nursing education) experienced high professional satisfaction. Although this finding was

unexpected, it supports the conceptual framework.

This research study added to the knowledge base on nurse migration issues by providing a greater understanding of foreign nurses' relocation and transition experiences in the US, and the successful integration of foreign nurses from around the world into the healthcare workforce. Several IEN participants indicated in their open-ended comments that they desired transition programs both in their source countries and their destination countries. Future studies with IENs may result in the development and piloting of an IEN focused transition program.

In summary, data were collected from a convenience sample of IENs in the US to examine relationships in the conceptual map and answer the research questions. It is hoped that as IENS relocate to the US and transition into the healthcare environment, they will experience increased professional satisfaction. This chapter discussed the findings of this exploratory descriptive study on the relocation and transition experiences of IENs who had migrated to the US using an ethically sound and rigorous approach.

APPENDIX A

NURSE INTERNATIONAL RELOCATION AND TRANSITION QUESTIONNAIRE 2

(GRAY & JOHNSON, 2008)

Nurse International Relocation and Transition Questionnaire 2

On each question, mark the answer that indicates your level of agreement.
There is no right or wrong answer.

The first group of questions asks about the things related to nursing and health care that motivated you to migrate to the United States.

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1.	I was motivated to migrate from my country because my pay was too low.					
2.	I was motivated to leave my country due to a lack of available nursing jobs.					
3.	I was motivated to move from my country to have additional opportunities for nursing education.					
4.	I was motivated to leave my country because working conditions of nurses were not safe.					
5.	I was motivated to move from my country because there were not enough nurses and too much work to do.					
6.	I was motivated to move from my country because there were not enough medicines, supplies, and staff to provide effective patient care.					

Provide any additional information you like about work in your home country that motivated you to move.

This group of questions asks about situations in your family and home country that increased your motivation to move.

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
7.	I was motivated to leave my country to live in a country with greater political stability.					
8.	I was motivated to leave my country with my family so that they could have better education and job opportunities.					
9.	I was motivated to move to the United States because several family members had already moved here.					
10.	I was motivated to move to the United States so I could make money to send home.					

Provide any additional information you would like about your family situation or the social/political conditions in your home country that motivated you to move.

11. Before coming to the US, which of the following factors **most** influenced your decision to move to the US to work as a nurse? ***Please tick one answer only:***

Personal Reasons (To travel/ experience a different way of living) ❒

Professional Reasons (To gain professional development) ❒

Financial Reasons (To earn a living from the profession/ be able to send money home) ❒

Social Reasons (To join family/ friends overseas or to enable children to grow up in the US) ❒

Think about how you felt when you first arrived and about your first job in nursing in the US. Answer these questions about your first year in your first nursing job in the US.

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
12.	I experienced language barriers when communicating with patients and staff.					
13.	The nurses I worked with showed respect for my education and experience.					
14.	My job did not fully utilize my skills, experience, and education.					
15.	When I first arrived in the US, I was surprised by the differences in the American culture and my own culture					
16.	The orientation I received prepared me for working independently.					
17.	When I had questions, I knew who to ask or where to get the answer.					

Provide any additional information you like about your first nursing job in the US.

These questions are about your professional satisfaction in your current job.

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
18.	I currently have a job that matches my level of nursing skill.					
19.	I am satisfied with my current job.					
20.	My work as a nurse in the US is personally rewarding.					
21.	My salary is equal to that of my peers.					
22.	I feel I have adjusted to US nursing practice.					
23.	I have opportunities to increase my knowledge and grow as a nurse.					

Provide any additional information you would like about how you feel about yourself as a nurse in the US.

These questions are about your family, friends, and community.

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
24.	During my first year in the US, I had a group of nurses from my home country as friends.					
25.	I have many friends in my community who are from my home country.					
26.	My family is supportive of me being a nurse in the US.					
27.	I have made new friends from other countries.					
28.	I have found a place to worship and practice my religion (if applicable).					
29.	I enjoy living in the US.					
30.	I feel safe living in the US.					

Provide any additional information that you would like about your family, friends, and community.

These questions are about your current work environment.

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
31.	I can protect myself from injury in my current job.					
32.	The patient load in my current job is too heavy.					
33.	I have experienced racism in the workplace in the US.					
34.	Nurses are more respected in my home country than in the US.					
35.	The nurses I work with support each other and me.					
36.	My supervisor values my experience and education.					
37.	Physicians value my experience and education.					

Provide any additional information that you would like about your current work environment.

Please finish the survey by answering these questions about you and your experiences.

Personal Information

38. How old are you? ____

39. What is your sex? (Please tick the correct answer)
    Male ❒
    Female ❒

40. What is your nationality? ____

41. Do you have a husband, wife, or partner?

Yes ❒
No ❒

If you answered YES, is your husband/wife/partner currently: *Please tick the correct answer*

Living with you in the US ❒
Living in your home Country ❒
Other (Please specify) ❒

42. Do you have children under the age of 18 years? *Please tick the correct answer*

Yes ❒
No ❒

If you answered YES, are your children currently: *Please tick the correct answer*

Living with you in the US ❒
Living in your home Country ❒
Other (Please specify) ❒

43. What year did you immigrate to the US?

44. What year did you begin working as a nurse in the US?

45. In what country did you receive your basic nursing training?

46. In what year did you receive your basic nursing training?

47. Was your nursing training in English?

Yes ❒
No ❒
If you answered NO, in what language was your nursing education taught?

48. What is the highest degree you hold in nursing?

Diploma❒
Associates degree ❒
Bachelors ❒
Master's ❒
Doctor of Nursing Practice ❒
PhD ❒

49. If you have worked in other countries outside of your home country and other than the US, list them below.

Name of Country	
Name of Country	
Name of Country	
Name of Country	

50. Which of the following best describes your current employment situation?
Please tick one answer only.

Employed and working full time ❒
Employed and working part time ❒
Employed, currently on leave ❒
Self employed ❒
Unemployed ❒
Other (please specify) ❒

51. Which of the following most closely describes your job title for your main job?
Please tick one answer only.

Staff Nurse ❒
Health Care Assistant/Nursing Auxiliary ❒
Clinical Nurse Specialist/Nurse Practitioner/Midwife ❒
Nursing supervisor/ manager/ administrator ❒
Other (please specify) ❒

52. Which of the following most closely describes your work setting for your main job?

Acute care hospital ❒
Nursing home or skilled care center ❒
Home health agency ❒
Other health care organization ❒
Not working in health care ❒

53. Do you plan to stay in the US permanently?

Yes ❒
No ❒

54. If you answered NO on the previous question, when do you plan to leave the US?
Within the next year ❒
Within the next 1 to 2 years ❒
Within the next 3 to 5 years ❒
Sometime after five years ❒

Please use this space to add any additional information that you wish to share about your experiences, motivations and aspirations or any other information that you feel is relevant.

Thank you for completing this questionnaire.

This questionnaire was adapted with author permission from the surveys described in the following two articles.

Buchan, J., Jobanputra, R., Gough, P., & Hutt, R. (2006). Internationally recruited nurses in London: A survey of career paths and plans. *Human Resources for Health, 4(14).*

Nguyen, L., Ropers, S., Nderitu, E., Zuyderuin, A., Luboga, S., & Hagopian, A. (2008). Intent to migrate among nursing students in Uganda: Measures of the brain drain in the next generation of health professionals. *Human Resources for Health, 6 (5).*

Both are articles are available from http://www.human-resources-health.com

APPENDIX B

PERMISSION LETTER TO USE INSTRUMENT

Permission Letter to Use Instrument

Jennifer Gray, RN, PhD
Associate Dean, PhD in Nursing program
The University of Texas at Arlington
School of Nursing
Box 19407
Arlington, TX 76019-0407
jgray@uta.edu

Dr. Gray,

I am a PhD candidate in the School of Nursing at the University of Texas in Arlington. I am interested in using the conceptual map and instrument developed by you and Ms. Johnson in 2008 in my dissertation research on the transition experience of nurses who migrated to the United States. I propose expanding the description of your questionnaire by studying internationally educated nurses from around the world, instead of focusing on African educated nurses.

I am requesting permission to use your conceptual map, “Conceptual Map: Relocation and Transition of Internationally Educated Nurses; Gray and Johnson 2008” and questionnaire, “Nurse International Relocation and Transition Questionnaire 2; Gray & Johnson 2008” for my dissertation.

Best regards,
Kristina Ibitayo

Kristina Ibitayo, RN, MSN, PhD Candidate
504 E. Melton St.
Longview, TX 75602
Kristina.ibitayo@mavs.uta.edu

APPENDIX C

PERMISSION LETTER TO USE GRAY AND JOHNSON'S

CONCEPTUAL MAP AND INSTRUMENT

Permission Letter to Use Gray and Johnson's Conceptual Map and Instrument

THE UNIVERSITY
OF TEXAS
AT ARLINGTON

School of Nursing

Box 19407
411 S. Nedderman Dr.
Arlington, Texas
76019-0407
T 817-272-2776
F 817-272-5006
www.uta.edu/nursing

October 5, 2009

Kristina Ibitayo, RN, MSN, PhD Candidate
504 E. Melton St.
Longview, TX 75602

Dear Kristina,

Thank you for requesting permission to use the conceptual map, "Conceptual Map: Relocation and Transition of Internationally Educated Nurses; Gray and Johnson 2008" and the questionnaire, "Nurse International Relocation and Transition Questionnaire 2; Gray & Johnson 2008," for your dissertation. I understand you plan to expand the description of the questionnaire by studying internationally educated nurses from around the world.

You do have permission to use both the map and the instrument in your dissertation research.

Sincerely,

Jennifer Gray, RN, PhD

Jennifer Gray, RN, PhD
Associate Dean, PhD in Nursing Program
George W. and Hazel M. Jay Professor
School of Nursing
Phone: (817) 272-5295
jgray@uta.edu

JG/vld

APPENDIX D

STUDY INFORMATION SCRIPT FOR EMAILS, ORGANIZATIONAL WEBPAGES, AND SURVEYMONKEY

Study Information Script for emails, Organizational WebPages, and SurveyMonkey

Factors Affecting the Relocation and Transition of Internationally Educated Nurses Migrating to the United States of America

You are being asked to participate in a research study. Participation is voluntary. Please direct any questions to Kristina Ibitayo, RN, MSN, nursing student, at 903-445-3700. This study has been approved by the UTA IRB Protocol:_(insert protocol number)___.

The subject of the relocation and transition experiences of internationally educated nurses in the United States has received little research overall, especially across different cultural groups. This study will increase understanding of foreign nurses' relocation and transition experiences in the US, facilitating successful integration of nurses migrating to the US for employment in the healthcare workforce.

This web-based questionnaire should take approximately 30 minutes to complete. This web-based questionnaire will have questions regarding nursing education and demographic information. Both open ended and closed questions will be asked, as well as questions on a 5-point scale from Strongly Disagree to Strongly Agree. The questions are regarding: conditions in the source country that motivate a nurse to migrate, conditions in the destination country that motivate a nurse to migrate, motivation to migrate reasons, transition conditions, family/social environment, work environment, and professional satisfaction.

All data will be collected anonymously. No disclosure of your responses outside could reasonably place you at risk of criminal or civil liability or be damaging to your financial standing, employability or reputation. All responses will remain confidential. Everyone in this study will receive the same survey. You will not benefit directly from this research; however, there is a benefit to society, as this study will further expand the knowledge base on the relocation and transition experience of IENs in the US.

You are asked to provide personal information and a brief amount of your time. All information provided will be maintained on a secure server. You may choose not to answer any questions or quit at any time at no consequence. You have the right to decline participation in this research as participation is voluntary.

In the unlikely event it becomes necessary for the Institutional Review Board to review your research records, then the University of Texas at Arlington will protect the confidentiality of those records to the extent permitted by law. The data resulting from your participation may be made available to other researchers in the future for research purposes not detailed within this consent form. The data will contain no identifying information that could associate you with it, or with your participation in the study.

Questions about this research or your rights should be directed to Kristina Ibitayo at 903-445-3700. By continuing with this survey, you voluntarily give your consent to participate in this research study.

(insert electronic link to SurveyMonkey for emails, web pages, and flyers here)_____

APPENDIX E

LISTING OF LARGEST HEALTH SYSTEMS AND HOSPITALS IN THE DALLAS/FORT WORTH METROPOLIS, NURSING ASSOCIATIONS, AND MIGRATION EXPERTS

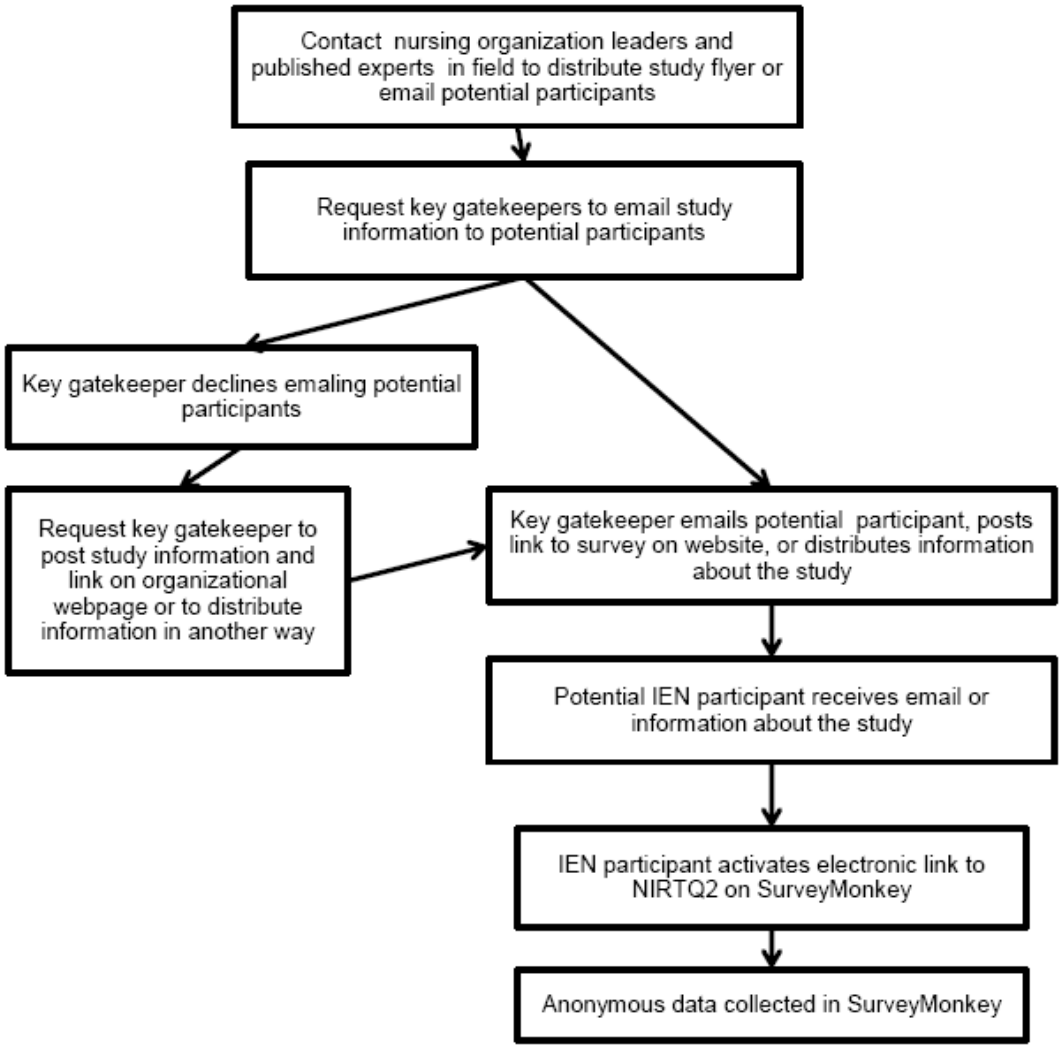
Listing of Largest Health Systems and Hospitals in the Dallas/Fort Worth Metropolis, Nursing Associations, and Migration Experts

Health Systems and Hospitals in Dallas/Fort Worth Metropolis	Contacted	Recruited	Received IRB approval
UT Southwestern Medical Center/ Parkland Health and Hospital System	x	x	x
Baylor Health Care System	x	x	x
Methodist Dallas Medical Center	x		x
Cook Children's Medical Center Fort Worth	x	x	
Medical City Dallas Hospital	x	x	x
Texas Health Resources	x	x	x
John Peter Smith Health Network	x		
Nursing Associations			
National Coalition of Ethnic Minority Nurse Associations (NCEMNA)	x		
Philippine Nurses Association of America, Inc. (PNAA)	x	x	
National Black Nurses Association, Inc. (NBNA)	x		
Asian American/Pacific Islander Nurses Association, Inc. (AAPINA)	x	x	
National Association of Hispanic Nurses, Inc. (NAHN)	x	x	
Canadian Nurses Association (CAN)	x		
National Association of Indian Nurses of America (NAINA)	x	x	
Nigerian Nurses Association of USA, Inc	x	x	
New York Korean Nurses Association	x		
National American Arab Nurses Association (NAANA)	x	x	
Texas Nurses Association – District 3 (Tarrant, Fort Worth area)	x	x	
Texas Nurses Association – District 4 (Dallas area)	x		
Texas Nurses Association – District 25	x	x	
Migration Experts in the US			
Xu, Yu	x	x	
Brush, Barbara L.	x		
DiCicco-Bloom, Barbara	x		
Jezewski, Mary Ann	x		

APPENDIX F

FLOW CHART FOR DATA COLLECTION PROCESS

Flow Chart for Data Collection Process



APPENDIX G

INSTITUTIONAL REVIEW BOARD AND RESEARCH COMMITEE APPOVAL LETTERS

THE UNIVERSITY
OF TEXAS
AT ARLINGTON

Office of Research Administration
Box 19188
202 E. Border St., Suite 214
Arlington, Texas
76019-0188

T 817.272.3723
F 817.272.1111

http://www.uta.edu/research
Expertise at UT Arlington
http://www.uta.edu/expertise

Be A Maverick.™

January 20, 2010

Kristina Ibitayo
Dr. Jennifer Gray
Nursing
Box 19407

Protocol Title: *Factors Affecting the Relocation and Transition of Internationally Educated Nurses Migrating to the United States of America*

RE: Exempt Approval Letter

IRB No.: **2010-0212e**

The UT Arlington Institutional Review Board (UTA IRB) Chair (or designee) has reviewed the above-referenced study and found that it qualified as exempt from coverage under the federal guidelines for the protection of human subjects as referenced at Title 45 Part 46.101(b)(2). You are therefore authorized to begin the research as of January 14, 2010.

Please be advised that as the principal investigator, you are required to report local adverse (unanticipated) events to this office within 24 hours. In addition, pursuant to Title 45 CFR 46.103(b)(4)(iii), investigators are required to, "promptly report to the IRB ***any*** proposed changes in the research activity, and to ensure that such changes in approved research, during the period for which IRB approval has already been given, are **not initiated without IRB review and approval** except when necessary to eliminate apparent immediate hazards to the subject."

All investigators and key personnel identified in the protocol must have documented *CITI Training* on file with this office. The UT Arlington Office of Research Administration Regulatory Services appreciates your continuing commitment to the protection of human research subjects. Should you have questions or require further assistance, please contact Robin Dickey by calling (817) 272-9329.

Sincerely,

Patricia Turpin

Digitally signed by Patricia Turpin
DN: o=The University of Texas System, ou=The University of Texas at Arlington CA, ou=www.verisign.com/repository/CPS Incorp. by Ref. LIABILTD(c)99, cn=Patricia Turpin, email=pturpin@uta.edu
Date: 2010.01.26 22:02:48 -06'00'

Patricia G. Turpin, PhD, RN, NEA-BC
Associate Clinical Professor
UT Arlington IRB Chair

THE UNIVERSITY
OF TEXAS
AT ARLINGTON

Office of Research
Administration
Box 19188
202 E. Border St., Suite 214
Arlington, Texas
76019-0188

T 817.272.3723
F 817.272.1111

http://www.uta.edu/research
Expertise at UT Arlington
http://www.uta.edu/expertise

BeA Maverick

April 12, 2010

Kristina Ibitayo
Dr. Jennifer Gray
Nursing
The University of Texas at Arlington
Box 19407

IRB No.: **2010-0212**

RE: Minor Modification Approval Letter

Title: *Factors Affecting the Relocation and Transition of Internationally Educated Nurses Migrating to the United States of America*

The UT Arlington Institutional Review Board (UTA IRB) Chair (or designee) reviewed and approved the modification(s) to this protocol on **April 6, 2010** in accordance with Title 45 CFR 46. 110(b)(2). Therefore, you are authorized to conduct your research. The modification(s), indicated below, was deemed minor and appropriate for expedited review.

- **THR will have a unique study information script and electronic link to the survey to be combined for analysis**

Pursuant to Title 45 CFR 46.103(b)(4)(iii), investigators are required to, "promptly report to the IRB ***any*** proposed changes in the research activity, and ensure that such changes in approved research, during the period for which IRB approval has already been given, **are not initiated without IRB review and approval** except when necessary to eliminate apparent immediate hazards to the subject."

The modification approval will additionally be presented to the convened board on May 11, 2010 for full IRB acknowledgment [45 CFR 46.110(c)]. All investigators and key personnel identified in the protocol must have documented *Human Subjects Training* or *CITI* Training on file with the UT Arlington Office of Research Administration Regulatory Services.

The UT Arlington Office of Research Administration appreciates your continuing commitment to the protection of human research subjects. Should you have questions or require further assistance, please contact Robin Dickey by calling (817) 272-9329.

Sincerely,

Patricia Turpin

Digitally signed by Patricia Turpin
DN: o=The University of Texas System, ou=The University of Texas at Arlington CA, ou=www.verisign.com/repository/CPS Incorp. by Ref.LIAB.LTD(c)99, cn=Patricia Turpin, email=pturpin@uta.edu
Date: 2010.04.20 14:58:46 -05'00'

Patricia Turpin, Ph.D., RN, NEA, BC
Clinical Associate Professor
UT Arlington IRB Chair

BAYLOR
Research Institute
Affiliated with Baylor Health Care System

3310 Live Oak
Suite 501
Dallas, Texas 75204
214.820.2687
214.820.4952 Fax
BaylorHealth.com

APPROVAL

April 29, 2010

Marygrace Leveille, PhD, RN, ACNP-BC
504 E. Melton St.
Longview, Tx 75602
Dallas, Tx 75602

Re: Factors Affecting the Relocation and Transition of Internationally Educated Nurses Migrating to the United States of America
Project#: 010-110 Protocol#: N/A Protocol Dt:

The following items received expedited review:

- Education Report (04/22/2010)
- Exemption from IRB Review - IRB008 (04/19/2010)
- Application and Project Summary - IRB001 (04/22/2010)
- Review Scientific/Scholarly Validity - IRB018 (04/19/2010)
- Consent Cover Letter/Study Information Script

Expedited Approval was granted 04/29/2010 for a period not to exceed 12 months and will expire on 04/28/2011. Your Continuing Review is scheduled for 03/08/2011. This Expedited review will be reported to the fully convened Institutional Review Board ~ Red on 05/11/2010.

On behalf of the Institutional Review Board, I have reviewed the above referenced research project in accordance with 45 CFR 46 & 164 and 21 CFR 50 & 56. This review was conducted in accordance with the expedited review process as outlined in 45 CFR 46.110(b). Based on the information presented, I have determined that the study meets the criteria specified below.

45 CFR 46.110(b)(1)(7):
(1) some or all of the research appearing on the category list and found by the reviewer(s) to involve no more than minimal risk:
(7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior), or research employing survey, interview, oral history, focus groups, program evaluation, human factors evaluation, or quality assurance methodologies. (NOTE: some research in this category may be

Based on this review, the above referenced research project is approved for implementation.

This study was determined to meet the following criteria for waiver of informed consent.

45 CFR 46.116(d) Waiver or Alteration of Informed Consent Requirements

DHHS and FDA regulations require you to submit periodic and terminal progress reports to Baylor's Institutional Review Board and to receive at least annual approval of your activity from this Committee.

Federal regulations and institutional policies require that the IRB review any and all changes in your research activity. This includes amendments, revisions, administrative changes, advertisements, or ANY other change in the information as presented at initial review. In other words, should your project change, another review by the Board is required.

Failure to comply with any of the above requirements, federal regulations, or institutional policy may result in severe sanctions being placed on the Medical Center and on you as the Principal Investigator. These sanctions could result in your research being permanently terminated for non-compliance.

Receipt of approval does not convey institutional authority to gain additional patient information. It is your responsibility as Principal Investigator to abide by institutional and/or departmental policies regarding confidentiality, access, and release of patient data.

Sincerely,

Lawrence R. Schiller, MD, Chair
Institutional Review Board ~ Red

Texas Health Resources

CERTIFICATION OF EXEMPTION

Date: May 7, 2010
From: Office of Research Compliance, THR

To: Kristina Ibitayo, RN, MSN
CC: Patricia Turpin, RN, PhD, CNAA, BC
Re: Study # Pro00001976
Factors Affecting the Relocation and Transition of Internationally Educated Nurses Migrating to the United States of America

An Exempt Review was conducted for this study under the provisions of 45 CFR 46.101 (b) category (2). The THR IRB Chair, or designee, has approved you to conduct research involving human subjects. Please review the following information summarizing the approval granted:

The study qualifies for a waiver of the requirement to obtain and document informed consent under the provisons of 45 CFR 46.116 (d) (1-4); and 45 CFR 46.117 (c) (2).

This study qualifies for a waiver of authorization for the use of protected health information (PHI) under 45 CFR 164.512 (i) (1) (i).

Study No: Pro00001976

Study Title: Factors Affecting the Relocation and Transition of Internationally Educated Nurses Migrating to the United States of America

Approval Date: May 7, 2010

Approved Via; Exempt Review

Risk Level: No more than minimal risk

Principal Investigator: Kristina Ibitayo, RN, MSN

Co-Investigators; Patricia Turpin, RN, PhD, CNAA, BC

Other Study Staff: None

Funding Information: None

To find the documents stamped with IRB approval for use in this research project, please follow the link below and click on the Documents tab (NOTE: If not on this list, any documents to be used in the research must be reviewed and approved by the IRB before use in the research):

If your study involves waiving the HIPAA/privacy authorization, please print out the approved study application and present it along with your approval letter when requesting access to protected health information. The federal regulations do not require exempted studies to be re-reviewed within 365 days of the last IRB review; However, please note that if the Principal Investigator (PI) wishes to modify the study in any way, the IRB must review and approve the modification before the PI may implement the change. Additionally, if any unanticipated problems occur during the research study, this information must also be reported to the IRB in a timely fashion. Otherwise, the PI may continue the research study until all research related activities have been completed, i.e., recruitment, data analysis, etc. Please notify the IRB when the study qualifies for closure.

Failure to submit the above reports may result in severe sanctions being placed on Texas Health Resources. All research-related records and documentation may be inspected by the IRB for the purposes of ensuring compliance with THR policies and procedures and federal regulations governing the protection of human subjects. The IRB has the right and authority to suspend or terminate its approval if THR and federal requirements are not strictly adhered to by all study personnel.
This submission was approved via electronic signature by the THR IRB Chair or designee.

If you have any questions or concerns, please contact the IRB Office at (682) 682-6746 or irb@texashealth.org. The IRB thanks you for your continued commitment to the protection of human subjects in THR research.

Parkland

April 21, 2010

Kristina Ibitayo, RN, MSN, PhD
PhD in Nursing Student
The University of Texas at Arlington
202 E. Border St., Suite 214
Arlington, TX 76019-0188

RE: IRB 042010-041

Dear Ms. Ibitayo,

Your research site request to Parkland Health and Hospital System (PHHS) for the study "Factors Affecting the Relocation and Transition of Internationally Educated Nurses Migrating to the United States of America" has been approved. This approval is contingent upon compliance with the University of Texas Southwestern Medical Center Institutional Review Board (IRB) rules and regulations and PHHS institutional policies. The research expense identified for this study is the origination fee. A waiver for the fee has been approved with minimal use of resources.

The IRB has waived consent for this study. At the time of annual IRB continuing review (CR) or modification of the study, please send a copy of the IRB forms to PHHS Clinical Research Office (CRO) to report study activity.

All members of the research team that will be interacting with patients on the PHHS campus must have privileges to practice at Parkland and must wear current Parkland ID badges. This includes research nurses and assistants. Contact the CRO for information on the process for obtaining research privileges. Please do not hesitate to contact me if I can be of further assistance with this study. I can be reached at (214) 590-8966 or via e-mail at vhart@parknet.pmh.org. Good luck with your study.

Sincerely,

Valerie Hart, RN, PhD, MSN,
Director, Clinical Research Office
Parkland Health & Hospital System
Mailcode: 7750 Fax: 214.590.4595

cc: Miriam Sibley

Clinical Research Department
5201 Harry Hines Blvd | MC 7750 | Dallas, Texas 75235
214-590-1170 | fax 214-590-4595
researchdepartmentparkland@parknet.pmh.org

Parkland Health & Hospital System

Site Approval Request for Research and/or Data Collection
Review and Recommendations

Date sent	3/26/2010	**IRACC Approval Date**	4/20/2010
Principle Investigator	Kristina Ibitayo, RN, MSN, PhD (c)	**IRB #:**	042010-041
Funding Source	☐DHHS ☐Industry ☐Internal/UTSW ☒Other (UTA) ☐PHHS		
Title of Study	..Relocation Transition. Internationally Educated Nurses..USA		

Reviewed by:

☐Medicine Services	☐Surgical Services
☐Pathology	☐WISH
☐Medical Records	☐ED
☐COPC	☐Investigational Drug Services (IDS)
☐Radiology	☐CV Lab
☐Nursing Education	☒CRDM
☐Decision Support	☒Other Nursing Administration

Research Resources

☒Review	☐Labs	☐IDS		☐ECG	☐Medical Records
☐CXR	☐MRI	☐CT	☐ PET	☐MROC	☐Image Copies
☐Data Extraction	☐OPC Visit	☐Inpatient Stay		☐Staff	☐Other

Request for Cost Negotiation	☒NO	☐YES
Request for Waiver of admin fee	☐NO	☒YES

Purpose: Dissertation UTA PhD Nursing Candidate. Purpose is to describe motivations for and influences on internationally educated nurses in the US healthcare system to migrate to the US and to describe the differences in these characteristics and factors across source countries by world region.

Study Design: The PI will request that Nursing Administration internally identify the internationally educated nurses on staff at PHHS. She will request that those nurses be contacted in a list serve e-mail informing them of the study. The e-mail will include an electronic flier (Study Information Script) that will describe the study and contain the electronic link to an online **Nurse International Relocation and Transition Questionnaire** which is the basis for study data collection. The questionnaire will take 30 minutes to complete and will have no questions asking for identifying information. Activating the electronic link to the questionnaire will infer consent. If distributing the study flier electronically is not feasible, the PI will request that Nursing distribute a hard copy of it. Participation in the study ends when the questionnaire is completed and submitted on the website.

Admin services:

- Study review and analysis
- Identification, notification and recruitment of potential study candidates
- Potential distribution of hard copy study fliers.

Clinical Support Services activities: na

Clinical Activities: na

Research Account Charges: Origination fee – waiver appropriate; student dissertation, recruitment only

Recommendations

☒Approval	☐Deferral for modifications	☐Disapprove
☒Fee Waiver	☐SAR Required	☐ No SAR

Reviewer Signature	**Date** 4/20/2010
CMO, Dr Jay Shannon	**Date** 04/23/10

THE UNIVERSITY OF TEXAS
SOUTHWESTERN MEDICAL CENTER
AT DALLAS

Institutional Review Board

TO: Kristina Ibitayo, RN, MSN
c/o Jennifer Gray, RN, PhD
UT Arlington
411 S Nedderman Dr.
Mail Box: 19407
Arlington, TX 76019

FROM: David Karp, MD, PhD
Institutional Review Board 1 Chairman
IRB - 8843

DATE: April 26, 2010

RE: **Exempt From IRB Review**
IRB Number: 042010-041
Title: Factors Affecting the Relocation and Transition of Internationally Educated Nurses migrating to the United Stated of America

The Institutional Review Board determined on April 26, 2010 that this research is exempt in accordance with the Code of Federal Regulations, Title 45, Part 46, Sub-part 101(b)(1) as revised November 13, 2001. Further review of this study by the IRB is not required unless the protocol changes in the use of human subjects. In that case, the study must be resubmitted immediately to the Board. Please inform the IRB when this research is completed.

If you have any questions related to this research or the IRB, you may telephone Annamaria Salvador at 214.648.3060.

Enc.: Memorandum Dated March 1, 2010, Study Information Script, Nurse International Relocation and Transition Questionnaire 2 and UT Arlington IRB Approval Letter Dated January 20, 2010

DK/as

Southwestern Medical School 5323 Harry Hines Boulevard / Dallas, Texas 75390-8843 / (214)648-3060

North Texas Institutional Review Board at Medical City
7777 Forest Lane, C-740 Dallas, TX 75230 972/566-6060 Phone 972/566-4715 Fax

March 2, 2010

Kristina Ibitayo, RN
UT at Arlington
7777 Forest Lane, C-740
Dallas, TX 75230

Attn: Nancy Nardelli, RN, CRC
Study Coordinator

Re: #10.014, Waiver of Coverage, "Factors Affecting the Relocation and Transition of Internationally Educated Nurse Migrating to the United States of America"

Dear Ibitayo:

In accordance with Federal Register guidelines and our Institutional Review policies, the Institutional Review Board agreed to waive coverage to the UT Arlington Institutional Review Board for the above referenced protocol. Also, you are required to submit a final report to the committee upon completion

If you need further assistance, please contact Yvette King at (972) 566-6060.

Sincerely,

Yvette King, CCRP
Supervisor, Institutional Review Board
Department of Clinical Research

rnk 10014wav

Subject	**Re: Request to conduct a study with PNAA members (with attached documents per PNAA guidelines)**
From	Leo Jurado
To	Ibitayo, Kristina S; kabriamyago@gmail.com
Sent	Tuesday, April 13, 2010 8:11 PM

Hi Kristina,
I am glad we were able to connect. Feel free to send the link and I will forward it to the membership.
Leo Jurado
------Original Message------
From: Ibitayo, Kristina S
To: kabriamyago@gmail.com
Cc: pnaapresleojurado@yahoo.com
Subject: RE: Request to conduct a study with PNAA members (with attacheddocuments per PNAA guidelines)
Sent: Apr 13, 2010 2:56 PM

Dr. Abriam-Yago,

Hello. Has a decision been made regarding conducting my study with PNAA members? Thank you.

Sincerely,
Kristina

Kristina Ibitayo, RN, MSN, PhD(c)
PhD in nursing student
The University of Texas at Arlington
Telephone 903-445-3700
kristina.ibitayo@mavs.uta.edu <mailto:kibitayo@uta.edu>

From: Ibitayo, Kristina S
Sent: Wednesday, March 31, 2010 10:25 PM
To: 'kabriamyago@gmail.com'
Cc: 'pnaapresleojurado@yahoo.com'
Subject: RE: Request to conduct a study with PNAA members (with attached documents per PNAA guidelines)

Dr. Abriam-Yago,

Hello. I am following up on my request to conduct a study with PNAA members. Do you require anything additional for the PNAA approval process?

Best regards,
Kristina

Kristina Ibitayo, RN, MSN, PhD(c)

REFERENCES

Adams, E., & Kennedy, A. (2006). Positive practice environments: Key considerations for the development of a framework to support the integration of international nurses. Geneva: International Centre on Nurse Migration.

Aiken, L. H. (2007). US nurse labor market dynamics are key to global nurse sufficiency. *Health Services Research, 42*(3 Part 2), 1299-1320.

Aiken, L. H., Buchan, J., Sochalski, J., Nichols, B., & Powell, M. (2004). Trends in international nurse migration. *Health Affairs (Project Hope), 23*(3), 69-77.

Aiken, L. H., Clarke, S. P., Sloane, D. M., Sochalski, J. A., Busse, R., Clarke, H., et al. (2001). Nurses' reports on hospital care in five countries. *Health Affairs, 20*(3), 43.

Bieski, T. (2007). Foreign-educated nurses: An overview of migration and credentialing issues. *Nursing Economic$, 25*(1), 20.

Blythe, J., & Baumann, A. (2009). Internationally educated nurses: Profiling workforce diversity. *International Nursing Review, 56*(2), 191-197.

Blythe, J., Baumann, A., Rhéaume, A., & McIntosh, K. (2009). Nurse migration to Canada: Pathways and pitfalls of workforce integration. *Journal of Transcultural Nursing, 20*(2), 202-210.

Brush, B. L. (1994). *Sending for nurses: foreign nurse immigration to American hospitals, 1945-1980.* Unpublished PH.D., University of Pennsylvania.

Brush, B. L. (2008). Global nurse migration today. *Journal of Nursing Scholarship, 40*(1), 20-25.

Brush, B. L., Sochalski, J., & Berger, A. M. (2004). Imported care: Recruiting foreign nurses to U.S. health care facilities: Importing nurses is likely to remain a viable and lucrative strategy for plugging holes in the U.S. nurse workforce. *Health Affairs, 23*(3), 78-87.

Buchan, J. (2006). The impact of global nursing migration on health services delivery. *Policy, Politics & Nursing Practice, 7*(3 Suppl), 16S-25s.

Buchan, J. (2007). International recruitment of nurses: Policy and practice in the United Kingdom. *Health Services Research, 42*(3 Pt 2), 1321-1335.

Buchan, J., & Aiken, L. (2008). Solving nursing shortages: A common priority. *Journal Of Clinical Nursing, 17*(24), 3262-3268.

Buchan, J., Jobanputra, R., Gough, P., & Hutt, R. (2006). Internationally recruited nurses in London: A survey of career paths and plans. *Human Resources for Health, 4*(14). Retrieved from http://www.human-resources-health.com

Buchan, J., McPake, B., Mensah, K., & Rae, G. (2009). Does a code make a difference - Assessing the English code of practice on international recruitment. *Human Resources For Health, 7*, 33-33.

Buchan, J., & Sochalski, J. (2004). The migration of nurses: Trends and policies. *Bulletin of the World Health Organization, 82*(8), 587-594.

Buerhaus, P. I., Auerbach, D., & Staiger, D. (2009). The recent surge in nurse employment: Causes and implications. *Health Affairs, 28*(4), w657-w668.

Buerhaus, P. I., Auerbach, D. I., & Staiger, D. O. (2007). Recent trends in the registered nurse labor market in the U.S.: Short-run swings on top of long-term trends. *Nursing Economic$, 25*(2), 59-67.

Carmines, E. G., & Zeller, R. A. (1979). *Reliability and validity assessment* (R. A. Zeller, Trans.). Beverly Hills, CA: Sage Publications.

Charest, C. A. (1992). *Analysis of a transcultural innovation: The socialization of Filipino graduate nurses into an acute health care organization in the United States.* Unpublished ED.D., University of Massachusetts.

Choy, C. C. (1998). *The export of womanpower: A transnational history of Filipino nurse migration to the United States.* Unpublished PH.D., University of California, Los Angeles.

Commission on Graduates of Foreign Nursing Schools. (n.d.-a). *VisaScreen* Progam. Retrieved September 24, 2009, from http://www.cgfns.org/sections/programs/vs/

Commission on Graduates of Foreign Nursing Schools. (n.d.-b). VisaScreen VisaScreen® Frequently Asked Questions. Retrieved November 30, 2009, 2009, from http://www.cgfns.org/sections/tools/faq/vsfaq.shtml

Connell, J., Zurn, P., Stilwell, B., Awases, M., & Braichet, J.-M. (2007). Sub-Saharan Africa: Beyond the health worker migration crisis? *Social Science & Medicine, 64*(9), 1876-1891.

Crawford, L. (2004). Nurses educated in other countries: Coming to America. *JONA's Healthcare Law, Ethics & Regulation, 6*(3), 66-68.

DiCicco-Bloom, B. (2004). The racial and gendered experiences of immigrant nurses from Kerala, India. *Journal of Transcultural Nursing, 15*(1), 26-33.

Dovlo, D. (2007). Migration of nurses from sub-Saharan Africa: A review of issues and challenges. *Health Services Research, 42*(3 Part 2), 1373-1388.

Dovlo, D., & Martineau, T. (2004). A review of the migration of Africa's health professionals: Paper commissioned by the Joint Learning Initiative on Human Resources for Health. Africa Working Group.

Gray, J., & Johnson, L. (2008). Initial psychometric evaluation of the nurse international relocation and transition questionnaire (NIRTQ), *Unpublished proposal*.

Hall, L. M., Pink, G. H., Jones, C. B., Leatt, P., Gates, M., & Peterson, J. (2009). Is the grass any greener? Canada to United States of America nurse migration. *International Nursing Review, 56*(2), 198-205.

Haour-Knipe, M., & Davies, A. (2008). Return migration of nurses. *Journal*. Retrieved from http://www.intlnursemigration.org

Hayne, A. N., Gerhardt, C., & Davis, J. (2009). Filipino nurses in the United States: Recruitment, retention, occupational stress, and job satisfaction. *Journal of Transcultural Nursing, 20*(3), 313-322.

Horevitz, E. (2009). Understanding the Anthropology of Immigration and Migration. *Journal of Human Behavior in the Social Environment, 19*(6), 745-758.

Jeans, M. E., Hadley, F., Green, J., & Da Prat, C. (2005). *Navigating to become a nurse in Canada: Assessment of international nurse applicants*. Retrieved August 27, 2009. from http://cna-aiic.ca/CNA/documents/pdf/publications/IEN_Technical_Report_e.pdf

Jerdee, A. L. (2004). Recruiting foreign registered nurses: Charting the course. *Journal of Nursing Law, 9*(3), 19-28.

Kingma, M. (2006). *Nurses on the move: Migration and the global health care economy*. Ithaca, NY: Cornell University Press.

Kingma, M. (2007). Nurses on the move: A global overview. *Health Services Research, 42*(3 Pt 2), 1281-1298.

Kingma, M. (2008). Nurse migration and the global health care economy. *Policy, Politics & Nursing Practice, 9*(4), 328-333.

Kline, D. S. (2003). Push and pull factors in international nurse migration. *Journal Of Nursing Scholarship, 35*(2), 107-111.

Labonté, R., Packer, C., & Klassen, N. (2006). Managing health professional migration from sub-Saharan Africa to Canada: a stakeholder inquiry into policy options. *Human Resources for Health, 4*, 22-22.

Lee, J. J. (2007). *Nurse migration to the United States: Foreign-educated nurses job participation.* Unpublished PH.D., University of Illinois at Chicago, Health Sciences Center.

Lin, L. (2009). A synthesis of the literature on Asian nurses' work experiences in the United States. *Research & Theory for Nursing Practice, 23*(3), 230-245.

Liou, S., & Cheng, C. (2009). Using the practice environment scale of the nursing work index on Asian nurses. *Nursing Research, 58*(3), 218-225.

Little, L. (2007). Nurse migration: A Canadian case study. *Health Services Research, 42*(3 Part 2), 1336-1353.

Lopez, N. (1990). *The acculturation of selected Filipino nurses to nursing practice in the United States.* Unpublished PH.D., University of Pennsylvania.

Lynn, M. R., & Redman, R. W. (2005). Faces of the nursing shortage: Influences on staff nurses' intentions to leave their positions or nursing. *Journal of Nursing Administration, 35*(5), 264-270.

McCloskey, J. C., & Aquino, N. S. (1988). Job effectiveness of foreign nurse graduates. *Western Journal of Nursing Research, 10*(4), 477-491.

McElmurry, B. J., Solheim, K., Kishi, R., Coffia, M. A., Woith, W., & Janepanish, P. (2006). Ethical concerns in nurse migration. *Journal Of Professional Nursing, 22*(4), 226-235.

Mejia, A. (2004). Migration of physicians and nurses: A world wide picture. *Bulletin of the World Health Organization, 82*(8), 626-630.

Muncada, F. L. (1995). *The labor migration of Philippine nurses to the United States.* Unpublished PH.D., Catholic University of America.

Nguyen, L., Ropers, S., Nderitu, E., Zuyderduin, A., Luboga, S., & Hagopian, A. (2008). Intent to migrate among nursing students in Uganda: Measures of the brain drain in the next generation of health professionals. *Human Resources For Health, 6*, 1-11.

Nichols, B. L., Davis, C. R., & CGFNS International. (2009). *The official guide for foreign-educated Nurses: What you need to know about nursing and health care in the United States*. New York: Springer Publishing Company.

Nunnally, J. (1978). *Psychometric theory*. New York: McGraw-Hill.

Polit, D., Beck, C., & Owen, V. (2007). Is the CVI and acceptable indicator of content validity? Appraisal and recommendation. *Research in Nursing & Health, 30*, 459-467.

Polsky, D., Ross, S. J., Brush, B. L., & Sochalski, J. (2007). Trends in characteristics and country of origin among foreign-trained nurses in the United States, 1990 and 2000. *American Journal of Public Health, 97*(5), 895-899.

Ross, S. J., Polsky, D., & Sochalski, J. (2005). Nursing shortages and international nurse migration. *International Nursing Review, 52*(4), 253-262.

Ryan, L. (2007). Migrant women, social networks and motherhood: The experiences of Irish nurses in Britain. *Sociology, 41*(2), 295-312.

Sherman, R. O., & Eggenberger, T. (2008). Transitioning internationally recruited nurses into clinical settings. *Journal of Continuing Education in Nursing, 39*(12), 535.

Sheskin, D. J. (2004). *Handbook of parametric and nonparametric statistical procedures* (3rd ed.). Boca Raton, FL: Chapman & Hall/CRC

Sparacio, D. C. (2005). Winged migration: International nurse recruitment -- friend or foe to the nursing crisis? *Journal of Nursing Law, 10*(2), 97-114.

Stilwell, B., Diallo, K., Zurn, P., Dal Poz, M., Adams, O., & Buchan, J. (2003). Developing evidence-based ethical policies on the migration of health workers: conceptual and practical challenges. *Journal, 1* (8), 1-13. Retrieved from http://www.human-resources-health.com/content/1/1/8

Stilwell, B., Diallo, K., Zurn, P., Vujicic, M., Adams, O., & Poz, M. D. (2004). Migration of health-care workers from developing countries: Strategic approaches to its management. *Bulletin of the World Health Organization, 82*(8), 595-600.

The National Council of State Boards of Nursing. (n.d.). NCLEX examinations. Retrieved November 30, 2009, from https://www.ncsbn.org/nclex.htm

U.S. Bureau of Labor Statistics. (2009). *Occupational Outlook Handbook, 2008-09 Edition*. Retrieved September 24, 2009. from http://www.bls.gov/oco/.

U.S. Bureau of Labor Statistics. (2009). *Foreign-born workers: Labor force characteristics in 2008*. Retrieved September 24, 2009. from http://www.bls.gov.

U.S. Citizenship and Immigration Services. (n.d.-a). Other ways to get a green card. Retrieved November 30, 2009, from http://www.uscis.gov/portal/site/uscis

U.S. Citizenship and Immigration Services. (n.d.-b). Temporary (non-immigrant) workers. Retrieved November 30, 2009, from http://www.uscis.gov/portal/site/uscis

Vujicic, M., Zurn, P., Diallo, K., Adams, O., & Dal Poz, M. (2004). The role of wages in the migration of health care professionals from developing countries. *Human Resources for Health 2*(3), 1-14.

Weber, R. P. (2006). *Basic content analysis* (2nd ed.). Newbury Park, CA: Sage Publications.

World Bank. (2009). Data and statistics: Country classification. Retrieved February 15, 2009, from http://go.worldbank.org/K2CKM78CC0

World Health Organization. (2010, May 21). WHO global code of practice on the international recruitment of health personnel. Retrieved July 30, 2010, from http://www.who.int/workforcealliance/media/news/2010/codestatementwha/en/index.html

Xu, Y. (2007). Strangers in strange lands: A metasynthesis of lived experiences of immigrant Asian nurses working in Western countries. *Advances in Nursing Science, 30*(3), 246-265.

Xu, Y., & Kwak, C. (2005). Characteristics of internationally educated nurses in the United States. *Nursing Economic$, 23*(5), 233-238.

Xu, Y., & Kwak, C. (2007). Comparative trend analysis of characteristics of internationally educated nurses and U.S. educated nurses in the United States. *International Nursing Review, 54*(1), 78-84.

Yi, M. (1993). *Adjustment of Korean nurses to United States hospital settings.* Unpublished D.N.S., State University of New York at Buffalo.

Yi, M., & Jezewski, M. A. (2000). Korean nurses' adjustment to hospitals in the United States of America. *Journal of Advanced Nursing, 32*(3), 721-729.

Zizzo, K. A., & Xu, Y. (2009). Post-hire transitional programs for international nurses: A systematic review. *Journal of Continuing Education in Nursing, 40*(2), 57-66.

BIOGRAPHICAL INFORMATION

The author has practiced nursing for 25 years in a variety of settings and roles, including specializing in peri-operative nursing care and managing four nursing units. Her academic preparation includes an ADN from Hesston College in 1985; a BS in journalism (1994), BSN (1997), and MSN in Nursing Administration (2004) from the University of Texas at Tyler. Her nursing expertise and childhood experiences in other countries led her to pursue a PhD in nursing with a research focus on internationally educated nurses (IENs) migrating to the US. She is interested in developing research based transition programs for IENs migrating to the US and exploring the existence of such programs in IEN source countries.

Her nursing management background, cross-cultural expertise, and fluency in Spanish will be assets in attaining her desired international goals. She is a member of the North Texas Africa Health Initiative. As a graduate research assistant in the College of Nursing's Center for Nursing Scholarship and Technology, she assisted several faculty members with their research projects, gaining research expertise. She is the editorial assistant for the *Journal of Child and Adolescent Psychiatric Nursing* and has her own column, Conference Call. As a poet, she has had numerous poems published in nursing journals and newsletters during her doctoral studies. Her nursing colleagues value her insight into aspects of nursing care and her musings on daily life reflected in her poetry. The Mary Lou Bond Fellowship provided funds to assist in dissertation completion.

Future goals include gaining proficiency as a faculty member in the College of Nursing's undergraduate nursing leadership and management program and gaining knowledge of human resource development. She will use this integrated knowledge to enrich and guide her own program of research and to assist nursing colleagues in low-income or middle-income countries in defining or redefining the nursing paradigm in their own countries.