How Do Student Nurses of English Language Learner Populations Experience NCLEX-RN Style Questions?

Shawne Manies

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How Do Student Nurses of English Language Learner Populations Experience NCLEX-RN Style Questions?

Shawne M. Manies

BSN in Nursing, May, 2004, Maryville University
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A Dissertation Submitted to The Graduate School at the University of Missouri-St. Louis
in partial fulfillment of the requirements for the degree
Doctor of Philosophy in Nursing

May 2020

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helped our children understand how important it was for me to continue. Thank you to my three children, Shanna, Anthony, and Lucy. You didn’t always understand what was going on but you knew in the end I’d be called doctor, and that always made you happy. Thank you.
ABSTRACT

The purpose of this qualitative study was to explore how student nurses of English Language Learner (ELL) populations experienced National Council Licensure Examination for Registered Nurses (NCLEX-RN) style questions. Evidence has suggested difficulty in improving the nation’s diversified nursing workforce, resulting in concerns over minority nurse representation. Student nurses of ELL populations are more likely than non-English language learner student nurses to be out of sequence or released from a nursing program. The extant literature has shown that this population of students struggle with NCLEX-RN style questions and that they have significantly lower pass rates than their English-speaking counterparts. The literature revealed that this population may feel self-conscious about their accent, and consequently are less likely to engage in class participation or communicate with peers. Additionally, there are difficulties not only understanding course content in English but also expressing their knowledge of English. Barriers exist related to leaving home, entering a different world, and feeling isolated from their culture and family. A Heideggerian phenomenological approach was used to explore the phenomena. A hermeneutic approach is often used in situations where meaning is sought and a deeper, perhaps overlooked, understanding is missing from the extant literature. Nine students were recruited from two colleges of nursing, and invited to participate in hermeneutic interviews. A team of hermeneutic scholars analyzed transcripts using a Heideggerian hermeneutic approach and results were rendered in the form of three overlapping patterns and five sub-patterns that illuminated and interpreted common experiences across participants. The three patterns were: 1) Time as an antagonist to NCLEX-RN success, 2) Situational context as a way of thinking, and 3)
NCLEX-RN as a deterrent to English language learner diversity in nursing. The five sub-patterns were: 1) Thinking through: Not enough time, 2) NCLEX-RN style question design: Success in context, 3) Imagining a situation: ‘thinking out’ versus ‘being in’ a situation, 4) Sociocultural perspective: One’s cultural background can change the answer, and 5) Emotional expression as an aspect of culture. Results are thought to be common experiences among this population. Implications for education, practice, and policy are suggested and areas of future research are recommended.
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Figure 2. AAMC Experiences-Attributes-Metrics Model
DEDICATION

This dissertation is dedicated to all student nurses of English language learner populations.
Chapter I

Introduction

Student nurses of English Language Learner (ELL) populations are a valuable addition to the nursing workforce, but they face challenges during their education and licensure. In particular, their performance on the National Council Licensure Examination for Registered Nurses (NCLEX-RN) is poor. Despite hard work and practical knowledge, student nurses of ELL populations have a 40% lower pass rate on the NCLEX-RN (Olson, 2012) than other student nurses who have English as their native language. This difference was identified regardless of academic record (Bosher & Bowles, 2008). Few interventions have been effective in increasing success on the licensure exam for student nurses of ELL populations.

Significance and Background

Increasing representation of minority populations in nursing is a priority in the United States (American Association of College of Nursing [AACN], 2017) and concurrently necessitates precedence in nursing schools. Improving one dimension of cultural diversity by increasing minority populations in the nursing workforce (for example: national origin and race), has far-reaching implications. For instance, studies have indicated that patients prefer providers with similar attributes. Patient satisfaction and adherence to treatment was correlated with the attributes, in part because of personal preference and language (Garcia et al., 2003; Saha, et al., 2000). Simply explained, individuals more easily follow suggestions from someone who speaks the same language as they do.
The United States is estimated to become a majority-minority nation for the first time by 2043 (Phillips & Malone, 2014). Currently, 20% of Registered nurses belong to racial or ethnic minorities (Budden et al., 2016). Our developing nation has become a vessel for multiculturalism and ethnic diversity (Brown, 2008). There are around 350 languages spoken in the United States (United States Census Bureau, 2015), and the use of a language other than English in the home environment has increased by 148% between 1980 and 2009 (Ortman & Shin, 2011). Historically, minority populations have higher rates of morbidity and mortality than dominant groups (Smedley et al., 2003). These health disparities may be attributed to socioeconomic differences, health-related risk factors, environmental degradation, and discrimination factors in the late 1990s (Williams, 1999). More recently, it was suggested that health disparities may also be from sociocultural differences, unconscious bias, and healthcare segregation (Schoenfeld et al., 2017). Health disparities in our society among people of minority populations were relevant to this study because the increasingly diverse society needs diverse nurses.

Representation of nurses of minority populations will assist in alleviating the nursing shortage while also addressing the health care disparities in the healthcare system (Gordon & Copes, 2010). However, the nursing profession has found difficulty in improving the nation’s diversified workforce (Brown, 2008). One reason for this is the decreased NCLEX-RN pass rates for student nurses of ELL populations whose English is not their native language.

The NCLEX-RN consists of a standardized test that is developed by the National Council of State Boards of Nursing (NCSBN) to produce the licensure examination safely (NCSBN, 2015). Entry into the professional practice of nursing is controlled by
both the NCSBN and the member board jurisdictions, which includes each state, province, nation, and regional boards of nursing (NCSBN, 2015).

A detailed test plan, written by the NCSBN, facilitates its organization, item-writing, and student nurse preparation for testing (NCSBN, 2015). This detailed test plan is reviewed and revised every three years using various resources, including practice inquiry of registered nurses, professional opinions of NCSBN’s examination committee, and an executive organization of NCSBN (NCSBN, 2015). Currently, the test plan has the following broad categories: safe and effective care management, health promotion and maintenance, psychosocial integrity, and physiological integrity (NCSBN, 2015).

Within two of these broad categories are sub-categories. To fully comprehend what is on the NCLEX-RN, educators and participants need to know not only what is within each category/subcategory, but also the percentage of test that would be within these areas. The following table explains the breakdown (NCSBN, 2019):

<table>
<thead>
<tr>
<th>Client Needs</th>
<th>Percentage of Items from Each Category/Subcategory</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Safe and Effective Care Environment</strong></td>
<td></td>
</tr>
<tr>
<td>• Management of Care</td>
<td>17-23%</td>
</tr>
<tr>
<td>• Safety and Infection Control</td>
<td>9-15%</td>
</tr>
<tr>
<td><strong>Health Promotion and Maintenance</strong></td>
<td>6-12%</td>
</tr>
<tr>
<td><strong>Psychosocial Integrity</strong></td>
<td>6-12%</td>
</tr>
<tr>
<td><strong>Physiological Integrity</strong></td>
<td></td>
</tr>
<tr>
<td>• Basic Care and Comfort</td>
<td>6-12%</td>
</tr>
<tr>
<td>• Pharmacological and Parenteral Therapies</td>
<td>12-18%</td>
</tr>
<tr>
<td>• Reduction of Risk Potential</td>
<td>9-15%</td>
</tr>
<tr>
<td>• Physiological Adaptation</td>
<td>11-17%</td>
</tr>
</tbody>
</table>

*Figure 1. NCLEX-RN Examination Breakdown*

The NCLEX-RN is not the only area that is crucial for an individual to be successful; it is merely what an individual must successfully complete before receiving
the title of Registered Nurse. Much preparation must be done before taking the NCLEX-RN, most of which will happen during an individual’s nursing program. There is ample evidence that faculty support and commitment are significant factors in the success of student nurses of ELL populations (Bond et al., 2008; Brown, 2008; Taxis, 2006). However, many faculty members do not understand how to provide the support needed by this student population (Hansen & Beaver, 2012). Perhaps this is because faculty members do not have an in-depth understanding of how student nurses of ELL populations experience an NCLEX-RN style or other style test questions. The lack of understanding makes it difficult for faculty members to provide the support needed for student success.

For nearly two decades, researchers and nurse educators have noticed the need for student nurses of ELL population success in nursing. During this time, several studies have posited the challenges that these students face (Sanner et al, 2002; Taxis, 2006). Studies have also been conducted supporting the need for interventions (Cunningham et al, 2004; Donnell, 2015; Klisch, 2000; Lujan, 2008). These challenges and interventions follow.

Challenges that student nurses of ELL populations have encountered consist of understanding medical and nonmedical terminology, taking multiple-choice questions, time constraints during tests, interpretation of concepts related to majority American culture, and managing cultural pressure (Brown, 2008; Cunningham et al., 2004). Reading comprehension continues to be a barrier to success (Brown, 2008; Donnell, 2015; Donnelly et al., 2009). Writing papers and fear of failure are also challenges faced (Brown, 2008).
Due to these challenges, research studies have utilized scales, assessments, and surveys to help identify those students at risk (Donnell, 2015; Salamonson et al., 2008). One scale provided evidence that academic performance among student nurses of ELL populations related to the linguistic aspect of acculturation (Salamonson et al., 2008). Acculturation is described as a “process of change” that occurs as an individual is incrementally exposed to the new culture around them (Salamonson et al., 2003). A survey was used to collect demographics, preadmission academic outcomes, perceptions of family and social support, and perceptions of personal qualities (Donnell, 2015). Results showed the need to evaluate student profile characteristics comprehensively when determining the risk of attrition (Donnell, 2015). These studies provided evidence of continued challenges during nursing school for students of minority populations, necessitating the need for further research on how to support this diverse population. The above literature has shown ways to identify those at risk of failure and also offers suggestions of why these individuals are at risk. However, there is a gap in the literature that further breaks down what one experiences while taking an NCLEX-RN style test question.

Several interventions that student nurses of ELL populations have used include utilizing dictionaries and thesauruses when studying, early identification of tutoring needs, practicing multiple-choice questions often, and psychosocial support (Cunningham et al., 2004). Cultural respect from faculty and English speaking students is another intervention that may help provide support to student nurses of ELL populations (Cunningham et al., 2004). Further interventions include assertiveness training, decreasing test bias, extending test time and test location (Klisch, 2000). Exploration of
perceptions of faculty and experiences of student nurses of ELL populations is warranted (Klisch, 2000) because previous surveys using statistical analysis cannot capture the experiences student nurses of ELL populations have when answering NCLEX-RN style questions.

Literature to date verifies the challenges English language learners face while going through nursing school and passing the NCLEX-RN (Brown, 2008; Cunningham et al., 2004; Donnell, 2015; Donnelly et al., 2009). While multiple interventions have been recommended and used, empirical data shows that the success of student nurses of ELL populations remains low with little improvement throughout the years (NCSBN, 2017). Simply explained, we have known there has been a problem with their success for years, but we have not been able to help the situation substantially improve.

**Statement of the Purpose, Research Question, and Specific Aims**

The purpose of this research was to describe and interpret the phenomenon of experiencing NCLEX-RN style questions using a Heideggerian hermeneutic methodological approach in a sample of Baccalaureate of Science in Nursing (BSN) student nurses who speak English as a foreign language.

The research question that guided this study was, “How do student nurses of ELL populations experience NCLEX-RN style questions?” Aims were to (a) generate a comprehensive interpretation of the experiences of English language learner student nurses who answer NCLEX-RN style questions and (b) identify mechanisms student nurses of ELL populations use to answer NCLEX-RN style questions. A sample of in-depth interviews provided broad information through storied accounts of student nurses of ELL populations and their experiences while answering NCLEX-RN style questions.
The goal of the analysis of these transcribed verbatim accounts was to lead to meaningful understanding, ideas, suggestions, or more questions of how nurse educators educate, how student nurses of ELL populations learn, and how the NCLEX-RN test is built. Exploring their experiences may help educators understand unique areas of cultural differences that have not been considered and may contribute to student learning. Ultimately, an increase in NCLEX-RN pass rates for student nurses of ELL populations is desired, as well as an increase in confident, well-prepared nurses of ELL populations.

Research in this area can help inform and encourage policymakers to change the way we test nurses, inform nurse educators of how to implement curricula that guides our student nurses of ELL populations to success, inform students nurses of ELL populations on how to succeed in school and on NCLEX-RN, and help our society by increasing the number of diverse individuals.

**Definition of Terms**

*Attrition* is defined as failing to re-enroll at an institution for two or more consecutive academic terms (Jeffreys, 2004). Additionally, *attrition* can be defined as delayed graduation or non-completion (Donnell, 2015).

*Cultural awareness* is defined as “recognition of the nuances of one's own and other cultures” (National Institute of Environmental Health Sciences [NIEHS], 2018).

*English Language Learners (ELL)* in this study was defined as any learner in the college of nursing program who self-identifies as having English as a foreign language. The student nurses of ELL populations have either immigrated to the United States or were refugees in the United States.
Baccalaureate degree (BSN) is an award that generally requires at least four but not more than five years of full-time equivalent college-level work (National Center for Education Statistics, n.d.).

Homonyms are defined as “one of two or more words spelled and pronounced alike but different in meaning” (Merriam Webster Dictionary, 2019).

Retention is defined as a measure of the rate at which students persist in their educational program at an institution, expressed as a percentage (National Center for Education Statistics, n.d.).

Patient and client was used interchangeably in this paper. Some would argue that there are clear differences; however, for this paper, the term patient will be used. Patient will refer to individuals, families, communities, or populations.

Summary

Research has been ongoing regarding the success and struggles surrounding student nurses of ELL populations. However, the NCLEX-RN pass rates remain lower for this population of first-time test-takers, making this area of research essential. A qualitative inquiry into this phenomenon has helped illuminate unknown barriers and elicit new information.
Chapter II

Review of the Literature

Philosophical Approach

Heideggerian hermeneutics, a philosophical approach to inquiry, guided this study of English Language learners’ lived experience of the National Council of Licensure Examination for Registered Nurses (NCLEX-RN) style questions (Heidegger, 1962). Phenomenology deals with what is specified or identified, while hermeneutics means taking something or some object as something, then interpreting it, and finally understanding and translating the phenomenon (Caputu, 1984).

For the Heideggerian hermeneutic scholar, inquiry focuses on understanding or ‘being’ (Heidegger, 1962), and the significance that a piece of reality takes on for the people under study (Berthon et al., 2002). The application of Heideggerian hermeneutics is a disciplined sensitivity, or way of “being-in-the-world” (Drefus, 1991). Heideggerian hermeneutic philosophers value stories that express the experiences of the phenomenon being studied (Dowling, 2011; Mackey, 2005). The philosophical intention is to look beyond the words and broaden understanding beyond everyday realism (Carr & Kemmis, 1983). This philosophical perspective informed the entire research endeavor.

Instead of using a particular theoretical approach to guide the study design and implementation, theoretical models were reviewed for application to the phenomenon of interest. One particular model that fit the study’s focus on English Language learner experiences of NCLEX-RN style questions is described in the next section of this chapter.
The Association of American Medical Colleges (AAMC) Experiences, Attributes and Metrics Model

Diversity in the healthcare workforce is desirable because today’s model of healthcare has racial and ethnic inconsistencies (Sharma et al., 2016), which may affect diverse populations of the United States. These inconsistencies circle around the need for personalized approaches to healthcare to meet the healthcare needs of diverse populations (Nair & Adetayo, 2019). Social determinants of health factor into one’s health. However, even with adjusting for socioeconomic elements, the treatment and outcome differences continue (Kutalek, 2012). One way to improve the health of diverse populations is to have a workforce reflective of the community they serve (Cohen et al., 2002). The literature suggests that by increasing the number of diverse nurses to care for the diverse population, more positive, healthy outcomes will be realized within communities. Positive, healthy community outcomes are described below.

Through a diverse healthcare team, community members may be more receptive to healthcare services because of the commonality between patient and practitioner (Simms, 2013). Another important reason for a diverse healthcare team is racial, ethnic, and language understanding (Simms, 2013). The chances of a patient seeking help and guidance improve when their healthcare team member is from the same racial or ethnic background and speaks the same primary language (Simms, 2013). Ultimately, healthcare outcomes can improve due to the sound communication and trust (Simms, 2013). In the United States, professional nurses have been the number one most trusted profession for years (Brennan, 2018). Although this is an impressive accomplishment, nurses need to
strive to bring more diverse nurses into the profession to help maintain the highest level of trust.

For those reasons, we must have more diverse nurses in our healthcare industry to meet the demands of our diverse nation. Nurse educators strive to prepare nurses with a healthy combination of skills, qualities, and experiences. The Experiences, Attributes, and Metrics Model below is used to help with admissions into some universities. However, this model also helps recognize the varying perspectives that shape a person’s identity (Association of American Medical Colleges [AAMC], 2019). By recognizing the different experiences, attributes, and metrics, we can also see that these many perspectives are what contributes to the diversity in the United States.
Figure 2. Association of American Medical Colleges Experiences-Attributes-Metrics Model

Experiences, attributes and metrics of minority populations in the United States.

The Experiences, Attributes and Metrics model has multiple facets within each layer. The outer layer of the model are the experiences that help shape a person. These can include cultural events, world events, historical events, political events, life experiences, travelled distance, leadership roles, health care experiences, community
service, affiliations, research experience, and education background (AAMC, 2019). The next layer are attributes and can include race, sexual orientation, geography, ethnicity, gender identity, faith, family status, national origin, socioeconomic status, citizenship, sex, age, physical ability, individual interests, integrity, intellectual curiosity, maturity, languages spoken, perspectives, leadership, and values and beliefs (AAMC, 2019). The innermost layer is the metrics and includes scores, grade trends, and GPA (AAMC, 2019).

Next, the layers will be applied to this study’s focus. First, the prevalence and factors affecting minority populations in the United States is described. Second, the background to the nursing workforce shortage and reasoning behind increasing minority representation are reviewed. Third, the prevalence and factors that influence English Language Learner (ELL) success and failure in nursing school are explored.

**Prevalence and factors affecting minority populations in the United States.**

The AAMC Model helps recognize what shapes an individual (AAMC, 2019). When looking at the factors that affect the health of minority populations in the United States, we could then align the facets of the AAMC Model to the factors affecting the health of minority populations. This alignment is shown in the table below. Not all factors were included for this study; only those believed relevant to this study. These experiences, attributes, and metrics that were chosen in the below table are relevant to minority populations, as opposed to all characteristics in the generalized model pertaining to all individuals.

**Table 1**
Application of The Association of American Medical Colleges (AAMC) Experiences-Attributes-Metrics Model; pertaining to minority populations in the United States.

<table>
<thead>
<tr>
<th>AAMC Model Experiences related to this study</th>
<th>Experiences related to this study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experiences</td>
<td>Background to the Nursing workforce shortage</td>
</tr>
<tr>
<td>Cultural events</td>
<td>Healthcare segregation</td>
</tr>
<tr>
<td>Historical events</td>
<td>Minorities in the United States</td>
</tr>
<tr>
<td>Life experiences</td>
<td>Cultural experiences</td>
</tr>
<tr>
<td>Distance traveled</td>
<td>Unconscious bias</td>
</tr>
<tr>
<td>Educational background</td>
<td>Health disparities</td>
</tr>
<tr>
<td>Health care experiences</td>
<td>Health-related risk factors</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AAMC Model Attributes related to this study</th>
<th>Attributes related to this study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attributes</td>
<td>Discrimination</td>
</tr>
<tr>
<td>Race</td>
<td>Cultural differences</td>
</tr>
<tr>
<td>Values and beliefs</td>
<td>Mistrust</td>
</tr>
<tr>
<td>Perspectives</td>
<td>Linguistic barriers</td>
</tr>
<tr>
<td>National origin</td>
<td>Language</td>
</tr>
<tr>
<td>Languages spoken</td>
<td>Environmental degradation</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>Socioeconomic differences</td>
</tr>
<tr>
<td>Geography</td>
<td></td>
</tr>
<tr>
<td>Citizenship</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AAMC Model Metrics related to this study</th>
<th>Metrics related to this study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metrics</td>
<td>Attrition</td>
</tr>
<tr>
<td>Grade trends</td>
<td>Standardized testing in school</td>
</tr>
<tr>
<td></td>
<td>NCLEX-RN</td>
</tr>
</tbody>
</table>

Other areas of the AAMC Model may still relate to minority populations; however, for purposes of this study, the ones mentioned above are most relevant. The experiences, attributes, and metrics related to this study are explored further to reinforce the importance of these factors in minority populations.

Minorities in the United States of America.

One of the most recent ongoing events in the United States is that individuals of minority populations are expected to make up more than half of the United States
population by 2044 (Colby & Ortman, 2015). Minority populations can be defined as “any group other than non-Hispanic White alone” (Colby & Ortman, 2015, p. 25). The percentage of individuals over the age of five who speak a language other than English at home was 5% from 2011-2015 (United States Census Bureau, 2017).

A more in-depth description of the factors affecting the health of individuals of minority populations, and how increasing the number of nurses of minority populations can help improve the health of minority populations, follow.

**Health disparities among minority populations.**

Racial or ethnic health disparity can be described as a difference in health that is related to or linked to societal, economic, or environmental disadvantage (National Center for Health Statistics, 2015). Racial and ethnic minority populations experience greater rates of morbidity and mortality than non-minorities (Smedley et al., 2003).

Health disparities are influenced by poverty, the environment, health care access, individual and behavioral factors, and education (Center for Disease Control and Prevention, 2018). Additionally, sociocultural differences, unconscious bias, and healthcare segregation may play a prominent role (Schoenfeld et al., 2017).

**Socioeconomic differences.**

Socioeconomic factors that affect minority groups are discussed below. Residents of minority populations with low average income levels, low employment rates, and high crime rates were less likely to have a medication delivery service (Chisholm-Burns et al., 2017). Also, insurance status affected medication access for these residents. For example, those without prescription drug coverage are more likely to refrain from the needed medication because of the high cost (Piette et al., 2004).
Unintended pregnancy continues to be a public health concern disproportionately experienced by individuals of minority groups of low socioeconomic status (Holliday et al., 2018). Evidence was found of socioeconomic differences in noise exposure throughout the United States, which may contribute to health disparities (Casey et al., 2017). Additionally, the socioeconomic disparities correspond to disparities in many other areas, such as asthma, cardiovascular disease, diabetes mellitus, human immunodeficiency virus, infection, mental health, oncology, and pain control (Hall-Lipsy, & Chisholm-Burns, 2010; National Center for Health Statistics, 2013).

Socioeconomic differences can have impacts on the healthcare one receives. For instance, one study shows the prevalence of obese students being greater among students of lower socioeconomic status (Delva et al., 2006). Another study discusses the obesity prevalence in not only socioeconomic differences but also based on ethnic minorities; this study finds that modifiable feeding factors may contribute to obesity among Latina infants (Cartagena et al., 2016). Recognizing modifiable feeding factors may help decrease the obesity rates in this infant population. These findings are critical to this study for the reason that they further identify the need for diverse nurses to help not only care for but the importance of living within minority populations.

Health-related risk factors.

Heart disease, cancer, cerebrovascular disease, Human Immunodeficiency Virus (HIV), and Acquired Immune Deficiency Syndrome (AIDS) cause high rates of mortality among African Americans (Smedley et al., 2003). American Indians experience high levels of diabetes, liver disease and cirrhosis, and unintentional injuries; and Hispanics very nearly twice as likely as non-Hispanic whites to die from diabetes (Smedley et al.,
Asian Americans experience higher than the average stomach, liver, and cervical cancers (Smedley et al., 2003). These statistics help confirm the need for more education and health promotion.

**Environmental degradation.**

Environmental degradation can be defined as “the deterioration of the environment through depletion of natural resources such as air, water, and soil” (Tyagi et al., 2014, p. 1491). The United Nations International Strategy for Disaster Reduction describes environmental degradation as “the decrease of the capacity of an environment to meet social and ecological intentions” (Tyagi et al., 2014, pp. 1491-1492). Air pollution and exposure to hazardous waste is affecting minorities (Bell & Ebisu, 2012; Hajat et al., 2015; Mohai & Saha, 2007). For example, cardiovascular disease and risk factors are more prevalent in neighborhoods with air pollution (Diez-Roux et al., 1997; Navas-Acien et al, 2007; Pope et al., 2009). The reasoning behind bringing forth these facts and statements was to make clear that we are living in a very diverse nation where a zip code can produce a higher or lower life expectancy due to the resources it has. This further supports the need to supply our diverse nation with diverse nurses.

**Healthcare segregation.**

Segregation is the seclusion of a race, class, or ethnic group by required or voluntary dwelling in a controlled region, by hurdles with social contact, separate educational amenities, or by other biased means (Merriam-Webster, 2019). Residential isolation has been linked to an increase in deaths for individuals of black populations (Collins & Williams, 1999). Furthermore, the correlation between hospital segregation and residential segregation is 0.71 ($p < 0.001$) using the Dissimilarity Index and 0.75 ($p <$
0.001) using the Isolation Index (Vaughan et al., 2009), both values indicating significantly statistical findings. Healthcare segregation could happen then if segregation in other aspects are present. An example of healthcare segregation was that African Americans were significantly more likely to receive surgery from a low-volume surgeon ($p < 0.001$) and at a low-volume hospital ($p < 0.007$), both values indicating statistically significant findings (Vaughan et al., 2009).

Both residential and healthcare segregation has proven to be an issue in the United States. Residential segregation has affected an individual’s risk of receiving a sexually transmitted infection, while community factors affected Sexually Transmitted Disease (STI) occurrence, poverty, and sexual activity (Adimora & Schoenbach, 2005).

**Discrimination.**

There is a link between racism and health outcomes for minority groups in the United States (Smedley, 2012). Long before the United States were formed, racism was the most prevalent form of oppression, and today this is still true, primarily as a factor in health disparities among minorities (Ernshaw et al., 2015; Shavers et al., 2012). Racism and racial discrimination are forms of violence (Bulhan, 1985). Exposure to racism and racial discrimination can be inversely associated with psychological and physical health among minorities (Barnes & Lightsey, 2005, Halim et al., 2015; Pieterse & Carter, 2007; Pieterse et al., 2012).

In healthcare today, discrimination is still prominent. A recent study compared minority women who self-reported healthcare visits every three years or less. Perceived discrimination was associated higher when a woman visited the healthcare office annually or more often; furthermore, perceived discrimination was associated with the
lower chance of having an excellent or very good perceived healthcare visit (Fazeli et al., 2016). The perceived discrimination among minority populations is causing mistrust of the healthcare team. This represents another example of why there is a strong desire for an increase of minority individuals in the nursing profession.

**Sociocultural experiences.**

**Cultural experiences.**

An individual’s beliefs are influenced by one’s culture, social status, and family (Institute of Medicine, 2004). Cross et al. (1989) state that culture is essential to health, and includes integrated patterns of human behavior, including language, communication, customs, beliefs, and values. In one’s health is how an individual defines health, illness, and treatment (Stein, 2010). By learning and acknowledging how someone views their health and their illness we as healthcare providers can better help individuals, families, communities, and populations.

**Linguistic barriers.**

Linguistic barriers to health care access can cause significant challenges among patients and providers, even with federal regulations that encourage and support the use of interpreters (Youdelman, 2008). The complexity of medical terminology and legal documents leave many English speakers confused, so an English language learner individual can have even greater problems understanding terminology and documents (Youdelman, 2008).

There are over 1000 laws among the U.S. that pertain to language services and over thirty states have adopted English as their official language (Youdelman, 2008). However, since federal law prevents conflicting state law, the English only law in those
states cannot override Title VI (Youdelman, 2008). Title VI states “no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance” (U.S. Department of Education, 2019).

Twelve percent of individual adults in the U.S. have proficient health knowledge, and nine out of ten adults may well lack the skills to manage their health and prevent disease (U.S. Department of Health & Human Services, 2019). Health literacy can be defined as the degree to which individuals can obtain, process, and understand health information and services necessary to make fitting health decisions (Nielsen-Bohlman et al., 2004). Table two shows the racial/ethnic breakdown of adults in their respective health literacy group (National Center for Education Statistics [NCES], 2003).

Table 2

<table>
<thead>
<tr>
<th>Ethnic Group</th>
<th>Below Basic</th>
<th>Basic</th>
<th>Intermediate</th>
<th>Proficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>9%</td>
<td>19%</td>
<td>58%</td>
<td>14%</td>
</tr>
<tr>
<td>Black</td>
<td>24%</td>
<td>33%</td>
<td>41%</td>
<td>2%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>41%</td>
<td>24%</td>
<td>31%</td>
<td>4%</td>
</tr>
<tr>
<td>Other</td>
<td>13%</td>
<td>21%</td>
<td>54%</td>
<td>12%</td>
</tr>
</tbody>
</table>

Low health literacy can relate to poor health outcomes and a higher risk of death (Berkman et al., 2010; Swartz et al., 2018; U.S. Department of Health & Human Services, 2019; Youdelman, 2008). Low health literacy among the U.S. population is having negative impacts on those people and others. For instance, a study involving low-
Income individuals with diabetes found that literacy mediated the relationship between education and diabetic control (Schillinger et al., 2006). This study and others have shown that limited health literacy is not easily visible and depends heavily on context (U.S. Department of Health & Human Services, 2019). Even fluent English-speakers and those who have strong literacy skills can have challenges with medical terms, challenges in understanding how the body works, understanding a disease process, and providing self-care in complex conditions (U.S. Department of Health & Human Services, 2019).

Poor health literacy is a better indicator of mortality risk than overall years of education (Institute of Medicine [IOM], 2009). Health literacy affects individuals when healthcare providers use medical terms that are unfamiliar or when patients have cultural barriers, Limited English Proficiency (LEP), or low education skills (Health Resources & Services Administration [HRSA], 2019). Low health literacy has been linked with poor self-reported health status in many diverse populations, even when education and other predictors of health status are controlled (Berkman et al., 2010; Sentell et al., 2011).

In summary, health literacy is a complex set of skills and cognitive processes. It has been suggested that, at the very least, health literacy intersects with effective patient-provider communication. Effective patient-provider communication in turn leads to improved relationships and better health outcomes (Brach et al, 2012; Brach et al., 2014).

In conclusion, health literacy within the healthcare setting is enhanced by a diverse workforce.

Unconscious bias.

While an individual goes about their social world they not only engage in conscious activities but also in unconscious activities (Williams & Wyatt, 2015). These
unconscious activities are based on positive and negative images that have been stored in memory (William & Wyatt, 2015). Higher levels of implicit bias among clinicians have been directly linked with biased treatment recommendations for black individuals (Paradies et al., 2014). Also, individuals report poorer quality of patient-physician communication and lower patient ratings of the quality of care received by their provider (Williams & Wyatt, 2015).

The disparities that individuals of minority populations face that have been attributed to the above factors have led to feelings of mistrust by members of minority populations (Smedley et al., 2003). In healthcare, this mistrust has negative impacts that are affecting the lives of minority populations.

**Mistrust.**

The feelings of mistrust have often led to refusal and noncompliance of treatment (Smedley et al., 2003). This leads to providers becoming less engaged in the treatment process and withholding more vigorous treatments and services (Smedley et al., 2003). The perceived mistreatment that individuals of minority groups experience is understandable as a response to negative racial experiences in other contexts, leading to reciprocal behaviors and attitudes (Smedley et al., 2003).

Overall, the providers’ expectations, beliefs, attitudes, and behaviors are where intervention efforts should be targeted (Smedley et al., 2003). This is accomplished through cross-cultural education in the health professions, an approach that includes practical, case-based, rigorous training that helps bridge the cultural gaps between provider and patient (Smedley et al., 2003). The approach has a focus on the provider’s beliefs, bias, and understanding of culture (Smedley et al., 2003). Also, providers will
have a better understanding and appreciation of racial and ethnic disparities in healthcare, and the impact of social cognitive factors and stereotyping (Smedley et al., 2003).

Relationships between provider and patient have been well researched, and it is known that consistency and stability of the provider-patient relationship relate to patient satisfaction and access to care (Smedley et al., 2003). Having a consistent relationship with a provider may help to address mistrust among individuals of minority populations, especially if the relationship is with a provider who can bridge cultural and linguistic gaps (LaViest et al., 2000). In nursing, efforts to increase the diverse workforce will help align providers’ expectations, beliefs, attitudes, and behaviors with the minority populations. This further solidified how the AAMC model is impactful since it shows how one’s identity is formed. Next, the background into the nursing workforce shortage will be discussed to give further insight into the ever-changing healthcare environment and to why minority representation is crucial.

**Background to the Nursing Workforce Shortage**

The Registered Nurse (RN) workforce is expected to develop from 2.71 million in 2012 to 3.24 million in 2022 (United States Department of Health & Human Services, 2014). It has been projected is that over 500,000 nurses will need to be replaced, suggesting overall, 1.05 million nurses are necessary by 2022 (United States Department of Health & Human Services, 2014). According to the AAMC Model, historical and cultural events have an effect on excellence and on shaping an individual. The increase in diversity in the United States may shape an individual’s interest in the nursing profession.

**Increasing minority representation in nursing.**
Some studies have shown that understanding between provider and patient to be connected with patient satisfaction and adherence to treatment, in part because of personal preference and language (Garcia, 2003; IOM, 2004; Saha, 2000). However, evidence suggests the nursing profession has explicitly found difficulty in improving the nation’s diversified workforce (Brown, 2008), resulting in concerns over minority nurse representation (IOM, 2004). One concern is the link between worse health outcomes for individuals of minority populations and the scarcity of minority health care providers (Sullivan Commission on Diversity in the Healthcare Workforce, 2004). Increasing minority nurse representation in the United States will assist in alleviating the nursing shortage and in addressing the health care disparities in our healthcare system (Gordon & Copes, 2010).

**Nurse’s role.**

The future of healthcare is changing, and the profession of nursing must adapt to these changes. However, changes in healthcare will require a new or an enhanced skill set on “wellness and population care, with an extended focus on patient-centered care, coordination of care, data, and quality improvement” (Salmond & Echevarria, 2017). The best path to patient and family-centered care is to interact with both patients and families to understand what matters to them most and then design their care around those specific individual needs (Johnson & Abraham, 2012).

**Prevalence and Factors that Influence ELL Success and Failure in Nursing School**

**Minority student academic success.**

**Attrition.**
Culturally diverse students have been found to have lower test scores on standardized entrance exams into nursing programs (Gilchrist & Rector, 2007). Student nurses of ELL populations are more likely than non-ELL students to be released from a nursing program or be out of sequence due to academic failure (Donnell, 2015). Consequences of attrition can be detrimental to the student, the universities, and the nursing workforce (Donnell, 2015). Higher attrition rates are found in student nurses of ELL populations when compared with non-ELL students (Memmer & Worth, 1991). In 2007, the attrition of students not returning for a second year in nursing school cost $1.35 billion (Press, 2010). The AAMC Model showed earlier is a good model for showing that excellence is built upon one’s experiences, attributes, and metrics. This means that one’s educational background and cultural beliefs can shape how one learns. If an individual primarily used essays when testing in their native country and then has to switch to multiple-choice in the United States, could this affect the outcome of their success?

_Nursing boards._

Previously, it was noted that there is a 40% difference in pass rates between English as native language speakers and English as non-native language speakers, regardless of academic record (Bosher & Bowles, 2008). This difference has educators working to prepare student nurses earlier in their nursing program. Often, the preparation involves the use of NCLEX-RN style questions on class examinations as well as standardized exams. The use of the standardized exams are frequently used as high-stakes exams during nursing school (Sosa & Sethares, 2015). However, these exams are not mandatory at all nursing programs, and it can vary significantly across institutions.
Understanding that the NCLEX-RN preparation begins long before a student nurse takes the NCLEX-RN. The nursing curriculum is strategically designed to help achieve academic success in courses and ultimately on the NCLEX-RN. There are four main areas of concern having an impact on academic success, which “include language, learning models, test-taking, and cultural differences” (Hansen & Beaver, 2012). Further details about this follow.

**Language.**

Worldwide, language complications have distressed both ELL learners and faculty (Olson, 2012). Language is essential in the nursing profession and is a necessity for both nursing school theory courses and the clinical setting. Student nurses of ELL populations experience a phenomenon called Second Language Anxiety (SLA) which is characterized by anxiety experienced from using a language other than their native language (Khawaja, Chan, & Stein, 2017). Until recently, little research has been done regarding the phenomenon of SLA. Student nurses of ELL populations may also feel self-conscious about their accent, consequently less likely to engage in-class participation or communicate with peers (Sanner et al., 2002). Another area of struggle is with medical terminology because it becomes an additional language (Olson, 2012).

Test-taking is an adjustment for all students, not only student nurses of ELL populations. However, the wordy scenarios intended to provide context may further challenge this student population rather than accurately assess their knowledge. Many nations utilize essay questions as primary evaluation methods, whereas the United States uses various methods of evaluation. These variations in how a country or culture evaluate
may be leading to one of the issues of lower success on NCLEX-RN among ELL individuals.

**Standardized test-taking.**

Research shows that utilizing standardized exams has improved NCLEX-RN pass rates; however, when students fail to meet assigned benchmarks, the remediation process is inconsistent (Morrison et al., 2002). Literature is unclear which intervention strategies used for remediation contribute to improved test performance (Dibartolo & Seldomridge, 2005). However, a recent literature review shows that current research in standardized nursing exams does not address ethnicity and other variables related to BSN student populations (Sosa & Sethares, 2015).

**Cultural differences.**

Traditional approaches to determining nursing competencies may be inappropriate for culturally and linguistically diverse individuals (Westby, 2007). Cultural differences can affect communication, namely issues such as therapeutic communication, eye contact and touch, planning for patient care, and providing an appropriate education (Westby, 2007), making it more complicated for nurse educators to determine minority students’ attainment of adequate nursing knowledge and functional skills. Student nurses of ELL populations may have adequate knowledge and skills that is not demonstrated adequately through NCLEX-RN test items; finding out their experiences with the test items may provide a deeper, perhaps overlooked, understanding that is missing from the extant literature.

Although student diversity is at the forefront of what a college and university desires, a diverse faculty is also necessary. The AACN (2017) states that faculty diversity
is racially skewed, showing that students of minority populations represent only 8.7% of faculty and 6.8% of deans. The skewed data may further explain some experiences of disconnect among student nurses of ELL populations. Writing in a different language also creates additional obstacles for ELL students that may hinder their academic performance in undergraduate programs (Salamonson et al., 2008). Found was that there are problems not only understanding course content in English but also expressing their knowledge in English (Weaver & Jackson, 2011).

Even though the AAMC Model’s purpose was to provide a framework for holistic admissions in medical colleges, its application to this study about nursing students is relevant in at least two ways. First, there is recognition of the value of diversity and inclusion. In particular, the model emphasizes various aspects of identity that should be taken into account when evaluating student performance. And second, the model helps educators recognize the variables that contribute to students’ thought process. Thus the AAMC Model serves as a useful theoretical frame for examining the ELL student population’s experience of NCLEX-RN test items.

**Interventions**

Interventions addressed in extant literature focus on cultural adaptation, language, standardized testing, and attrition. In this chapter, ways that faculty and students can help create a successful nursing school experience are suggested.

Areas that affect diverse individuals include, health disparities, socioeconomic differences, health-related risk factors, environmental degradation, healthcare segregation, discrimination, cultural experiences, linguistic barriers, unconscious bias, and the feelings of mistrust. The AAMC Model, described earlier can help faculty
understand how one’s experiences, attributes, and metrics shape an individual (AAMC, 2019).

Unconscious bias is a common identifiable human experience. Faculty members can understand their unconscious biases by taking the Implicit Association Test (IAT) which measures thoughts and feelings that are out of an individual’s conscious awareness and control (Project Implicit, 2019). This non-profit organization also offers consultation, lectures, and workshops surrounding implicit bias, diversity, inclusivity, leadership, application of science to practice, and innovation (Project Implicit, 2019).

The areas that affect student success in nursing school include interventions to help decrease anxiety and promote coping and management of issues related to English language learning (Khawaja et al., 2017). One of these interventions involved using social support to help with acculturation (Major, 2005). Social support can be utilized by introducing resources and interventions designed to build resilience, factoring into the nursing program coping and management of ELL issues, and promoting interaction between international and domestic students (Khawaja et al., 2017).

Cultural awareness measurement tools have been known to help identify social outlooks and gender roles (Lujan, 2008). These tools help individuals of ELL populations learn the cultural differences between their native culture and what they will be practicing (Olson, 2012). This potentially gives the student the chance to discover how answers may differ based on culture (Olson, 2012). Other interventions that have helped individuals of ELL populations learn cultural differences include role-playing, video clips, and interactive computer programs that offer a look at cultural norms in unfamiliar cultural interactions (Lujan, 2008).
Interventions closely related to academic performance include following a needs assessment of student nurses of ELL populations. These include language support, vocabulary journal, study groups, oral presentations, academic support, various teaching strategies, alternate testing and assessment methods, engagement of students in lecture and discussions, social support, monthly meetings with a mentor, and social activities that support culture (Brown, 2008). Additional literature suggested tutoring sessions with verbal, written, reading, and listening activities (Gudhe, 2003; Lujan, 2008). The tutoring through small group sessions focusing on translation and accuracy, faculty-guided NCLEX-RN practice sessions that decreased stress, and cultural adaptation to test questions (Olson, 2012).

One tutoring session consisted of exercises that were used to assess verbal, written, reading, and listening skills of student nurses of ELL populations (Gudhe, 2003). A template was developed and easy to adapt to different education levels for the tutoring process (Gudhe, 2003). This template consisted of a beginner level structured around foundational nursing skills, and an intermediate template structured around nursing content. The template could be used for small groups of students from the same or various cultures with a tutor offering appropriate feedback on the grammar, pronunciation, and course content clarification (Gudhe, 2003).

Another program called the Spanish-English Nurse Education program (SENE) helped student nurses of ELL populations involved a three-year program aimed at recruiting bilingual students into educational programs that lead to RN licensure (Bosch et al., 2012). During the first year, prerequisite classes of nursing took place, and at the end of the first year, students could take the Certified Nurse Assistant (CAN) certificate.
The second year of the study focused on classes towards Licensed Practical Nurse (LPN), and at the end of the second year, students could sit for LPN licensure. The third year of study was aimed at classes towards a degree, and at the end of the third year students could sit for the NCLEX-RN licensure.

Many colleges of nursing employ retention coordinators. Retention coordinators teach study skills and test-taking workshops while, working closely with struggling student nurses of ELL populations (Gardner, 2005).

The interventions that faculty can use are robust but faculty should understand their specific population of students before moving forward with measures to help students nurses of ELL populations. Likewise, the interventions offered to minority students vary in nature and sometimes depend on the specific needs of the identified population at a college or university.

Summary

Overall, the AAMC Experiences, Attribute, and Metrics Model helps explain the connection and pathway to success. The nursing profession has found difficulty in improving the nation’s minority workforce in nursing (Brown, 2008). Further exploration needs to occur in recruiting and retaining minority student nurses, specifically student nurses of ELL populations. Presently, there is limited understanding about student nurses of ELL populations’ experience of NCLEX-RN style questions. This limited understanding is affecting their success in nursing school and the NCLEX-RN. When individuals do not pass the NCLEX-RN, they cannot practice. Thus, the problem of healthcare disparities is perpetuated when individuals of minority populations do not attain licensure to practice as Registered Nurses.
Chapter III

Research Design and Methodology

History and Philosophical Background of Phenomenology

Phenomenology was developed as an alternative to the empirically-based positivist paradigm (Spiegelberg, 1982), and is popular in both the social and health sciences (Willis, 2007). Phenomenology is the study of “what gives itself” in lived or prepredicative experiences (van Manen, 2017, p. 813). The human being experiences of the world is through examining the ‘how’ of a situation, thus reframing the focus from what to how (van Manen & Adams, 2010).

During the middle ages, the term hermeneutics was referred to as the interpretation of the biblical text and was often used for translation purposes to make the biblical text understandable to the public (Vandermause & Fleming, 2011). This translational undertaking became a portion of the phenomenological movement of the 1800-1900s as philosophers began writing about the essence of experience as it shows itself (Vandermause & Fleming, 2011).

Today, hermeneutics describes the art or theory of interpretation, most commonly the interpretation of texts. This scholarly approach acknowledges the current position in time of researchers, participants, and phenomena (Ironside, 2011). In hermeneutics, there is not a start or finish that is ever tangibly defined; rather an experience of revolving inquiry of the phenomena (Diekelmann & Diekelmann, 2009; Gadamer, 1989).

To understand Martin Heidegger’s hermeneutics, understanding the work of Franz von Brentano (Edmund Husserl’s teacher) and Edmund Husserl (Martin Heidegger’s teacher), are necessary. Franz von Brentano was a German philosopher born in 1838
(Baggini & Stangroom, 2004). His contributions to philosophy were in metaphysics, ontology, ethics, logic, the history of philosophy and philosophical theology, and he was known for his notion of intentionality. Intentionality is very complex and describes mental and physical phenomena (Brentano, 2012).

**Husserl.**

Edmund Husserl was a student of von Brentano and is often considered to be the founder of the phenomenological movement and transcendental phenomenology (Vandermause & Fleming, 2011). Born in Prossnitz in 1859, Edmund Husserl studied in the areas of astronomy, mathematics, physics, and philosophy (Brentano, 2012). From 1884-1886 Husserl studied with von Brentano, whose lasting impact included von Brentano’s strict scientific, philosophical vision (Stanford Encyclopedia of Philosophy, 2016). In the early 20th century, Husserl was able to refine and modify transcendental phenomenology (Brentano, 2012).

Husserl’s transcendental phenomenology, also called descriptive phenomenology was developed because of Husserl’s disillusionment with natural science and the desire to study human experiences (Velarde-Mayol, 2000), thus creating the study of ‘lived experience’ or experiences within the ‘life-world’ (Koch, 1995). Transcendental phenomenology, more simply defined, is the philosophical methodology that seeks to comprehend human experience (Moustakas, 1994), without trying to give meaning to the human experience (Smith et al., 2009). Transcendental is also described as perceiving things newly as if it is an original experience (Moustakas, 1994).

Husserl advocated the use of phenomenological epoché or ‘bracketing’ meaning he felt it necessary for all preconceived ideas or beliefs to be put aside (Stumpf & Frieser,
Another way said, the researcher abstains from persuading someone’s understanding of a phenomena (Chan, Fung, & Chien, 2013). By bracketing, we “temporarily suspend what we think we already know and actively listen” (Hamill & Sinclair, 2010, p. 17). When practicing epoché, the meanings, uses, and connections between a person and an object are taken away (Carel, 2014). Therefore, ‘bracketing’ or epoché is the means to reduction, which leads to viewing the world openly. The epoché or ‘bracketing’ of preconceived ideas is where Husserl and his student, Martin Heidegger, disagreed.

**Heideggerian Hermeneutics**

Heidegger.

Martin Heidegger was born in Messkirch, Germany, in 1889 (Wisnewski, 2012). He studied theology and philosophy and followed the writings of Brentano and Aristotle (Wisnewski, 2012).

Unlike Husserl, Heidegger was interested in moving from description to interpretation (McConnell-Henry et al., 2009a). He moved away from Husserl when Husserl brought up phenomenological reductionism (or epoché). Heidegger’s focus was instead on developing meaning from ‘being’ (Mulhall, 1993). He described phenomenology as “to let that which shows itself be seen from itself in the very way in which it sows itself from itself” (Heidegger, 1962 p. 50). The notion of appearing can be described as to “shine forth, but detective work is required by the researcher to facilitate the coming forth, and then to make sense of it once it has happened” (Smith et al., 2009, p. 35).

**Being and time.**
Much of Heidegger’s thinking produced his work, *Being and Time* (1931). *Being* is undefinable, cannot be understood as a being, and cannot be derived from higher or lower concepts (Krell, 1993). Regarding *being*, humans can live either an authentic or inauthentic existence. Having authenticity means that one can be a master of their existence, while as inauthenticity means one has not chosen their existence (Wisnewski, 2012).

*Being is Dasein*, a concept that Heidegger uses to describe one’s existence or being in the world. *Being and Time* claims that as *Dasein*, we are defined by our way of existing (Zuckerman, 2015). “As ‘being-in-the-world’ *Dasein* is the ‘there’ or the realm wherein entities can disclose themselves and thus be discovered by human beings as meaningful” (Fastiggi et al., 2013, p. 349). A basic dimension of *Dasein* is the concept of ‘care’ (Watts, 1957), although not the type of care that is most common. This ‘care’ is in the sense of temporality which embraces its past, present, and future. Each of these structures are mixed-up in the human experience.

Furthermore, the three ontological structures existing in *Dasein* are described as the past (throwness), present (fallenness), and future (existence) (Watts, 1957). Thrownness can be described as a person being ‘thrown’ into a situation, or a society, or the historical period in which they were born. That person did not have a say of when and how they would enter into this world. Thrownness can be placed in the inauthentic realm of existence because a person has not chosen their existence. Contrary to this structure is fallenness, described as how we live our day to day lives which is mostly inauthentic because we are following and acting upon what others did before us. Another example of fallenness would be that we ‘fall’ into line, doing what everyone else is doing, such as
going to school, working, or engaged to be married. Lastly, is the existential realm, the only truly authentic realm because a person in this structure strives for uniqueness and looks at what potential they have in a world. These three structures constantly interweave through one’s life.

Heidegger used the term *fore-structure*, meaning that the way we interpret everything is based on our background practices (Ironside, 2011). The fore-structure can also be termed fore-having or having familiarity, or foresight or one’s perspective (Ironside, 2011). The way individuals interpret is continuously circulating because the fore-structure is continuously evolving. This circular motion of understanding is called the hermeneutic circle.

**Hermeneutic circle.**

The term “hermeneutic circle” is used across various texts and essentially describes a contextual and iterative pattern of thinking that is a meaning-making experience for humans. Rapport and Wainwright (2006) described the 'hermeneutic circle' as the means in which interpretation through understanding is accomplished by the process of endless re-examination of propositions. The hermeneutic circle can also be described as a reciprocal process with back-and-forth questioning leading to a circle of ideas (Tuohy et al., 2013). “The hermeneutic circle is part of the continuum of a tradition in the sense that the fore-meanings that we go back over in our interpretations are historical effects that are already the result of interpretations” (Warnke, 2011, p. 99).

Overall, the true meaning of the experiences are meant to be uncovered (McConnell et al., 2009b). During a hermeneutical analysis, the circle is a means for testing our interpretation of any given text (Warnke, 2011).
Hans-Georg Gadamer was a student of Heidegger who was born in 1900, in Marburg, Germany (Baggini, & Stangroom, 2004). Like his teacher, Gadamer believed that the degree of our understanding is part of our real-world involvement (Warnke, 2011). The hermeneutic circle is part of a continuum, and Gadamer places emphasis on the historical traditions handed down through the generations (Warnke, 2011). Described another way “the web of belief and practice in which we operate is one we inherit” (Warnke, 2011, p.99).

The background understanding of a studied phenomenon is one of the distinctions between Heideggerian hermeneutic phenomenology and Husserl’s transcendental phenomenology (McConnell-Henry et al., 2009a). For instance, Husserl asserted that all presuppositions that a researcher feels about the said question must be put aside, whereas Heidegger felt the researcher should bring previous knowledge and understanding (forestructure) in play (McConnell-Henry et al., 2009a). Today, several researchers have challenged Heideggerian philosophy, claiming that researcher involvement may skew the data (Oiler, 1982; Omery, 1983; Paley, 2005). Heidegger would challenge this response by saying that understanding is never without presuppositions (Johnson, 2000). To understand what is meant by presuppositions, we reflect on our history of nursing research. Although positivism has a place in nursing, the subjectivity of human experience has become increasingly respected as research moves to qualitative research (Dreyfus & Wrathall, 2008). Nurses seek meaning in their work, as evidenced by their willingness to share their experiences. These stories that nurse researchers bring to their
research can be called presuppositions, or presumptions. By using Heidegger to underpin this study, we are encouraged and allowed to use the presumptions as authentic components of the research at hand (McConnell-Henry et al., 2009b). Furthermore, our self-reflective experiences, along with the self-showing of a phenomenon, are woven together to produce a shared understanding (Gadamer, 1975).

Phenomenology deals with what is specified or identified, while hermeneutics means taking something or some object as something, then interpreting it, and finally understanding and translating the phenomenon (Caputu, 1984).

**Evolution of Heideggerian Hermeneutics in Nursing**

Patricia Benner introduced hermeneutic phenomenology to nursing practice in the mid-1980s (Benner, 1984; Benner et al., 1996). Since then, hermeneutics has been a significant contributor to nursing education (Diekelman & Diekelmann, 2009; Ironside, 2005).

Examples used in the classroom include combining analytical and interpretive research to design a doctoral course in fundamental research methods (Vandermause et al., 2014). Giles, Smythe, and Spence, (2012) used the hermeneutic methodology to research teacher-student relationships as it is experienced by lecturers and student teachers in pre-service teacher education programs. Darbyshire (1994) used a hermeneutic evaluation of a new course about understanding caring through arts and humanities. Diekelmann and Diekelmann (2009) question conventional pedagogies while discussing narrative pedagogy, which draws on past, present, and future pedagogies. Narrative pedagogies bring forth a richer way of thinking that gathers all pedagogies, into
conversations in new approaches to educating and learning (Diekelmann, & Diekelmann, 2009).

In this study, a Heideggerian hermeneutic approach was utilized to observe transcripts of in-depth audio-recorded interviews with ELL students who have taken the National Council of Licensure Examination for Registered Nurses (NCLEX-RN) style questions on nursing examinations. This approach was appropriate for use because deeper meaning was being sought to uncover perhaps overlooked understanding.

Petty et al. (2012) conversed that with a large variety of knowledge types, one would not always have an evident knowledge set. This may be true of persons of English Language Learner (ELL) populations. The Heideggerian approach examines the ways individuals go about understanding the world in which they live, moving beyond the structure of understanding to how the phenomenon of interest is interpreted (Benner, 1994). Ironside (2003) says that our willingness to listen and reply to diverse viewpoints about phenomena is essential to questioning.

Hermeneutic interpretive phenomenology typically comprises recurring observations and interviews (Benner, 1994). Subsequently, this approach allowed for exploration of student nurses of ELL minority population experiences when answering preselected NCLEX-RN style questions to uncover possible disconnects. This approach helped uncover what was concealed (Johnson, 2000). Hermeneutic phenomenology thrives in this particular study for two sound reasons. First, past empirical scientific explorations have already shown that student nurses of ELL populations struggle in nursing school and on nursing boards but we are still missing a big piece of how this continues to unfold. Second, in the qualitative realm, although Husserl’s descriptive and
Heidegger’s hermeneutic phenomenological approaches both seek to uncover the life world or human experience as it is lived, their philosophical orientations diverge. Heidegger believed that it is impossible to separate (i.e. bracket, epoché) one’s pre-understandings (i.e. presuppositions) and the history of one’s experience (Heidegger, 1962). We recall that with Heiddeger's approach, Being is Dasein and as Dasein, we are defined by our way of existing (Zuckerman, 2015). The many ways of experiencing the world are interpretable, both to participants and to analysts of participants’ experiences. It is important to understand “how” students’ struggles unfold and to interpret such experiences from our own experiences as teachers and as humans. This process, engaging hermeneutic phenomenological thinking and application, is a fitting way to address the gaps in understanding that continue regarding the education of ELL students.

**Locating the Researcher in the Research**

The exploration of literature in hermeneutic research involves providing contextual and provoking thought, which then becomes essential for scholarly thinking and emerging insights (Smythe & Spence, 2012). Along with this realm of thought, interpretive research involves identifying and examining personal biases and preconceived beliefs (Laverty, 2003). The following are my presuppositions regarding the phenomenon of student nurses of ELL population’s success on NCLEX-RN style questions.

I am a Registered Nurses (RN) with 15 years of experience. I hold a Bachelor and Master of Science in Nursing (BSN and MSN). I have been a nurse educator for 13 years. Through my work as a nurse educator, I have encountered many student nurses who are English language learners, some of whom make it through school and then fail their
nursing boards. Witnessing their efforts in becoming a professional nurse made me realize I should be doing more to help them be successful. I believe that nurse educators are missing a chance to intervene early on in a student’s program of study. This personal belief comes from years of experience in helping English language learners and witnessing bright student nurses of ELL populations struggle to pass the NCLEX-RN.

I was therefore inclined to explore the phenomenon of student nurses of ELL population success on the NCLEX-RN style questions. Many student nurses of ELL populations have expressed their strong desire to become a diverse nurse in a diverse nation. Reflecting on my biases and preconceived beliefs (i.e., I want student nurses of ELL populations to have success) could impact the research and interpretation. However, being cognizant of this is part of the interpretive process in Heideggerian hermeneutic research (Laverty, 2003).

**Pilot Study Summary**

A pilot study involving three participants was performed in the summer and fall of 2018. The purpose of the study was to explore how student nurses in a BSN program who self-identify as having English as a foreign language experience take NCLEX-RN style questions.

A qualitative design was implemented to obtain in-depth knowledge of individual experiences of taking NCLEX-RN style questions. Motivated by a phenomenological hermeneutic approach for qualitative research, open-ended interviews were used to explore the experiences. The study aims were to generate an interpretation of the experiences of student nurses of ELL populations who are answering NCLEX-RN style questions and to describe or identify the mechanisms they use to answer NCLEX-RN
style questions. Another aim was to consider potential interventions to prepare students for success.

Three students known to me were invited to participate in the pilot study, and all three participated. Each participant completed a one on one audio-recorded interview. Inclusion criteria included, being in a BSN program of study, and being an English language learner.

The interview guide (Appendix C) covered areas of the participant’s background information about where they were initially from and how long they have been in the United States. This question generally brought up how the participant came to the United States; two were immigrants, and one was a refugee. The participants were encouraged to speak without restrictions about their experiences. Subsequent questions depended on what each participant said.

The hermeneutic qualitative analysis was an ongoing process involving data collection and identification and discussion of the main themes by an analytical team of researchers (Crist & Tanner, 2003). The team of researchers (Appendix F) included the primary investigator, and other individuals who specialize in hermeneutic analysis. Each interview transcript was read repeatedly to grasp the meaning of the material. A framework for evaluating rigor was used to help guide the analysis (DeWitt & Ploeg, 2005).

Results revealed two main patterns, including 1) *Time as an Antagonist to Test Success* and 2) *Thinking All the Way Through as a Necessity to Learning*. *Time as an Antagonist to Test Success* revealed that participants seek time, time that they do not always have. *Thinking All the Way Through as a Necessity to Learning* revealed that
participants read through a question four to five times, translate and answer the question in their native language, and then they must translate it back into English and look for the correct answer in English. The number of extra steps is increased, and a plurality of thinking materializes. One participant states,

I was not able to translate them into my language…I feel it was just the way the question was presented. I had a very, very hard time understanding what it was asking. What do you really want to know?

The pilot study allowed for exploration of the phenomena and then grounded some of the theoretical possibilities reviewed early on in the research. By actively engaging in the pilot study activities, theories and frameworks were refined for the dissertation study of English language learner experiences of NCLEX-RN style questions. The pilot study also allowed further exploration into the types of questions that should be asked in the dissertation research study. These included further exploration of how students think through NCLEX-RN style questions by using sample NCLEX-RN style questions during the interview process.

**Methodology and Method**

**Design.**

The hermeneutic phenomenological design was used in this dissertation research study. This involved using face-to-face or phone, audio-recorded, transcribed, and interpreted interviews. Each interview transcript was transcribed verbatim with the audio interviews for the reliability of the narratives (Crist & Tanner, 2003). The interviews were transcribed using Temi.com and checked for accuracy by the Primary Investigator (PI) by comparing the transcriptions with the audio interviews.

**Recruitment, sample, and setting.**
Participants were recruited via email using a flyer (Appendix A) or in-person at a university or college of nursing in the United States. Inclusion criteria was determined so that the experience of a similar group of people could be obtained (Patton, 2002). The inclusion criteria in this study included the following:

1. Nine participants who self-identified as ELL and who live in the United States.
2. Participants were currently enrolled in a BSN program of study.
3. Participants were currently taking standardized computerized exams in nursing school.
4. Participants were willing to be in a one-on-one interview session at a neutral location that was decided on by both participant and researcher.
5. Participants gave permission and signed a consent form (Appendix B) in accordance with university and federal requirements that protect the rights and dignity of all informants.

**Human Participants.**

The data for this study was kept confidential to the degree allowed by federal and state law (see Appendix B). Published results do not identify the participant, and their name will not be connected with the findings. Information that identifies the participant may be released for internal and external reviews in certain situations. Reports of intentions to harm oneself or others must be reported by law. When the results of the research are published or discussed in conferences, no information will be included that would reveal the participant’s identity. If audio tape recordings of a participant are used for educational purposes, their identity will be protected or disguised. Information that
was acquired in association with this study will remain confidential and will be disclosed only with the participant’s permission or as required by law. The voice recordings and transcripts are kept on a password-protected computer in the locked office of the primary investigator. To maximize confidentiality, geographical locations and individual languages mentioned during the interviews were deleted from all transcripts before analysis. The primary investigator has the original transcriptions.

**Data Collection**

The data collection and interpretation phase was completed over a timeline of eleven months, beginning in February 2019. The nature of the involvement of the human participants was through one-on-one in-person interviews with student nurses in a BSN program who self-identified as having English as a foreign language (see Appendix D). Three of the student participants’ were interviewed over the phone using Temi.com, and those recordings were also transcribed verbatim using Temi.com. The interview session required mutual trust between the researcher and participant (Vandermause & Fleming, 2011), thus finding mutual ground to interview and laying out specific guidelines to the interviewee so that the dialogue could take place. The conversational dialogue between the interviewer and the interviewee allowed stories to form and an interpretation to begin while having a goal of making sense of the experience or phenomena (Vandermause & Fleming, 2011). This process of making sense of the experience or phenomena required both the interviewer and interviewee (Crist & Tanner, 2003).

Two primary questions were asked regarding experiences of answering NCLEX-RN style questions (see Appendix D). These included asking the participant to tell a story that may demonstrate their experiences when taking an NCLEX-RN style question, and a
time they answered questions where they struggled to understand what the question was asking. Subsequently, asking participants to delve deeper into individual responses was essential to have a full understanding of the experience. Throughout the interview process, the research questions developed as meanings appeared from several perspectives of both participants and researcher (Crist & Tanner, 2003). These perspectives helped develop what is called a ‘fusion of ideas’ which can happen as a narrative text emerges (Vandermause & Fleming, 2003). The ‘fusion of ideas’ can be described as the interlinking connection between two different positions (Gadamer, 1975). During the interview the interviewer guided rather than lead the dialogue, thus allowing data to be revealed (Dinkins, 2005). Additionally, field notes (Appendix E) were available to pick up observations that might not be audible in the recorded interview, such as spoken pitches, body language, and movements (Crist & Tanner, 2003). The field notes of this study revealed that participants’ body language appeared comfortable and engaged during their interview.

Each participant was interviewed once, with each session lasting approximately 20-60 minutes. The length of each interview was determined upon how much the participant wanted to explore the area of inquiry. As part of the trust between interviewer and participant, several disclosures happened. These included making the participant aware that they were free to end the interview at any time and that they did not have to answer any questions that they did not want to answer. All of the participants completed the interview without incident. Potential discomforts of the interview process could have included psychological or emotional discomfort while talking about thoughts and feelings surrounding an experience. However, no participants disclosed feelings of discomfort and
all participants appeared willing and comfortable during the interview process. There was a risk that the participant’s confidentiality would be broken, although as the investigator, I made every effort to keep the participant’s identity secure and confidential.

Nine participants were recruited to be in this study. Pseudonyms were chosen by each participant so that they could remain anonymous. Any information with the participant’s name on it and the participant’s voice recording were kept separately from the de-identified written form of the interview. The in-depth interviews were completed using a Heideggerian hermeneutic approach (Crist & Tanner, 2003). Before each interview, the participant was asked and gave permission (Appendix B) to record the interview.

**Data Analysis**

After data collection, the analysis phase pursued. The interpretive process for analysis involved a team of researchers (Appendix F) who are experts in hermeneutic interpretive phenomenology or the content area of inquiry (Crist & Tanner, 2003). The team of researchers provided insightful interpretation through debate, brainstorming, and discussion (Crist & Tanner, 2003).

Throughout the interpretive process, the interpretive team acknowledged any assumptions that may influence interpretations and recognized that within this philosophical framework, people are inseparably situated in their worlds (Merleau-Ponty, 1962; Richardson et al., 1998; Taylor, 1989).

The process of analysis was not linear and often had an overlapping of the following five phases (Crist & Tanner, 2003):
1. Phase 1: Early focus and lines of inquiry; included a critical evaluation of the primary investigator’s interview and observation techniques that came from reading the initial transcripts. Exploration of unclear or missing data was discussed further to help guide future interviews.

2. Phase 2: Central concerns, exemplars, and paradigm cases; included identifying central concerns, important themes or implications that were noteworthy. During this process, an interpretive summary of ‘the story’ by each team member provided a vehicle for discussion so that the interpretations could begin to form. The interpretations were refined through frequently written revisions by the investigator. Through this phase, exemplars and pattern cases were recognized.

3. Phase 3: Shared meanings; central concerns became rich and the investigator, and team members observed commonalities. The revised summaries were focused on and began to show connections, or patterns across stories (Diekelmann, 1993).

4. Phase 4: Final interpretations; informative notes and summaries continued to deliver strong arguments for existing stories and future sampling. Associated interpretive writing was discussed and helped to clarify the evolving interpretations.

5. Phase 5: Dissemination of the interpretation; refinement of interpretations was an “iterative process between the narratives, field notes, and team input” (Crist & Tanner, 2003, p. 204). The field notes (see Appendix D) were
available for use and the main notation on field notes showed that participant body language indicated that they were relaxed and engaged in the interview.

Imperative to the interpretation process was approaching the process systematically within a nonlinear methodology (Crist & Tanner, 2003).

Limitations

Expected was that participants would provide information that may be considered among most ELL students in the U.S. as the shared human experience. However, this study was limited to the geographic location of two universities, one private, and one public. Three of the nine interviews were conducted over the phone. Although phone interviews are acceptable in hermeneutic research, they did not work well for this study. There were difficulties in building rapport with these participants and there were complications in understanding one another over the phone at times during the phone interview. The team was also unable to visualize body language during the data analysis since field notes could not show this piece.

Evaluation of Rigor

The methodology and interpretive analysis was sound in this research study, which is why the concept of rigor was imperative to this study’s success. The DeWitt and Ploeg (2005) framework for evaluating rigor in interpretive phenomenology was used in this study and included five expressions to provide a robust framework for the interpretive phenomenology. The first two expressions, balanced integration and openness, address the research process used (DeWitt & Ploeg, 2005). Balanced integration included articulating the philosophical themes and their fit with the researcher and this research topic, 2) the in-depth intertwining of philosophical concepts within this
study’s methods and findings, and 3) the balance between the voice of the study participants and the philosophical explanation (DeWitt & Ploeg, 2005). To reflect, Heidegger reminds us that the hermeneutic as is defined as an interpretive fore-understanding of how the world operates on the level of Dasein (Grondin, 1994). van Manen (2017) described phenomenological study as what gives itself “as” a lived experience. We are reminded that Dasein in its very Being, that Being is an issue for it; although Dasein appears, it does not appear the same way as other things in the world (Øverenget, 1998). The second expression in the research process was the openness which was the transparent process that accounted for the multiple decisions made throughout the study process (DeWitt & Ploeg, 2005). During this expression of openness, the researcher reinforced the interest of the participants’ perspectives and kept in mind that no answer could be deemed correct or incorrect (DeWitt & Ploeg, 2005).

The last three expressions of the framework addressed the research outcome (DeWitt & Ploeg, 2005). Concreteness implied showing usefulness in practice and everyday life and was conveyed in these research findings by providing clear written examples that placed the reader concretely in the context of a phenomenon (van Manen, 1990). Resonance is defined as an epiphany or the sudden perception or intuitive grasp of the life meaning of something (DeWitt & Ploeg, 2005). An example of this is the moment when understanding the meaning of the text was placed alongside the reader’s self-understanding (Ray, 1994). Lastly, actualization showed that interpretation did not end when the study was finished. The interpretation will continue by readers in the future (DeWitt & Ploeg, 2005) since in hermeneutics, there is not a start or finish; there is revolving inquiry (Diekelmann & Diekelmann, 2009; Gadamer, 1989).
Moreover, rigor helped to avoid separating the account of hermeneutical research from its philosophical basis (Baker et al., 1998). Stated clearly, the researchers in this study remained mindful of reporting the learnings in a way that reflected the meaningfulness and rigor of the research” (Baker et al., 1998).
Chapter IV

Results and Discussion

This interpretation addresses the experiences of student nurses of English Language Learners (ELL) populations taking National Council of Licensure Examination for Registered Nurses (NCLEX-RN) style questions, as constructed from the hermeneutic analysis of the accounts of nine individuals. Following a hermeneutic phenomenological approach, interviews were conducted using an unstructured interview style. Participants recalled their experiences that lead to the NCLEX-RN answer they chose. Interpretive findings were derived from analyses across the verbatim de-identified texts of interviews. The participants may be understood as characteristic voices for student nurses of ELL populations in a Bachelor of Science in Nursing (BSN) program of study, in that common understandings were present during the iterative review of the texts. The interview process allowed for storied accounts to be constructed by the individual participants, thus bringing forth the fundamental nature of the experience. These findings help illuminate the experiences of student nurses of ELL populations taking NCLEX-RN style questions. The qualitative research methods used in this study yielded rich descriptions.

The overarching research design and methods utilized in this dissertation were completed using guidelines detailed in Chapter three. The interviews generated multifaceted statements from the participants, who explained their experiences of taking NCLEX-RN questions with a sense of appreciation of the phenomenon. The hermeneutic approach allowed me to bring my own experiences and understanding of the phenomena to the study. Further, it guided an interpretive commentary that answers the research
question and raises new questions for consideration in understanding nursing education with regard to English language learners.

The in-person interviewed participants were asked to read two NCLEX-RN style questions aloud. One question was a physiological NCLEX-RN style question, and the other was a psychosocial NCLEX-RN style question. Each in-person participant was asked to explain their experience that led to their answer. Participants were reassured that we are focusing on how they arrive at the answer and their thought process throughout, not whether they were able to answer the question correctly. Mention of this helped relax the participants so they could focus more on how they break a question down and arrive at the answer they did. Keeping the participants at ease helped the conversational dialogue expand without reservation. The calmness was elucidated by the participant’s relaxed body language and ease of telling their story. Some of the participants knew me before the interview. This relationship helped the participants feel more at ease and willing to open up at times. One participant in particular that I had never met was not very forthcoming and not willing to share as much. However, another student that I also had never met was very forthcoming and had much to offer. Three participants who had their interview over the phone did not participate in the question and answer of NCLEX-RN style questions. I did not ask them to do this exercise because I felt it more comfortable for the participants to do this piece of the interview in person.

Initially, while designing this research study, the goal was to focus on an area that was of high relevance, both personally and professionally. Through this research, contributions were made to an area that has little research. Given my current professional career as an assistant teaching professor in the college of nursing at a public institution,
my interactions with the ELL populations has proven to be an area of great importance. Specifically, working with this particular population in their senior-level capstone course led me to ask the question: what can I do to help this population of students succeed in nursing school, the NCLEX-RN, and their profession?

Listening to each participant share their experiences, aided in the realization that this is an area of research where participants are also highly passionate and eager. They, too, want to help others be successful in this profession.

**Participant Background Information**

A decisive sampling technique was used to recruit nine student nurses for this study. The participants were invited to participate through emailed flyers. The participants were assigned pseudonyms to preserve anonymity further. The self-chosen pseudonyms were Sura, Jane, Joy, Susie, Pink, Sandra, Kelly, Rose, and Cory. The participants were over the age of 18 and enrolled in a BSN program of study in at least a medical/surgical course with theory and clinical components. By having participants in at least a medical/surgical course allowed for the participants to have enough experience taking NCLEX-RN style questions. Participants were female, born outside of the United States, immigrated to the United States, and did not speak English as their native language. The participants came from countries such as Kenya, Nigeria, and Zambia. In fact, eight out of the nine participants came from Africa. English was the primary language in many of the countries, however, none of the participants spoke English as their primary language. In fact, the majority of these participants never spoke English in their home. They learned it a little in school but did not use it outside of school until they came to the United States, and even then many of the participants still did not speak
English in the home. Some of the languages most spoken in their native country were French, Kituba, Katwe, Zambia, and Lingala.

**Brief images of the participants.**

The participants were each asked to begin by sharing a bit about themselves, such as their background of when they came to the United States, how long they have been in the United States, how long they have spoken English, and who taught them English. They were encouraged to share as little or as much as they felt comfortable sharing.

**Table 3**

*Participant background data*

<table>
<thead>
<tr>
<th></th>
<th>Years in the United States (5-10, 11-20, 20 plus)</th>
<th>Years speaking English (0-10, 11-20, 20 plus)</th>
<th>Primarily speaks English in her home?</th>
<th>Taught English in native country, school</th>
<th>Some primary school education in United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sura</td>
<td>11-20</td>
<td>11-20</td>
<td>no</td>
<td>no</td>
<td>Yes</td>
</tr>
<tr>
<td>Jane</td>
<td>11-20</td>
<td>11-20</td>
<td>no</td>
<td>no</td>
<td>Yes</td>
</tr>
<tr>
<td>Joy</td>
<td>5-10</td>
<td>5-10</td>
<td>no</td>
<td>yes</td>
<td>No</td>
</tr>
<tr>
<td>Susie</td>
<td>5-10</td>
<td>5-10</td>
<td>no</td>
<td>yes</td>
<td>No</td>
</tr>
<tr>
<td>Pink</td>
<td>11-20</td>
<td>20 plus</td>
<td>yes</td>
<td>yes</td>
<td>No</td>
</tr>
<tr>
<td>Sandra</td>
<td>5-10</td>
<td>5-10</td>
<td>no</td>
<td>yes</td>
<td>No</td>
</tr>
<tr>
<td>Kelley</td>
<td>5-10</td>
<td>5-10</td>
<td>no</td>
<td>yes</td>
<td>No</td>
</tr>
<tr>
<td>Rose</td>
<td>5-10</td>
<td>5-10</td>
<td>no</td>
<td>yes</td>
<td>No</td>
</tr>
<tr>
<td>Cory</td>
<td>5-10</td>
<td>5-10</td>
<td>no</td>
<td>yes</td>
<td>No</td>
</tr>
</tbody>
</table>

**Results and Interpretation**

Through the interpretive process, a team of researchers gathered often to discuss the study. The researchers were experts in hermeneutic interpretive phenomenology or the content area of inquiry. Two members of the research team were the primary individuals that helped with the confirmation of ideas, findings, and procedures. During
the analysis of the data, the research question was repeatedly considered: How do student nurses of ELL populations experience NCLEX-RN style questions?

In this chapter, the findings of the study are shared. Throughout the findings, my experiences as a researcher were just as important as the experiences of the participants. With this in mind, my findings are organized and reported professionally, but also with my interpretative insights and commentary.

**Patterns and sub-patterns.**

Designated in Chapter Three, Crist and Tanner’s (2003) process of analysis was used to interpret the interview data of the nine participants. The student nurses of ELL populations shared their stories after having experienced NCLEX-RN style questions in nursing school. Through a literature review, we were already expecting students to feel the disadvantages of translating English and medical words. The study was to go deeper than this known knowledge.

After a storied account was transcribed and checked for accuracy against the audio, each reader first did an overview of the text to become familiar with the phenomenon taking place. Then the transcription was reread, looking for words, phrases, and comments that stuck out as having meaning. These areas were highlighted for ease of finding them later. The readers stayed alert to leading questions by the interviewer, and the spontaneity of the interviewee’s responses. A response to a leading question may have received less attention from the reader versus responses that were not directed or led by the interviewer. The reader also paid particular attention to the comments that appeared to be new ideas of experiential versions as opposed to comments that were already considered widely known facts.
Following the readers’ first take on each transcription, the team came together to share their interpretative findings and to open up a dialogue about the interpretations. Ideas were pulled from the text, and working patterns were developed from areas of the text where several participants had a similar experience. Those working patterns were named and became more explicit as future readings of the same or other transcripts occurred. Once patterns showed themselves, I was then able to retell the story of the phenomenon of interest through using the text for specific language that illustrated what was being seen.

One of the interpreters on the research team described the experiences of taking NCLEX-RN style questions as a ‘way of thinking’ versus ‘what one is thinking.’ The interpretations indicated three patterns and several sub-patterns.

**Table 4**

**Patterns and Sub-patterns**

<table>
<thead>
<tr>
<th>Pattern 1: <em>Time as an antagonist to NCLEX-RN success</em></th>
<th>Pattern 2: <em>Situational context as a way of thinking</em></th>
<th>Pattern 3: <em>NCLEX-RN as a deterrent to ELL diversity in nursing</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-pattern 1: <em>Thinking through: Not enough time</em></td>
<td>Sub-pattern 1: <em>NCLEX-RN style question design: Success in context</em> Sub-pattern 2: <em>Imagining a situation: ‘thinking out’ versus ‘being in’ a situation</em></td>
<td>Sub-pattern 1: <em>Socio-cultural perspective: One’s cultural background can change the answer</em> Sub-pattern 2: <em>Emotional expression as an aspect of culture</em></td>
</tr>
</tbody>
</table>

**Pattern 1: *Time as an antagonist to NCLEX-RN success***

*Time as an antagonist to NCLEX-RN success* continued to be an overarching pattern that appeared from the transcripts. With this pattern came the sub-pattern

*Thinking through: Not enough time.* Like the pilot study revealed, time was expressed as
a problem when taking exams. Many students expressed that they were some of the last ones in the classroom to finish an exam and often ran out of time or felt they were rushed. The following is a description of this pattern.

**Sub-pattern 1: Thinking through: Not enough time**

Every participant in this study spoke about time being a factor in their experience while taking an NCLEX-RN style exam. Sura speaks several languages, and she finds herself going between her various languages when she writes out answers. For instance, she may be thinking of the answer in one language and writing it down in English. However, when she writes it in English, the wording is incorrect because she is translating it differently in her mind. Subsequently, when faculty read her answer, it is difficult to understand because she has mixed up many of the words in her sentence to read like it would in a different language. This finding supports the problems not only in understanding course content in English but also in expressing knowledge in English (Weaver & Jackson, 2011). Not only does it take time to translate, but it takes just as much time if not more time to express in English.

Timing is an experience other participants also shared: “I…translate into my language…So it takes me time to finish…homework especially” (Joy: l:52-43); “it was a lot of wording…and long sentences…and it’s taking me time…I am always the last” (Susie; l: 201-202; 218); “Well I was probably last person taking the tests…you just gotta take your time…time is definitely key” (Sandra; l: 306-307; 312; 324); “Timing is one huge thing (Susie; l: 499); “I take longer with my exams because I have to actually in my mind translate it into my own language” (Pink; l: 89).
The amount of time Sura spends in translation also caused increased anxiety; “One of my fears is like if I read a question and I have limited time… do I have time to read it? And then it gives me anxiety” (Sura; l: 558-560). Anxiety is an area seen often in nursing students due to the stress, academic workload, and progression standards (Quinn & Peters, 2017). The additional burden that student nurses of ELL populations may experience came up often in this study.

**Pattern 2: Situational context as a way of thinking**

**Sub-pattern 1: NCLEX-RN style question design: Success in context**

Several students described their experience of taking NCLEX-RN style questions as having trouble understanding English words that are not medical words. “I’ll come across words that I don’t understand…big words…I’m not talking about medical terminology.” (Susie; l:455,458). “I wasn’t able to like quite understand that keyword that made the whole question focused” (Jane; l:60-61). “Try to understand what exactly it is you’re asking because it’s not a direct translation…sometimes you may say in English it means something different in (participant’s language)” (Pink; l: 90-91).

Sura described how one word can change the meaning for her, and that more context helps her decide how to respond in a situation:

Something I also face when it comes to ah ‘bleeding.’ And bleeding doesn't necessarily mean bleeding in our language. I mean theirs have different words for it. So I guess explaining the severity of the bleeding would make more sense for me to just easy bleeding when it comes to NCLEX type questions. (Sura; l: 339-343)

Kelley had a similar story when translating word for word:

What I used to do is translate word by word and then I’ll get my answer wrong. So when I read now...try to translate whole sentence...why sometimes might get those wrong because it's only one word in English. But in my language that one word can mean different things (Kelley; l:69, 84-87).
Pink discusses her experiences in English words sometimes having a different meaning in her native language:

If you’re telling me to…give an injection subcutaneously…in my language, if you try to translate it, it’s actually ‘take’…So if I translate it directly and I see the word give, then when I translate… it’s…’take’. It would be, it would mean ‘take’ instead of ‘give’. (Pink; l:99).

Regarding NCLEX-RN style questions, Sandra first brings up the priority questions. Such as ‘you have four patients; which one do you see first, second, third, and fourth?’ She feels the way a question is worded sometimes makes it difficult to know how to respond “what exactly it’s asking about” (Sandra; l:122).

Throughout this study, the findings show that student nurses of ELL populations do better when there is more context, which may be why the participants felt they did better in the clinical setting. Participants’ experiences of processing information in the clinical setting include, “processing is much quicker when I’m having a conversation” (Pink; l:164-165); “so for me being in the environment, it is so much better than you know, than reading a question and stuff like that” (Pink; l: 178-180). When receiving report from a nurse, one students says “when they are giving out reports, it’s easy for me. I’m able to follow through. Yeah. And it really does give you the whole brief stay of the patient…it’s easy for me to understand” (Sandra; l: 255-259); “it’s so different...clinicals are perfect” (Kelley; l:170).

The literature to date leads us to believe that perhaps wordy scenarios intended to provide context may further challenge student nurses of ELL populations rather than accurately assess their knowledge. However, Pink describes her experience with case studies that provide more context in the following excerpt:

The case study, I have the entire picture, and then we go through one, two, three, four, five different things. You will go through assessments, you go through
medications… I like case studies because it give me an entire picture… But you give me a question asking me about someone who’s heart rhythm is like different and what would you do that it’s like, okay, what was the first things the nurse should do? That’s very limited information you just gave me there. Like, what’s going on with the person? How old are they? You know, what’s the medical history… and I know they can’t give us case studies as questions, but case studies are good. I like a lot of information. I think a lot of information helps you to um make better decisions (Pink; l: 234-237).

After analysis of the data in this study, it appears that more context may indeed help clarify a situation and may increase one’s understanding of what an NCLEX-RN style question is asking.

**Sub-pattern 2: Imagining a situation ‘thinking out’ versus ‘being in’ a situation**

*Thinking out* relates to the moment a student places themselves mentally into a question. They imagine themselves in the clinical setting, in that exact scenario. *Being in* relates to being physically in the clinical setting.

*Thinking out.*

When I ask Sandra if she needs to go to a different place (a different place in her head during the test) when answering questions, she says, “Yes, sometimes I get out of the question like okay… what is exactly happening? You have to think out and then come back to the question” (l: 293-295).

Sura describes answering questions “without completely understanding the question because I might may have misinterpreted one of the definitions while I was translating it from English to one of the languages to back to English” (Sura; l: 184-188). Sura is describing an experience that we often saw during this study.

Student nurses are encouraged to mentally place themselves in the clinical setting when answering an NCLEX-RN style question. However, the added difficulty of translating words and possibly misinterpreting what a question is asking is where the
thinking out becomes more difficult. The student needs to imagine themselves in the clinical setting without literally being there.

Being In.

Currently, learning how to take the NCLEX-RN can be ongoing and complex. My colleagues and I have often said, ‘it’s an art.’ Processing can take time in the clinical setting, but we are learning that in the clinical setting our participants believe they can process better because of the context of their environment and surroundings. Not only do the participants believe they perform better in the clinical setting, but their instructors believe this as well. Students receive good marks on evaluations from their instructors and feel they have a good understanding. Sandra believes this is because she has it “right here and have the patient and everything...Because everything is hands on like you able to visualize. Yeah. You can see...You can see, yeah the context” (Sandra; l: 224-227). These findings again confirm that context is playing a role in practicing correctly in clinical. Sandra also feels comfortable when receiving a report from the nurses on the floor; “I’m able to follow through. Yeah. And you really does give you the whole brief stay of the patient, yeah, it does. It’s easy for me to understand” (l: 257-259). One participant describes this phenomenon of ‘being in’ as “processing it is much quicker when I’m having a conversation. But when I am in an exam and I’m writing...processing...it takes a lot longer.” (Pink; l: 165-166). She goes on to say, “so for me being in the environment, it is so much better than you know, than reading a question” (Pink; l: 178-180).

We are learning that the clinical setting is an excellent area where students can practice ‘being in’. However, what about simulation? Research tells us that simulation
Pink discusses her experience of simulation in the below excerpt:

…simulations. We had a scenario, and I was like oh my gosh, I don’t know. What are we going to do? I don’t know how to do this. How are we supposed to do this? Then you get into clinical settings, and it’s like, okay, let’s go do this. For example, straight cathing an 18-month-old little girl… I didn’t know I could do it. Give it to me in simulation, I’m all shaky, and I’m like, oh, I can’t do this. Give it to me in the clinical setting; it was like one, two, three, bam, it’s over. We did it. (Pink; l: 281-289).

Defining what ‘being in’ exactly means in both the clinical and simulation setting is an area of research that needs to be studied further. What we are realizing is that context continues to come up as a necessary component in decision making.

**Pattern 3: NCLEX-RN style questions as a deterrent to ELL diversity in nursing**

Mentioned earlier was that the diversity of the nursing workforce is far behind that of the general population (Villarruel et al., 2015), with nearly 20% belonging to an ethnic or racial group (Budden et al., 2016). Also stated was that the United States needs more racial and ethnic diversity in the nursing workforce because it is linked to improved access to care for racial and ethnic minorities, enriched communication, and better patient outcomes (Grumbach & Mendoza, 2008; Institute of Medicine [IOM], 2004). Lastly, the Association of American Medical Colleges (AAMC) Model helped recognize what shape’s an individual (AAMC, 2019). From the analysis of the transcripts, two sub-patterns came forth that may help us understand further why the NLCEX-RN style questions are not helping increase the diversity in nursing. These two sub-patterns follow.

**Sub-pattern 1: Socio-cultural perspective: One’s background changes the answer**

Participants discussed how their cultural background may influence the answer they choose. “Coming from a different…cultural background something may not be as
significant or maybe more significant to me than what...we are taught in the program” (Sura; l: 334-338); “It’s different from how I will see the solution based on my own background and my own culture…the way I understand the question and how I see it is different from how the other students from here (the United States) see the question” (Susie; l: 265, 270); “so in American culture it’s this… So I have to follow this… Versus in another culture, it’s something else” (Sura; l:687-689).

Established is that an individual’s beliefs are influenced by one’s family, culture, and social status (IOM, 2004). Additionally, AAMC Model shows us that educational background and cultural beliefs can shape how one learns (AAMC, 2019). Smythe and Spence (2019) bring light to the phenomenon of cultural influence in word interpretation by saying one’s own life experience can alter the interpretation. For example, Sura described a cultural difference:

Well, I thought it was very interesting how in America the NCLEX would actually openly say you know a male needs a male catheter inserted. In another country, if when you were practicing medicine, male catheter is inserted by a male physician…you don’t have females doing male stuff. I mean like genital, your area is completely off the guard when it comes to you know females. (Sura; l:424-430).

Pink was also able to convey how one’s culture can alter how they answer or process a question. “Females are like property, so you belong to...and all that sort of stuff, so you don’t really get to make decisions on your own” (Pink; l:51-53). This is another example of culture affecting the way one processes information, whether it’s causing one to pick one answer over another or it is taking more time to process already complex NCLEX-RN style questions. We know from extant literature that culture is essential to health and includes integrated patterns of human behavior, which include language, communication, customs, beliefs, and values (Cross et al., 1989).
One participant was able to describe her experience using technology, which was a cultural shift for her. She mentioned that where she is from, she “wasn’t exposed to technology” (Susie; l: 100-101). Coming to the United States and being introduced to computers and other technology was difficult for Susie to adjust. “If I have any…problem on the computer, I don’t know how to navigate my way” (Susie; l:392-393).

Two participants discussed their experience of answering NCLEX-RN style questions related to Lesbian, Gay, Bisexual, Transgender, or Queer (LGBTQ) individuals:

I noticed though the subject matter here (in the U.S.) is flat out there. Like in some cultures, you are not going to get an NCLEX question asking about how are you going to um address a bisexual individual because being bisexual is banned completely and is punished by death in certain countries. (Sura; l: 450-454)

These proceedings have shown us that multiple experiences go into students’ thought process. Next, the following two NCLEX-RN style questions were used during the interview process for several participants. One question is a physiological NCLEX-RN style question, and the other question is a psychosocial NCLEX-RN style question. The experiences of answering these two questions, described below, further demonstrated how a student experiences NCLEX-RN style questions.

Participants read the following physiological NCLEX-RN style question.

The nurse is caring for a client who has just had implantation of an automatic internal cardioverter defibrillator. The nurse immediately would assess which item based on priority?

a. Anxiety level of the client and the family
b. Presence of a medical alert card for the client to carry
c. Knowledge of restrictions with post discharge physical activity

d. Activation status of the device, heart rate cut off and number of shocks it is programmed to deliver. (correct answer)

(Silvestri, 2013)
Sura struggled immediately with choosing between answer A and answer D. She stated she first visualized the question. She became stuck though on the ‘anxiety’ piece. She felt she would answer the question very differently in her native country:

I visualize stuff, um…or they are going through a metal detector that might buzz off, and then anxiety level of client and family. Well, I guess it is important...like… Well then again, it’s tricky because we have learned that the patient must be calm and collected to be able to receive any information. So you want to address anxiety first. So now, I’m in dilemma whether or not do I want to address the patient’s anxiety level or do I want to check if the device is even working correctly. Everything is important. (Sura; l: 510-518)

Sandra discussed post-care and teaching as the most important, and she stated that her priority would be to teach. But then she also mentioned anxiety. “Because I want them to be, I want my patient and the family to be relaxed. So whatever education I’m going to give, I want them to be at their best so that they can receive information (Sandra; l: 188-194). Sandra answered this question incorrectly; the correct answer dealt with making sure the device was working appropriately. Ultimately, Sandra picked a psychosocial answer instead of the correct physiological answer.

Jane had a similar experience when answering the same question. She pointed out the word priority as a keyword, and she also knew that Maslow’s should have been used in this question, but she went in the direction of a psychosocial answer, instead of the physiological answer thus getting the answer incorrect.

Participants read the following psychosocial NCLEX-RN style question.

A client says to the nurse, the federal guards were sent to kill me. What is the best nursing response to the client’s concern?

a. I don’t believe this is true
b. The guards are not out to kill you
c. **Do you feel afraid that people are trying to hurt you? (correct answer)**
d. What makes you think the guards were sent to hurt you?
Sandra immediately recognized that the first answer, “I don’t believe this is true,” would not be therapeutic so, she eliminated that answer. She also believed the last answer was judgmental “What makes you think that guards were sent to hurt you?” She ended up going with the correct answer to this question, letter C. “Do you feel afraid that people are trying to hurt you?

Pink discussed the issue of using direct translation (word for word) with the psychosocial NCLEX-RN style question. “So if I do a direct translation in my native tongue, it’s like, oh my God, somebody scared that somebody’s trying to kill them. And me being responsible for them, I got to figure out a way to help them” (Pink; l: 391-393). Pink ultimately chose the correct answer.

**Sub-pattern 2: Emotional expression as an aspect of culture**

Emotion came up often in the interviews in terms of expression. Many of the participants do not show emotion the same way natives of the United States tend to show, so coming here and witnessing and immersing themselves in this culture has shown them many ways to react in certain situations.

The nature of culture changing one’s answer selection is complex. One participant described the psychosocial NCLEX-RN question number two from above. She stated that in her native country, the correct answer would have been letter A, versus the correct answer in the United States as letter C. Pink has had to “let go, most of your cultural practices” of what she knows to get the answer correct (Pink; l: 444). Another participant ssid, “this is not my country, and this is nursing...And even after I speak it (NCLEX-RN style questions) out loud, with some friends like oh, I would have picked that answer too
Joy says, “you need to be in the system to know how to, how it works. Where we are coming from, there is not lawsuits like here” (Joy; l:255-257).

Sura felt she is less emotionally attached to the English language versus her native language:

Mother tongue with your mom, you know it would be like more of alert need to watch how you speak how you come across, and in our culture, it’s we don’t… it’s they don’t show like love and look the way American parents show love. It’s more of like a top-down approach, and it’s linear depending on…It’s parallel depending on like a certain situation, but parents don’t show emotional connection or affection to the children the way you (Americans) do. (Sura; l:100-107)

Love is a concept that has been discussed by researchers for years. Love is defined as “a diverse constellation of subjective connotations, experiences, and expressions, which vary from person to person, from culture to culture” (Karandashev & Victor, 2019, p. 32). This emotional connection was not something that came forth often during the literature review.

Joy and Pink described emotion in a typical conversation with somebody in America; “if you want to pass your message, you know, if you are passionate about what you are saying, they tend to look and see we are angry. We are not (angry)...if anything, we are passionate about what to talk about” (Joy; l: 42-45). Pink also describes a similar experience. When she expresses herself in English, “it can be a problem because it might seem like you’re coming across as aggressive or, or you’re upset about a situation when it’s like, no, you’re not upset about the situation” (Pink; l: 198-201).

**Commentary**

Thinking through information can take time and can involve various steps for student nurses of ELL populations. Every student nurse spoke about time being a significant factor during their experiences of taking NCLEX-RN style questions. What I
found in this study is that time stands out as significant and it is often overlooked in the literature. When thinking of time, I went back to what Heidegger said about Dasein. We recall that Dasein is being, and by that we mean being in the world. According to Dasein we are defined by our way of existing (Zuckerman, 2015), and within Dasein we have the past (thrownness), present (fallenness) and future (existence) (Watts, 1957). We are reminded that these three structures interweave constantly through one’s life. What is most difficult to understand here is that Dasein is not temporal for the reason that it exists in time, but because it is very being is rooted in temporality: the original unity of the past, present, and future. What we see here is that history matters in every decision one makes and time is an aspect of what it means to be and what is significant in a moment.

Yes, time is much deeper than chronological in nature but let’s not forget that chronological time is still an issue for ELL students. We must understand though that the increased chronological time it takes to answer a question is only the surface of the phenomena of ELL’s success in answering NCLEX-RN questions. To grasp why it’s taking longer to answer these questions, we look at the interweaving of the past, present, and future within Dasein. Time is going back to one’s history, heading towards one’s future, and being in the present. This movement is something that happens with everyone. However, it’s coming to light, its impact, is seen emphatically with our English language learner student nurses.

Situational context as a way of thinking was brought forth in this study as a way of thinking. When a student becomes stuck on an unfamiliar word, they may struggle to refocus their energy into moving forward, especially when there is no back-tracking to previous questions on the NCLEX-RN. I found clarity through Heidegger’s writings
regarding word by word translation. Smythe and Spence (2019) provided a quote from a doctoral student regarding being stumped by an unfamiliar word:

For our homework we were asked to read that article with a word in the title that none of us knew. We all went to our little spots to read it and I just kept reading. A while later, someone came out and she said, “I can’t read this because I don’t know what this word means.” She had let herself get stuck because she didn’t know what the word meant. Whereas I didn’t have a clue what it meant but I kept reading. And by the end I sort of had a sense (Liz; Smythe & Spence, 2019).

The woman above could not understand this one word in the whole article, which caused her to get stuck. What we learn from this is that it takes more than a single word before understanding can happen. Meaning can form when there is a context from which the meaning begins to be determined (Smythe & Spence, 2019).

Extant literature reveals that many nations utilize essay questions as primary evaluation methods, whereas the United States uses various methods of evaluation. These variations in how a country or culture evaluate appear to affect how student nurses of ELL populations in this study experienced testing in the U.S; “It was stressful because how they teach is so different from home” (Sandra; l: 48-49)… “We took exams…very different (from here). Cause there’s nothing like multiple choice. It’s just um, you have to write out your answers” (Sandra; l: 66-70).

By using this realm of thought, I cannot help but think about the Next Generation NCLEX (NGN). The NGN is currently a new project that is being developed and tested by the National Council of State Board of Nursing (NCSBN). The idea behind NGN is finding a better way to close the gap between what is measured on NCLEX-RN and what is taught in nursing school (NCSBN, 2019). The model applies specific concepts of the Clinical Judgment Measurement Model, a model that will help measure individual steps of clinical judgment using realistic, complex clinical scenarios (NCSBN, 2019).
Currently, the NCSBN will continue to use the adaptive exam until new methods are ready. The NCSBN is charged with making the NCLEX-RN. Items and policies are continuously reviewed for accuracy and entry-level nursing practice (NCSBN, 2019). Entry-level nursing practice is defined as a nurse who has no more than 12 months of experience in the practice setting (NCSBN, 2019). Expert nurse volunteers are used as subject matter experts on the NCLEX Practice Analysis Panel and the NCLEX Knowledge, Skills, and Abilities Panel (NCSBN, 2019). Due to the ever-changing healthcare field, practice analysis studies are done on three-year cycles, which helps with the validity of the items chosen on the NCLEX (NCSBN, 2019). Surveys are sent out to first-year nurses, which include the analysis items. These surveys serve as guides for what remains on the NCLEX. (NCSBN, 2019).

NCSBN test writers are volunteer nurse educators with at least a Master’s of Science in Nursing who are familiar with entry-level nursing knowledge, and the reviewers include nurses who are employed in clinical settings (NCSBN, 2019). The NCSBN has strict guidelines for volunteer participants who will write test questions, but research shows that nurse educators within colleges of nursing have much variability in how they go about writing test questions (Bristol et al., 2018). Nurse educators should ensure that testing policies are in place within their college of nursing.

Imagining a situation ‘thinking out’ versus ‘being in’ a situation is an experience that many students experienced during this study. During this thinking out moment is perhaps where the thought process is becoming altered. Are the students struggling in creating the situation in their mind? Perhaps the question is not deep enough, meaning the question may not provide adequate context. Pink says, “when you are in the moment and
the environment you can, you have so many different cues you can draw from” (Pink; l: 167-1678). Maybe the answers are not thorough enough? We do know that this population of students want to have more context in their questions and answers.

Recalling Smythe and Spence’s (2019) study, participants struggled to understand certain words from a Heideggerian text, which caused a loss in meaning. To more clearly understand a word, the reader must use a “sentence, the paragraph, the chapter” to put that word into the context in which it is meant (Smythe & Spence, 2019, p. 4).

In contrast to ‘Thinking out’ is ‘Being in.’ Are students able to understand things better in the clinical setting because they are living it right then and are able to ask questions? ‘Being in’ may be supported very well by the Next Generation NCLEX when designed in a way that provides the appropriate context. The NGN currently is researching measurable actions such as forming hypotheses, prioritizing them, generating solutions, and then taking action (NCSBN, 2019).

Previously mentioned was that simulation could be used up to 50% of a student’s total clinical hours. However, more research needs to be pursued regarding how student nurses of ELL populations experience simulation. Although significant, this is an area that was not of great focus during this study.

Does the NCLEX-RN truly capture what it could for the ELL population? We are finding a movement beyond translating words. Participants are transitioning their thought process during the test, but in a way that at times leads to the wrong answer. There appears to be this constant struggle, balance almost, when trying to answer NCLEX-RN style questions. This struggle comes up again and again with the participants in this
study. We can better use this information if we recognize how others define language, communication, customs, beliefs, and values.

When discussing Heidegger’s words, one study participant said, “it was clear to me that it wasn’t just a different language; it was a whole different world culturally and philosophically” (Smythe & Spence, 2019). Another participant says it must be hard for people that do not know the meaning of certain words (Smythe & Spence, 2019).

Just as those who read and try to understand Heidegger, perhaps those who try to understand any culture other than the one to which they are native will feel unclear on what is being said or in the case of NCLEX-RN style questions, what is being asked? Sura provides an example of how one’s culture can cause a student to pause and question how they process things. Sura describes working with male patients in the clinical setting. In her native country, a woman would never bathe a male patient, nor would a woman insert an indwelling ‘foley’ catheter into a male. She has found herself in this very situation of having orders to insert catheters in a male, or the necessity to bathe a male patient. However, she has learned in her studies that it is acceptable to insert foley catheters in male patients as well as to bathe them. This simple example could give some insight into how one’s cultural background could alter their thought process. Even when a student gets the correct answer, much time may have been put into processing through the question. Are we even asking the right questions? This example tells something more about how all nurses are educated and tested.

We know that culture is essential to health and includes integrated patterns of human behavior, which include language, communication, customs, beliefs, and values
(Cross et al., 1989). We can better use this information if we recognize how others define language, communication, customs, beliefs, and values.

Cultures vary, and the United States is a culture of great diversity. For example, some cultures do not discuss Lesbian, Gay, Bisexual, Transgender, and Queer (LGBTQ), and sometimes it’s illegal to identify as LGBTQ. When answering questions regarding LGBTQ, some students may need to pause and really process the information being given. This pause takes time, and time could cause anxiety, and anxiety could lead to wrong answers.

The nurse is caring for a client who has just had implantation of an automatic internal cardioverter defibrillator. The nurse immediately would assess which item based on priority?

a. Anxiety level of the client and the family  
b. Presence of a medical alert card for the client to carry  
c. Knowledge of restrictions with post discharge physical activity  
d. **Activation status of the device, heart rate cut off and number of shocks it is programmed to deliver. (correct answer)**

(Silvestri, 2013)

When looking at decision making on NCLEX-RN style questions and ultimately in the clinical setting, the American Nurses Association (ANA) is the trusted guide. The ANA helps guide nurses through the professional standards such as the Code of Ethics for Nurses, Nursing Standards, position statements that the profession may have, and the Principles of Nursing Practice (American Nurses Association, 2019). Could Sandra be altering her thought process to try to think more like a native of the United States? While doing this though, she is not following Maslow’s hierarchy of needs. Maslow’s Hierarchy places basic human needs, such as air, food, and water above psychosocial needs (Schulte, 2018).
A client says to the nurse, the federal guards were sent to kill me. What is the best nursing response to the client’s concern?

a. I don’t believe this is true  
b. The guards are not out to kill you  
c. Do you feel afraid that people are trying to hurt you? (correct answer)  
d. What makes you think the guards were sent to hurt you?

Silvestri (2013)

The psychosocial question appeared easier for Sandra than the physiological question. However, not for the reason of not knowing the physiological content. When answering the physiological question, she appears to focus more on emotion and educating the patient, both of which are very important but are not a priority for question number one. The overload of emotions/feelings/reactions may be causing student nurses of ELL populations to think so deeply into a question that they choose incorrect answers. This student population may think more about the psychosocial aspect, perhaps because they have found how important this piece appears to be in one’s everyday lives in the United States.

These situations can cause students to feel uncomfortable, which supports the literature regarding student nurses of ELL populations feeling self-conscious and consequently less likely to engage in-class participation or even communicate with peers (Sanner et al., 2002). Individuals acquire what is known as “socially shared scripts” that consist of physiological, behavioral, and subjective factors (Matsumoto & Juang, 2017, p. 219). This may further explain why cultural differences in appraisal and emotion exist (Mesquita & Ellsworth, 2001).

Many participants in this study completed their exams on paper, which is very different from taking an exam online in an NCLEX-RN format. The concern with a paper
format is that the NCLEX-RN exam does not allow students the ease of circling and underlining areas of the exam because the exam appears on a computer screen. Sura says, “if there’s a word that sticks out to me then I’m trying to a circle that word…I look and underline and circle and underline and circle like what the question is asking me and then I look through the options and go through them and choose them.” (Sura; l:168-174).

Another participant uses a “pencil to highlight” (Joy; l:172-173). During the NCLEX-RN exam, each participant is given a small dry-erase board to use, but this is not the same as being able to underline or circle items on the exam. Additionally, writing things out on a small dry-erase board takes time and space, possibly causing increased anxiety. Many colleges of nursing are continuing to move towards computer-based testing. Administrators must be aware of this and the possible negative side-effects, such as anxiety (Kolagari et al., 2018).

**Summary**

Student nurses of ELL populations shared their experiences openly and honestly. Through the rigorous analysis of the transcripts, three patterns and five sub-patterns were illuminated during this study. The three patterns, included 1) time as an antagonist to NCLEX-RN success, 2) situational context as a way of thinking, and 3) NCLEX-RN as a deterrent to ELL diversity in nursing. The five sub-patterns, included 1) thinking through: not enough time, 2) NCLEX-RN style question design: success in context, 3) imagining a situation ‘thinking out’ versus ‘being in’ a situation, 4) sociocultural perspective: one’s cultural background can change the answer, and 5) emotional expression as an aspect of culture.
A multitude of experiences helped illuminate the patterns and sub-patterns. The analysis offers more insight for student nurses of ELL populations. This study has implications for education, nursing practice, policy change, and future research, presented in the following.
Chapter V

Implications and Conclusions

The purpose of this research was to describe and interpret the phenomenon of experiencing NCLEX-RN style questions using a Heideggerian hermeneutic methodological approach in a sample of Baccalaureate of Science in Nursing (BSN) student nurses who speak English as a foreign language.

To review, nine students participated in this research study from two colleges of nursing, one public college, and one private college. During this study, I was able to help participants verbalize their experiences during the in-depth interviews using the Heideggerian hermeneutic approach. Constant exploration of the phenomena was explored, especially when further clarity was required. I intentionally made certain to guide rather than lead the dialogue and during the analysis of the transcripts, my team and I were able to sift through areas that appeared to be guided both intentionally (purposefully guiding dialogue) and unintentionally (not realizing they were guiding dialogue). The following implications relate to education, practice, policy, and research.

Implications for Education

The findings in this study highlight that more education is needed surrounding English language learner success in answering NCLEX-RN style questions. Interventions addressed in the literature focused on decreasing attrition such as tutoring through small group sessions, focusing on translation and accuracy, faculty-guided NCLEX-RN practice sessions that decreased stress, and cultural adaptation to test questions (Olson, 2012). Further interventions from the research included anxiety reduction, social support, resilience techniques, coping and management, and promoting interaction between
international and domestic students (Khawaja et al., 2017). The guidance in cultural interactions included role-playing, video clips, and interactive computer programs (Lujan, 2008). Other interventions included following the needs assessment of student nurses of ELL populations which included language support, vocabulary journal, study groups, oral presentations, academic support, various teaching strategies, alternate testing and assessment methods, engagement of students in lecture and discussions, social support, monthly meetings with a mentor, and social activities that supported culture (Brown, 2008).

Reading comprehension as a barrier and the fear of writing is an area that the literature focused on as well (Brown, 2008; Donnell, 2015; Donnelly et al., 2009), although none of the participants discussed writing concerns during their interviews in this study. This may be for the reason that writing does not always have a significant focus in nursing school. This may be the case at many colleges of nursing, however, reading is a necessity in school. What we do know is that amount of information being taught during nursing school is overwhelming and we have approached a time in nursing academia where different methods of teaching are beginning to come to fruition. Concept-based learning is still relatively new in the nursing community. Concept-based learning involves five elements including, concepts, exemplars, concept-based curriculum, concept-based instruction, and conceptual learning (Giddens, 2015). One of the main ideas behind concept-based learning is to manage content, engage students, develop thinking, and produce graduates who are highly skilled in management of patients (Giddens, 2015).
The largest barrier according to the participants of this study was \textit{time}, but after analysis we recognize that \textit{time} constraints are the result of multiple factors. One of the biggest factors dealt with the way one processes a question versus the way one comprehends a question. There is a distinct difference between comprehension and processing. Comprehension can be defined as “the capacity for understanding,” or “the act or action of grasping with the intellect” (Merriam Webster, 2019). Processing can be defined as “a natural phenomenon marked by gradual changes that lead toward a particular result,” or “a continuing natural or biological activity or function” (Merriam Webster, 2019). What we saw in this study was that student nurses of ELL populations had the knowledge but they may process that knowledge differently based on factors like culture and their understanding of what was being asked. More context may help solidify how an individual processes and answers an NCLEX-RN style question. We are reminded that competency in clinical practice requires much more than applying knowledge in a situation, it necessitates engagement in the understanding of knowledge along with the context of the care and patient’s experience of health and illness (Ironside et al., 2003).

There is a critical need for resources to adequately provide inclusivity to students’ language and culture (Gupta, 2019). Aspects of culture should include the entirety of one’s background, heritage, ancestry, education, politics, and life. Gupta (2019) suggested the following seven principles:

1. know your student and motivation to learn a foreign language
2. create a welcoming classroom environment
3. build background knowledge
4. provide comprehensible input by building vocabulary
5. include frequent opportunities for interaction and discussion
6. use multiple modalities during instruction
7. conduct ongoing review and assessment

These seven suggestions above can be broken down further to help student nurses of ELL populations. Knowing a student can set a strong foundation for success. A faculty member can learn more about a student by asking them for a one-on-one conversation in a place that is non-threatening. This may be at the faculty member’s office but it may also be a location outside of the university setting such as a coffee shop. A suggestion is that reaching a student using a few phrases in their mother tongue can help with social barriers; this can be done with Google Translate or a similar application. Actions can speak louder than words so a brief conversation can help the student feel more at ease to bring forth issues or concerns in the future. Keep in mind that in some cultures, openly discussing concerns with a professor is not acceptable so encouragement to open up may be needed. Another consideration during a conversation is that sometimes what an individual from the U.S. perceives as anger from an ELL student may be the opposite of anger. The ELL student may just be passionate about the topic. These are important considerations to be aware of when meeting with a student.

Loneliness and isolation are concerns for this population of students. Taking the time to listen to the student and learning more about their background or any other things they would like to share will show them that their faculty member cares about their well-being and about their success. Many times the students may need support in finding someone in the class that they could fit in with. This initial meeting can also give the
student the opportunity to discuss how they communicate and express themselves. Body language movements can show a faculty member quite a lot about how an individual is feeling. Some students have certain body movements that can mean different things. These movements may appear disrespectful to some individuals so having a conversation about this is necessary to help facilitate future encounters. One of the best things a faculty member can do is actively listen to their student.

A welcoming classroom environment can place all students more at ease. Find out where your ELL student feels most comfortable sitting and make arrangements for them. This can be done on day one of class by having everyone fill out a short survey that asks things such as: where do you prefer to sit? What are you most afraid of about this course? How can I help make this classroom environment more comfortable? Are you interested in having a peer mentor that is in this class? What do you expect from me as your instructor? How do you learn best? What type of exams are you used to having (multiple choice, fill-in-the-blank, essay, et cetera)? What is your biggest fear in nursing school? Be honest about the examination statistics regarding passing the NCLEX-RN. Allow the student to have open discussion about this and help them build a plan to for success. During an examination, try to have the student sit where they are most comfortable or perhaps have them sit furthest from the door where the risk of being bothered is decreased.

Building background knowledge for the ELL can be challenging, especially in their first semester of a nursing program. The first semester is when students are beginning to learn what nursing is and what they will do with the knowledge they already have. Many programs are moving towards having students take a cultural diversity class.
This class is best suited in the pre-requisite classes to help prepare the student for the diverse world of nursing. As we have learned in this study, one’s cultural background can change their answer on an NCLEX-RN style test question. Educators should help facilitate education regarding culture for all students and they should encourage open dialect in a safe place. Furthermore, educators need to stay current on cultural diversity and inclusivity.

Other pre-requisites should be carefully considered to enhance the nursing student’s knowledge base and help prepare them for their nursing courses. Pre-requisites should have medical terminology covered so that the student has enough time to process that prior to starting the nursing courses. Building non-medical vocabulary will help the ELL student be more prepared for their course load also. There are courses and evaluations offered outside of the university and some offered on campus that can help ELL students. The Test of English as a Foreign Language (TOEFL) is one evaluation method that measures the English language ability of non-native speakers (Educational Testing Service, 2016), but depending on university requirements, not all ELL students have to take the TOEFL.

The issue surrounding non-medical vocabulary was brought up often in this study as a barrier to understanding what a question is asking. One non-medical word in an NCLEX-RN style question can change the whole meaning for a student. Now, as mentioned, we did find that context helps clear some of this up since the more context there is, the more one has to draw from to piece something together. However, vocabulary is still an issue. Learning medicine is a language of its own. So imagine an ELL student learning not only medicine, but English also. Now imagine that English is
the student’s fourth or fifth language. Lastly, imagine deciphering what an NCLEX-RN
question is asking while using five languages to figure it out and you’re on a time limit.

English speakers in college can learn on average 2000 words per year, and English
language learners need double that time for academic purposes (Peregoy & Boyle, 2013).
The social interactions through conversations can help develop one’s vocabulary
(Peregoy & Boyle, 2013), but explicit training in vocabulary is recommended in college.

One of the participants of this study said to read as much as possible. She said it is not
about memorizing, it is about understanding and practicing the questions.

ELL students need to be offered time for interaction and discussion. We recall
that this population of students can be vulnerable to loneliness and isolation. We must not
just create a welcoming environment at the start of their journey, this should be a
thoughtful, ongoing process that continues throughout their educational experience. This
should include assessing what is being done and how each student feels. Time constraints
can limit the amount of time we have with students so sometimes offering opportunities
through online platforms is appropriate. An online platform for ELL students can be
another safe place for them to have discussion. Discussion boards pertinent to ELL
students could include: How are you bringing your culture to nursing? How do you show
emotion? Which instructional method has worked best for you?

Classroom instruction is an art in and of itself. Not only do the students need
further education, but nurse educators do as well. This supports literature regarding
faculty support and commitment and the issue of faculty not understanding how to best
provide the support needed (Bond et al. 2008; Brown, 2008; Hansen & Beaver, 2012;
Taxis, 2006). Nurse educators must be aware of the underlying assumptions that are
rooted in any pedagogical approach used in their courses (Ironside, 2003). Nurse educators must also continue to explore new pedagogies that will build students’ thinking both in the classroom and in the clinical setting (Andrews et al., 2001; Dahlberg et al., 2003). The following are five shifts in thinking about pedagogies in nursing education that can be useful in the classroom (Benner, 2016):

1. A shift from superficial knowledge to educating students on how and when knowledge is relevant.

2. New ways of thinking about professional practices (nursing, medicine, social work, teaching, et cetera). For education, moving from what a theory is to how to use the theory in practice.

3. Moving from an emphasis on critical thinking alone to and emphasis on multiple ways of thinking. Nurses need to think about multiple frames of reference when working with any one patient because no one patient is alike.

4. Active student participation for the formation of a good nurse. The formation allows for innovation.

5. Using knowledge to think productively. This requires inductive, contextualized use of knowledge in practice.

These five shifts above relate to the findings of this study. By shifting the way educators think about pedagogies in nursing education the student nurses of ELL populations can better adapt to the nursing profession. Just as nurses need multiple frames of reference when working with any one patient, nurse educators need multiple frames of reference when working with any one student.
Give students various ways to learn the material by offering several modalities. I recommend going with a book company that has a strong online platform with items such as: electronic books, videos, virtual simulations, electronic charting, testing, et cetera. Have an open forum for students to come and view how to better work through the various learning opportunities. The book company representative that a school works with should be very involved in the success of the learning platform.

English language learner students in this study said they needed much practice with NCLEX-RN style questions. They put themselves in the question by visualizing what is happening. They underline and circle key words and look for words such as priority or intervention. They have found that having too many words in a question can cause difficulty in understanding what the question is asking so they sometimes have to guess. This same complication of not understanding what a question is asking arises with fill-in-the-blank questions. Many students speak multiple languages and they are sometimes using all of the languages during the translation process so keep the NCLEX-RN style question clear and concise. Decide if faculty are going to help students with non-medical terminology during an examination. For instance, during an examination, if an ELL student raises their hand and asks what the word inconsiderate means, should faculty be allowed to answer since it is not a medical term? Or maybe the faculty can only help the student out in the first semester of nursing school. And what about students who are English-speaking learners? Do they get to ask what the word inconsiderate means as well? These are things that come up often during examinations and faculty may or may not be following what policy is set forth, if there is a policy. In the end, what does your state board of nursing allow during the examination? Faculty should contact their
state board of nursing to find out what accommodations are available for the NCLEX-RN.

Developing a good test takes time. Stricter guidelines at the college level should be considered regarding test design and delivery. Look at the NCLEX-RN Test Plan on the National Council of State Boards of Nursing, website to know what is on the test. Collaborate with colleagues to determine which test-writing book(s) work best for the students. Also imperative is to map out the test questions to insure the correct content is being covered and at the correct difficulty level. Homonyms should not be used on exams. Homonyms are words that look alike and sound alike but have different meanings (Merriam Webster, 2019).

Every participant in this study mentioned that hands-on experiences were more impactful in their learning than the NCLEX-RN style questions. For the participants of this study, the real-life clinical experiences offered a context that is not captured as well in an NCLEX-RN style question.

Based on the results of this study, the Next Generation NCLEX could be a better option in testing student nurses of ELL populations since they are scenario-based, which offer more context. However, this new way of testing is not available yet and it will only be for a small portion of the examination. Overall though, more context could help the student nurse feel like they are ‘Being in’ a situation because of the gradual unfolding of a case. This ‘Being in’ experience could help student nurses of ELL populations better visualize and interpret. This way of thinking aligns more closely with Benner’s shift in the way nurse educators think about pedagogies in nursing education.
Simulation was not an area discussed heavily in this study but is important to mention. Simulation is an alternative to clinical practice for up 50% of the total number of hours that a nursing student completes (Hayden et al., 2014). However, simulation centers vary, and not all simulations run as intended. Participants in this study who discussed their experiences regarding simulation preferred not to do simulation. However, the simulation center where these students attended school was not yet a state-of-the-art simulation center at the time this study was completed.

Implications for practice.

When the participants of this study were asked why they chose nursing, they had similar reasons as their English-speaking counterparts: to care for others and to make a difference. The one area they hope to make an impact is in the lives of those with similar backgrounds as their own. They have ideas of empowering others to fulfil their own dreams, they want to help others feel safe and know they are in good hands with them, they want to help the community be healthier, and they look forward to the day that the number of diverse nurses more closely matches the diversity of the nation they serve. The participants of this study understand that they are helping with the nursing shortage, but also with the health care disparities in our healthcare system (Gordon & Copes, 2010). Many of the participants hope to stay in the U.S. and be a part of helping provide stability and consistency for patients (Smedley et al., 2003) and to help build trust. Building trust is important as it can help bridge cultural and linguistic gaps as mentioned in the literature review (LaViest et al., 2000). Some participants want to go back home to get more young adults to the United States. As mentioned in Chapter Two, an increased
diverse workforce will help align providers’ expectations, beliefs, attitudes, and behaviors with diverse populations.

**Implications for policy.**

The United Nations Educational, Scientific, and Cultural Organization (UNESCO), which the U.S. recently departed from for the second time in history, states that children should receive instruction in their native language in the early years, especially (UNESCO, 2019). However, in many parts of the world, it is common practice to see a difference in the language spoken at home versus the language spoken at school (UNESCO, 2019).

The United States does not have an official national language policy. Due to no prohibitions on states having one or official languages, the majority of U.S. states have designated English as their official language (Center for Applied Linguistics, 2019). Some states do have both English and Spanish as co-official languages, and Hawaii has English and Hawaiian (Center for Applied Linguistics, 2019). The U.S. is going to become a majority-minority nation in the 21st century. I question why we would go back in history to a time when there was deculturation of American Indians by enforcing an English-only boarding school system (The Language Policy Research Network [LPREN], 2019b).

LPREN is an internationally recognized organization consisting of researchers, scholars, and stakeholders (LPREN, 2019a). Their mission is primarily to collaborate with others surrounding the issues of language policy (LPREN, 2019a). The network says that by ignoring linguistic resources and offering only education in English “negatively affects educational equity, achievement, and a sense of identity” (LPREN, 2019b).
Encouraging is that over the past decade, there has been growth in schools “teaching heritage languages, and informal dual-language programs” (LPREN, 2019b). The hope is that this trend continues and expands (LPREN, 2019b). In addition to creating strong NCLEX-RN style questions that are concise, non-medical words should have a dictionary available because the test is not examining whether one knows all English words, but rather is examining whether one is safe in their entry level practice. If an individual can better understand a non-medical English word by having the definition or at minimum the synonyms available, then we should accommodate.

**Implications for research.**

Further research is needed for this population since this population of students remains at high risk for NCLEX-RN failure. Specifically, we need to research word selection and context in NCLEX-RN style question writing, test-structure policies, nurse educator experiences in working with this population, simulation experiences of ELL student nurses, and policies that help contribute to the success of student nurses of ELL populations.

Research on non-medical word selection in NCLEX-RN style questions should be studied to determine what English words are appropriate and inappropriate for use. Furthermore, how can we clearly define what is appropriate and inappropriate word usage in an NCLEX-RN style question? Would providing more context in the NCLEX-RN questions help clarify what a question is asking? The Next Generation NCLEX should be studied closely to determine its efficacy for ELL individuals. What education do nurse educators have in writing NCLEX-RN style test questions and do nurse educators have continued education on writing NCLEX-RN style test questions? Should
it be required that nurse educators attend seminars and conferences regarding successful NCLEX-RN test writing? Do colleges of nursing put emphasis on test writing construction? What policies are in place at the college level regarding test writing and construction? How do nurse educators experience success and failure with their ELL students? Do paper and pencil tests impede learning since individuals will take their NCLEX-RN on a computer? How can simulation instructors create experiences that help student nurses of ELL populations? These questions above need to be studied further to help guide the success of ELL individuals. Placing emphasis on the success of student nurses of ELL populations will greatly increase the number of diverse nurses in the United States.

The research question that guided this study was, “How do student nurses of English language learner populations experience NCLEX-RN style questions?” The aims of the study were successful in a) generating a comprehensive interpretation of the experiences of English language learner student nurses who answer NCLEX-RN style questions and b) identifying mechanisms student nurses of ELL populations use to answer NCLEX-RN style questions.

Summary

The participants were very forthcoming and excited to tell their stories surrounding experiencing NCLEX-RN style questions. Their experiences of not having enough time to think through a question, the success in having the context in a question to help further clarify the question, and the socio-cultural and emotional perspectives that contribute to the way a student answers an NCLEX-RN style question were critical to this study.
This study highlighted the fact that how student nurses of ELL populations experience NCLEX-RN style questions, is a complex phenomenon. Upon completion of this study, one main issue remains, student nurses of ELL populations continue to do poorly on the NCLEX-RN. Until there is a paradigm shift in the way this population is prepared for nursing practice, we will continue to have issues in raising the number of diverse individuals in our profession. As a nursing profession, we need to have better policies in place so that this population of students does not slip through the cracks. Adequate resources need to be provided to our educators that teach our future nurses, and adequate resources need to be provided to our student nurses of ELL populations so that they can be successful as a professional nurse in a diverse nation.
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APPENDIX A

Participant Flyer

Are YOU an English Language Learner?

RESEARCH STUDY
UMSL Institutional Review Board has reviewed and deemed this study appropriate to conduct

VOLUNTEERS NEEDED
For a study about English Language Learner undergraduate student nurses experiences when answering NCLEX-RN style questions.

Will you share your story?
To be in this study you must:
1. Be an English Language Learner in a BSN program of study.
2. Be in your second to last or last semester of a BSN program.

Contact Shawne at maniess@umsl.edu
APPENDIX B

Consent

Informed Consent for Participation in Research Activities

Experiences of EFL student nurses answering NCLEX style questions; Pilot Study

Participant ______________________________________ HSC Approval Number __________

Principal Investigator __Shawne M. Manies__________ PI’s Phone Number 636-357-7769

Why am I being asked to participate?

You are invited to participate in a pilot study about student nurses of English Language Learner (ELL) populations, and your experiences in taking National Council Licensure Examination for Registered Nurses (NCLEX-RN) style questions. You are currently an undergraduate student in a nursing program. We ask that you read this form and ask any questions you may have before agreeing to be in the research. Your participation is voluntary and will not affect your current or future relations with the university. If you decide to participate, you are free to withdraw at any time without affecting that relationship.

What is the purpose of this research?

The purpose of the research study is to learn how you as a student nurse of an ELL population, experience NCLEX-RN style questions in the United States.

What procedures are involved?

If you agree to participate in this research, you can expect:

- You will be asked to participate in an in-person one-on-one interview.
- The interviewer will ask you questions about your experiences while answering NCLEX-RN style questions.
- The interview will last from around 15 minutes to an hour or so, depending on what you have to say. You are free to end the interview at any time.
- You do not have to answer any questions that you do not want to answer.
● An example of some of the questions that will be asked: Can you think of a time when you were answering a NCLEX-RN style question and struggled to understand what it was asking? Can you walk me through your process of answering a NCLEX-RN style question?
● Your voice will be recorded during the interview, and this is required to participate in the study

What are the potential risks and discomforts?

There are certain risks and discomforts that may be associated with this research. They include:

● Psychological or emotional discomfort may occur after talking about your thoughts and feelings surrounding your experience.
● There is a risk that your confidentiality will be broken, although I will do everything in my power to keep your identity secure and confidential.

Are there benefits to taking part in the research?

There are no direct benefits to you from being in this study.

What about privacy and confidentiality?

Will my information be kept private?

The data for this study will be kept confidential to the extent allowed by federal and state law. No published results will identify you, and your name will not be associated with the findings. Under certain circumstances, information that identifies you may be released for internal and external reviews of the project. Reports of intentions to harm yourself or others must be reported by law.

● Each person that participates in the study will be given another name by the interviewer so that you can remain anonymous
● Any information with your name on it and your voice recording will be kept separately from the de-identified written form of the interview
● The interview will be transcribed by an experienced transcriptionist, who will take out the names and places or identifying information. Before each interview, you will be asked for permission to record the interview
● The voice recordings will be kept on a password-protected computer in the home of the primary investigator until the interview is transcribed and checked for accuracy by the PI.
● The de-identified transcribed interviews will be kept in a locked cabinet in the home of the primary investigator
• The following people will have access to the voice recordings and typed anonymous interview:

All researchers and research staff (Shawne Manies, Roxanne Vandermause, other professionals in hermeneutic analysis, and the transcriber). When we tell other people or write the study’s findings, we will not include your name. The voice recording for this study will be destroyed immediately after transcription is completed and verified. The anonymous paper copies will be kept indefinitely for further learning purposes. The only people who will know that you are a research subject are members of the research team. No information about you, or provided by you during the research, will be disclosed to others without your written permission, except:

• If necessary to protect your rights or welfare (for example, if you are injured and need emergency care or when the University of Missouri-St Louis Institutional Review Board monitors the research or consent process); or
• If required by law.

When the results of the research are published or discussed in conferences, no information will be included that would reveal your identity. If photographs, videos or audiotape recordings of you will be used for educational purposes, your identity will be protected or disguised. Any information that is obtained in connection with this study, and that can be identified with you, will remain confidential and will be disclosed only with your permission or as required by law.

Do you already have contact restrictions in place with UM-SL? [ ] Yes [ ] No

(Example: no calls at home, no messages left for you, etc.)

Please specify any contact restrictions you want to request for this study only.

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**What if I am injured as a result of my participation?**

If you suffer an injury in the presence of the investigator, the investigator will assist you in seeking emergency services. If you suffer an injury in the absence of the investigator, you are responsible for seeking emergency services. You or your third-party payer, if any, will be responsible for payment of treatment.

**What are the costs for participating in this research?**

None

**Will I be paid for my participation in this research?**
There will be no monetary payment for participation.

**Can I withdraw or be removed from the study?**

You can choose whether to be in this study. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You also may refuse to answer any questions you do not want to answer and remain in the study. The investigator may withdraw you from this research if circumstances arise which warrant doing so. If you decide to end your participation in the study, please complete the withdrawal letter found at [http://www.umsl.edu/services/ora/assets/WithdrawalLetter.doc](http://www.umsl.edu/services/ora/assets/WithdrawalLetter.doc), or you may request that the Investigator send you a copy of the letter.

**Who should I contact if I have questions?**

The researcher conducting this study is Shawne Manies. You may ask any questions you have now. If you have questions later, you may contact the researcher Shawne Manies @ 636-357-7769 or maniess@umsl.edu or by regular mail at 301 East Northview Avenue, Wentzville, MO 63385. You may also ask questions or state concerns regarding your rights as a research participant to the Office of Research Administration at (314) 516-5897

**What are my rights as a research subject?**

If you have any questions about your rights as a research subject, you may call the Chairperson of the Institutional Review Board at (314) 516-5897.

**What if I am a UMSL student?**

You may choose not to participate, or to stop your participation in this research, at any time. This decision will not affect your class standing or grades at UM-SL. The investigator also may end your participation in the research. If this happens, your class standing will not be affected. You will not be offered or receive any special consideration if you participate in this research.

**What if I am a UMSL employee?**

Your participation in this research is, in no way, part of your university duties, and your refusal to participate will not in any way affect your employment with the university or the benefits, privileges, or opportunities associated with your employment at UM-SL. You will not be offered or receive any special consideration if you participate in this research.

**Remember:** Your participation in this research is voluntary. Your decision whether to participate will not affect your current or future relations with the University. If you decide to participate, you are free to withdraw at any time without affecting that relationship.

You will be given a copy of this form for your information and to keep for your records.
I have read the above statement and have been able to express my concerns, to which the investigator has responded satisfactorily. I believe I understand the purpose of the study, as well as the potential benefits and risks that are involved.

**All signature dates must match.**

____________________________________  
____________________________________  
Participant’s Signature               Date               Participant’s Printed Name

The Notice of Privacy Practices (a separate document) describes the procedures used by UM-SL to protect your information. If you have not already received the Notice of Privacy Practices, the research team will make one available to you.

________ I have been offered a copy of the UM-SL Notice of Privacy Practices.

*Initial*
APPENDIX C

Pilot Study Interview Questions

How do EFL Student Nurses Experience NCLEX Style Questions?

Interview Guide

Opening question: I am conducting a study to understand the experiences of students like yourself, for whom English is a foreign language. I would like to talk about your experiences taking exams, such as NCLEX style exams. Let’s start by my asking:

1. Please tell me a story that stands out for you because of what it means to take required tests. For instance, what is it like to answer NCLEX style questions in an exam?
2. Please tell me of a time when you were answering a NCLEX style question and struggled to understand what it was asking?
3. The remaining questions will remain focused on the participant’s account.

Subsequent questions may include:

1. Tell me more about that.
2. Has there been a time you struggled answering a question?
3. Is test taking similar to other kinds of teaching/learning?
4. Do you have anything more to add about your experience as an EFL student?
Appendix D

Interview introduction and questions

Opening question: I am conducting a study to understand the experiences of students like yourself, for whom is an English Language Learner in a RN program of study. I would like to talk about your experiences taking exams, such as National Council Licensure Examination for Registered Nurses (NCLEX-RN) style questions. Let’s start by my asking:

1. Can you share a little bit about yourself; such as your background of when you came to the US, how long you have been here, how long you have spoken English and who taught you English. Please only share what you feel comfortable sharing with me.
2. Please tell me a story that may demonstrate your experiences when taking a NCLEX-RN style question?
3. Please tell me of a time when you were answering a NCLEX-RN style question and struggled to understand what it was asking?
4. Tell me of your experiences in conveying meaning with language? Does this language effect your way of expression? How do you feel emotionally about the language itself?
5. How do you feel NCLEX-RN does at capturing what you know?
6. Tell me of your experiences in the clinical and simulation settings?

NCLEX-RN questions:

1. I will now show you three NCLEX-RN style questions that are of the application or analysis level. I will not be looking for a correct or incorrect answer here, rather I want to learn more about your experience while going through the process of answering the NCLEX-RN style question.

Subsequent questions may include:

1. Tell me more about that.
2. Has there been a time you struggled answering a question?
3. Is test taking similar to other kinds of teaching/learning?
4. The remaining questions will remain focused on the participant’s account.

Ending questions

1. Do you have anything more to add about your experience taking NCLEX-RN style questions?
APPENDIX E

Field Notes

Date: ______________

Setting: ____________________________________________________________

Participant Pseudonym: __________________________

1. Where is the participant sitting in relation to interviewer?

2. Body language of participant throughout interview

3. Non-verbal's by participant

4. Comments:
APPENDIX F

Research team members

Main team members:

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