The Lived Experience of Underrepresented Pre-Nursing Students: An Exploration to Diversify the Nursing Workforce

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THE LIVED EXPERIENCE OF UNDERREPRESENTED PRE-NURSING STUDENTS: AN EXPLORATION TO DIVERSIFY THE NURSING WORKFORCE

A Dissertation Submitted in Partial Fulfillment Of the Requirements for the Degree of Doctor of Philosophy

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Entitled: The Lived Experience of Underrepresented Pre-nursing Students: An Exploration To Diversify the Nursing Workforce.

Has been approved as meeting the requirement for the Degree of Doctor of Philosophy in the College of Natural and Health Sciences in the Department of Nursing.

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ABSTRACT

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Understanding about the experience of underrepresented students making the decision to choose nursing as a career would improve the ability of nursing programs to recruit applicants from a more diverse background. The purpose of this research was to explore the experience of underrepresented students who are considering nursing as a career but have not yet applied to a nursing program. This research was conducted using a descriptive phenomenological research method. Thirteen participants participated in the study. The participant interviews were interpreted as an expression of pre-nursing students from racially or ethnically underrepresented backgrounds who are feeling they are in a stressful situation and who are experiencing a feeling of isolation and a perception of discrimination. Highlighted is the need for promotion of improved patterns of responding for the staff and faculty of nursing programs, promotion of counseling services, as well as evidence based recruitment efforts. By critically reflecting upon the status quo of the experience of being a pre-nursing student, inequities and injustices can be brought to light and potentially remedied.
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CHAPTER I
INTRODUCTION

The lack of diversity in the health care professions has an impact on the overall health of our nation (Sullivan Commission on Diversity in the Healthcare Workforce, 2004). Evidence demonstrates a correlation between the quality of health care for individuals of ethnic minorities and the level of diversity of health care professionals (Cooper & Powe, 2004). In a health care encounter, the racial/ethnic profiles that both the patient and health care worker bring to a situation, if divergent, can be a source of health care disparities (Drewniak, Krones, & Wild, 2017). Having a health care workforce with a racial/ethnic diversity similar to the diversity of the general population will increase the likelihood of improved relationships between patients and practitioners. Without a diverse workforce there will be a continued contribution to reduced health care disparities and increase patient satisfaction (Barr, 2014).

Disparities in health care exist along social and economic gradients. In fact, those from more advantaged backgrounds, whether socially or economically advantaged, have longer life expectancies and lower incidence of chronic health problems (Department of Health and Human Services, 2011; World Health Organization, 2008). The connection between the diversity of health care providers and the reduction of health care disparities includes providing more services in underserved communities, communication that is more effective and trusted by minority patients, greater trust in the health care system and
greater advocacy for disadvantaged groups by diverse health care providers (Department of Health and Human Services [DHHS], 2006).

Although the discipline of nursing has made progress, there is still much that needs to be addressed to adequately diversify the nursing workforce. In 2013, the nursing workforce was made up of only 19% of nurses from minority backgrounds in comparison to 37% of the United States population that identify as being from a minority background (American Association of Colleges of Nursing [AACN], 2015). Because the workforce of nursing does not resemble the general population, many Americans feel that the health care system has excluded them (Sullivan Commission, 2004). Attention needs to be paid to recruitment and retention efforts for underrepresented minority students if the discipline of nursing is to overcome this obstacle (Barr, 2014).

The specific role of the diversity of the nursing workforce in reducing health care disparities includes better patient-nurse interactions, increased research on health care disparities by minority nursing researchers, and better leadership in health care policy regarding health care disparities by minority nursing leaders (Phillips & Malone, 2014). With this in mind, the discipline of nursing should foster not only increased recruitment, retention, and graduation of underrepresented minority students but include plans to increase the number of nurse scientists and leaders from these same populations. The AACN (2015) identified that registered nurses from minority backgrounds continue on to obtain higher degrees of education at an increased rate compared to their white counterparts. This is encouraging information given the need to increase the numbers of underrepresented populations in nursing research, education and leadership. The nursing workforce is still in need of greater racial/ethnic diversity. As a discipline, we have the
opportunity to contribute to the reduction of health care disparities through these efforts.
The pathway for accomplishing this task begins with schools of nursing recruiting, retaining, and graduating underrepresented students.

Increasing admission of underrepresented students has been the focus of holistic admissions (Urban Universities for Health, 2014). Admitting students who are representative of minority groups is the first step toward a more diverse workforce. The research about interventions to reduce barriers for underrepresented nursing students is dependent upon the successful recruitment and admission of diverse students to nursing programs. Through holistic admission policies, nursing programs can increase the diversity of student populations (Urban Universities for Health, 2014). Recruitment efforts are important to help attract diverse student populations to the discipline of nursing as a career. Outreach programs have been investigated (Kneipp et al., 2014) and recommendations about marketing (Rosenberg & O’Rourke, 2011) and education for students in high schools have been made (Colville, Cottom, Robinette, Wald, & Waters, 2015).

Recognizing the need to increase the diversity of the nursing workforce, researchers have focused on admitting, retaining, and graduating underrepresented students in nursing programs. Barriers for underrepresented students have been identified in an attempt to respond to the diverse needs of students (Amaro, Abriam-Yago, & Yoder, 2006). Financial needs for education are a barrier for underrepresented students as well as academic needs, language barriers and cultural barriers (Loftin, Newman, Gilden, Bond, & Dumas, 2013; Colville et al., 2015; Bleich, MacWilliams, & Schmidt, 2015). Interventions including financial aid and scholarship assistance (Loftin et al.,
as well as social work support to help students navigate the financial needs for families while perusing their education (Colville et al., 2015). Tutoring and mentoring are identified as helpful for students to overcome academic challenges to increase retention and graduation (Murray, Pole, Ciarlo, & Holmes, 2016; Nnedu, 2009). Assistance for faculty to better facilitate learning for English as second language learners (Mulready-Shick, 2013) as well as mentoring to overcome cultural needs are also important in improving the retention and graduation rate for minority students (Wilson, Sanner, & McAllister, 2010).

Even though we are beginning to understand how to better support underrepresented students and assist them in successful completion of nursing programs, there is still a deficit in our understanding of the experience of underrepresented students and what may need to be overcome to apply to a nursing program in the first place. Working to increase the diversity of the nursing workforce through an understanding of the experience of underrepresented students who are considering applying to nursing programs is paramount. Recruitment efforts are of utmost importance to further the progress of increasing the diversity of nursing programs (Rosenberg & O’Rourke, 2011). Exploration of this topic will add to current understanding of the experience perceived by racially and ethnically diverse students registered in nursing programs (Amaro et al., 2006; Alicea-Planas, 2017), interventions to increase admission of underrepresented students (Urban Universities for Health, 2014), and interventions to increase retention of underrepresented students (Loftin et al., 2013; Travers, Smaldone, & Cohn, 2015). Understanding the experience of being a pre-nursing student applying to a nursing
program from the student perspective would provide guidance to optimize recruitment and retention efforts.

**Background**

Although, there are historical accounts of nurses from many racial or ethnic minority backgrounds throughout history (Carnegie, 1995; Charbonneau-Dahlen & Crow, 2016; Hayes-Bautista, Schink, & Hayes-Bautista, 2016) it was not until our recent history that official statements implored nursing programs to seek out greater diversity in nursing students and nurses (Lewin & Rice, 1994; National Advisory Council on Nursing Education and Practice, 2001). As evidence mounts regarding improvement in population health and reduction of health care disparities through greater diversity in the nursing workforce attention has shifted to this important topic. Primarily efforts to increase diversity in nursing have revolved around admission, retention, and recruitment to nursing programs.

Admissions criteria for undergraduate nursing programs vary widely. Most commonly academic measures, such as grade point averages and standardized test scores, have been used as criteria for entrance into nursing programs (Schmidt & MacWilliams, 2011). Recently, holistic admissions has been shown to improve the diversity of student populations in health care related fields (Urban Universities for Health, 2014). Holistic admissions use multiple measures to conduct a comprehensive review of candidates for an academic program (Scott & Zerwic, 2015). A framework for holistic admissions includes consideration of an applicant’s life experiences, attributes and academic abilities (Addams, Bletzinger, Sondheimer, White, & Johnson, 2010). Allowing more information about an individual to be considered for admission provides for more equity among
students from varied backgrounds. Despite the known advantages of holistic admissions, there is resistance by faculty due to an over reliance on academic metrics as superior information (Donnon, Paolucci, & Violato, 2007), perceived legal ramifications (Scott & Zerwic, 2015), and increased workload of completing interviews and completing comprehensive reviews of applicants (Hendricks & Krothe, 2014). These barriers prevent some nursing programs from embracing holistic admissions. Approximately 47% of nursing programs in the United States self-report as using a holistic admissions process (Urban Universities for Health, 2014). Over reliance on academic measures maintains high NCLEX-RN pass rates by selecting students who have proven the ability to be successful at earning high grades and performing well on tests (Schmidt & MacWilliams, 2011). However, students who have diverse backgrounds may not have been exposed to educational experiences that prepared them to do well in traditional higher education courses or perform well on standardized tests despite the fact that they may excel at nursing and provide the diversity in the nursing workforce that is needed to improve the health of minority populations.

Identification of barriers for underrepresented students who have been admitted into nursing programs has been a focus of inquiry to increase retention and graduation (Loftin et al., 2013). Efforts have focused on faculty development (Bednarz, Schim, & Doorenbos, 2010) and student support (Amaro et al., 2006). Faculty development focused on improving the response of faculty to underrepresented students can provide support for students who may have different needs than the traditional nursing student population (Yoder, 1996). Student support to stay enrolled and be successful academically includes not only academic support but financial and social support as well.
Modest gains in retention have been made through efforts to provide support for underrepresented students in nursing programs (Tab, 2016). If appropriate support is in place, students from underrepresented populations in nursing can be successful.

A variety of recruitment strategies have been used to reach out to students from the use of social media to career days at local high schools (Rosenberg & O’Rourke, 2011). Outreach programs to attract underrepresented students to the discipline of nursing promote the profession and provide information to potential students about pathways available to them (Melillo, Dowling, Abdallah, Findeisen, & Knight, 2013). Academic preparation programs in schools with a large proportion of underrepresented students have been used to help students be better academically prepared for nursing programs (Gordon & Copes, 2010). Unfortunately, much of the work regarding recruitment is descriptive and projects to increase diversity through recruitment are often large in scope and difficult to measure effectiveness. It is unknown how many students from underrepresented backgrounds apply to nursing programs, as this information is not routinely collected on applications. This furthers the difficulty of evaluating recruitment projects. Additionally, many programs are grant funded and questions about long-term sustainability are present.

There has been some measured success in increasing the numbers of underrepresented nurses through efforts in recruitment, admission, and retention. However, a question remains as to why more individuals from underrepresented backgrounds do not apply for nursing programs. Outreach programs are only effective if targeting the right populations and providing the information, motivation, and support in a way that is meaningful. Academic preparation, financial resources and social support
are a starting point but there may be something about the experience of being an underrepresented student considering nursing that is being missed through these efforts.

**Problem Statement**

The nursing workforce needs to reflect the populations of patients that are served by nurses in order to better provide culturally competent care and reduce health care disparities (Sullivan Commission, 2004). In order to accomplish this task, underrepresented students need to be recruited to nursing programs and be admitted to nursing programs. Understanding of barriers to retention and graduation for underrepresented nursing students, which has been a focus of nursing research (Amaro et al., 2006; Bednarz et al., 2010; Loftin et al., 2013; Tab, 2016), has laid a foundation for increasing the retention and graduation of students from diverse racial or ethnic backgrounds. What is still needed is to understand the experience of underrepresented students who might be considering nursing as a career, but have not yet solidified that decision by applying to a nursing program. In the absence of an adequate supply of individuals from underrepresented backgrounds in nursing, the efforts to admit, retain, and graduate a diverse nursing workforce will be in vain. There is an urgency to move forward in diversifying the nursing workforce in order to reduce the health care disparities faced by minority population in the U.S. (Williams, et al., 2014). Information gained from this study will improve recruitment efforts by shedding light on the experience of this student population while making career decisions.

**Purpose**

Minority populations in the United States have health care disparities that are in part contributable to the lack of diversity of health care professionals (DHHS, 2006).
Nurses make up a large proportion of the health care workforce and it is an important priority of the nursing discipline to increase the diversity of the workforce (AACN, 2015). Understanding about the experience of underrepresented students making the decision to choose nursing as a career would improve the ability of nursing programs to recruit applicants from a more diverse background. The purpose of this research was to explore the experience of underrepresented students who are considering nursing as a career but have not yet applied to a nursing program.

**Research Question**

To better understand the needs of underrepresented students and address the problem, a qualitative study designed to explore the experience of underrepresented students who have declared pre-nursing as their major and are deciding to apply for a nursing program was undertaken. Phenomenological interviews facilitated the gathering of data from potential nursing students who self-identified as being from an underrepresented racial or ethnic background.

The research question:

Q1 What is the lived experience of students who have declared pre-nursing as a major and are underrepresented racially or ethnically in nursing when making the decision to apply to a nursing program?

**Professional Significance**

For nursing practice, a more diverse nursing workforce would provide culturally competent nursing care for minority populations. When health care workers share the cultural and lived experiences of the patients they care for it can remove barriers to communication and understanding that are essential for culturally competent care. Culturally competent care has the potential to reduce health care disparities for minority
populations (Williams et al., 2014). In nursing education, this research is significant because knowledge of the experience of underrepresented students can inform the recruitment efforts utilized and guide support associated with application and admissions to nursing programs (Woods-Giscombe et al., 2015). Better recruitment efforts would increase the numbers of nursing students from underrepresented backgrounds. Graduation of nursing students from minority backgrounds additionally provides the opportunity for increased numbers of researchers, teachers, and leaders with interest in the health of minority populations (Phillips & Malone, 2014). Fundamentally, the potential exists to improve the lives of students from underrepresented backgrounds who might not otherwise choose to be nurses. Providing the information and support needed by these students opens opportunities to a rewarding career.

**Definitions**

Underrepresented student in nursing for this study is defined as students from racial or ethnic backgrounds that have less representation in the discipline of nursing than in the U.S. population. The nursing workforce in 2013 had 19% representation of nurses from minority racial/ethnic backgrounds versus 37% in the U.S. population as a whole. In nursing, the breakdown by race or ethnicity is African American at 6%, Asian at 6%, Hispanic at 3%, American Indian/Alaskan Native at 1% and Native Hawaiian/Pacific Islander at 1% (AACN, 2015). Operationally, students who self-identify as being from one of the above racial or ethnic backgrounds were considered underrepresented students in nursing.

Pre-Nursing students in this study refers to students who have declared pre-nursing as a major. Nursing programs have prerequisite course work that must be taken along with
general education courses. Pre-nursing students are still in the phase of completing this course work. Because there is an application process for the nursing program, the students must declare a pre-nursing major in order to work with the nursing academic advisor to apply to the nursing program. Students are not obligated to apply to the nursing program and can decide not to do so. As such, pre-nursing students are still deciding whether to make the application to the program or not. Operationally, students who have declared a pre-nursing major were considered a pre-nursing student.

**Conclusion**

A lack of diversity in the nursing workforce has detrimental effects on the health care disparities faced by racial and ethnic minority populations. Although, progress has been made toward greater diversity there is still progress needed. Increasing the diversity of the nursing workforce will lead to more research and leadership that can improve the health of the nation as a whole. To accomplish this goal of workforce diversity pathways to nursing education for underrepresented students must be addressed. This study contributes to the existing knowledge of supporting underrepresented nursing students by providing further understanding of the experience of underrepresented pre-nursing students who are pursuing nursing degrees as well as provide guidance for supporting students.
CHAPTER II
REVIEW OF THE LITERATURE

Critical Theory

Critical theory research is founded upon challenging the status quo and affecting change. The difference between research that seeks to understand a perspective and one that is critical of the oppression that is present because of its acceptance (Crotty, 2012). At the root of critical theory is the understanding of reality as a combination of the world as objectively seen and the perceptions of the world by individuals. Freire (1972) described critical thinking as action and reflection taken together to recreate the world, transform human conditions, and liberate individuals as an expression of being human. In order for individuals to move out of oppression, awareness must be brought to light and through solidarity with others to take action to change or recreate reality. Critical theory is a reflexive theoretical perspective that causes a researcher to be attentive to the details in the research associated with equity.

The history of critical theory research includes questioning of social structures and institutions (Freire, 1972; Marx, 1964; Roderick, 1986). An example of critical theory is critical race theory, which involves research that questions how race influences how social institutions function and examines the existence of institutional racism (Yosso, 2005). It is important to note that institutional racism can be subtle or unseen to those who are unaffected by it, but that does not make it any less present. Often in a
culture, those who are oppressed are unaware that they are oppressed making research that questions the unspoken norms of society all the more important (Freire, 1972). The aspect of invisibility of the barriers in place due to this kind of racism make it even more important to question it to affect change. It is because of the subtle or silent presence of racial inequality that details related to equity be monitored during research, scholarship and practice (Ford & Airhihenbuwa, 2010). This is important to this research because many categories of diversity that are underrepresented in nursing are aligned with race or ethnicity (AACN, 2015). Educational research is benefited by the use of critical theory for examining disparities in education based on minority status because of the educational disparities that persist based on race (Ladson-Billings & Tate, 1995). Much of the research in the area of increasing the diversity of the nursing workforce could be considered as critical but may not identify themselves as such (Fontana, 2004).

The work of emancipatory knowing by Chinn & Kramer (2015) is grounded in critical theory and encourages nursing science to investigate inequalities that give advantage to one group over another. Emancipatory knowledge is knowing in the context of action and the search for freedom (Crotty, 2012). As described by Chinn & Kramer (2015), emancipatory knowing is the result of praxis that comes from critically reflecting upon the status quo and seeking to use this reflection to eliminate inequity and injustice. It is not enough to seek to understand what current reality is. The researcher must ask the reason for the reality, who is placed at a disadvantage by this reality and what changes need to be made to reality to arrive at justice and equality. This proposed research seeks to add to the body of knowledge about barriers for underrepresented groups due to race or ethnicity and critical theory has informed the research topic and question.
The Process of Responding to Ethnically Diverse Nursing Students

Yoder’s (1996) theory of how faculty respond to diverse students provides a framework to relate the findings of this study to how faculty can facilitate success by underrepresented students. The theoretical framework was born out of grounded theory research conducted by Yoder to understand the various patterns that faculty used when teaching students from cultural backgrounds different from their own. Through interviews with faculty teaching in nursing programs in California and nursing graduates from minority backgrounds, observations were made about these patterns from both the faculty and student perspectives. One underlying assumption made in this theory is that faculty will be able to adapt to the changing composition of the student body, but intentional education and discussion are helpful to decrease unintentional negative consequences for both faculty and students (Bednarz et al., 2010).

Yoder (1996) describes the elements of cultural awareness of educators as the underlying influence on the pattern of responding exhibited by the faculty member. The greater the cultural awareness of the educator the more appropriate the pattern of responding. It is important to note that the influences of cultural awareness of the educator are multifaceted and are not merely reflective of intellectual knowledge of cultural issues. The patterns of responding to students observed by Yoder were generic, mainstreaming, nontolerant, struggling, and bridging. Bridging, as the most desirable response includes helping students bridge between the cultural worlds of students and the dominant culture.

From the perspective of the student, Yoder (1996) sought out perceptions of interactions with educators. The perceptions of students were influenced by their level of
need and severity of barriers that student encountered. Student needs were categorized as personal needs, academic needs, language needs, and cultural needs. Yoder identified that many students had high levels of need in more than one category. This important finding has influence over the way that schools of nursing should respond to underrepresented students. Additionally, most students acknowledged that they experienced discrimination or racism in either the academic or the clinical setting while nursing students. Other researchers have continued the work of Yoder to better clarify and confirm the needs and barriers of underrepresented nursing students (Amaro et al., 2006).

The aim of the current study is to explore the experiences of underrepresented students who are considering applying for a nursing program. This would add to the work by Yoder (1996) who interviewed graduates from nursing programs by looking at the experience of students who have not applied to nursing programs. The Yoder (1996) model is useful in understanding how the barriers and needs of underrepresented students influences how students interpret the interactions with faculty. Through the lens of critical theory, it is the institutional responses to underrepresented students that should be questioned. There is often a tendency in academic institutions, nursing schools included, to be ethnocentric to the majority population (Ackerman-Barger & Hummel, 2014). Bridging patterns of response to the needs and barriers of pre-nursing students would facilitate better recruitment of underrepresented students that are needed in the profession of nursing.
Barriers for Underrepresented Students

Barriers for underrepresented students exist as they attempt to navigate the often-monolithic culture of higher education (Veal, Bull, & Miller, 2010). For the purpose of this literature review of the barriers for underrepresented students the barriers will be grouped into the categories of needs identified by Yoder (1996) and further clarified by the Amaro et al. (2006). The categories identified are personal, academic, language, and cultural needs. Personal needs include money, time, and family issues. Academic needs include tutoring, study groups, and adapting to workload. Language need such as adapting for English as second language learners. Examples of cultural needs are adjusting to the dominant culture and a lack of role models in nursing.

Personal Needs

Personal needs have been studied to provide evidence of ways that faculty and staff of institutions of higher education and specifically nursing programs can better assist students in their education. Not surprisingly, the cost of education has been identified as a barrier that is difficult for many from underrepresented backgrounds to overcome. Navigating financial aid specifically has been identified as a barrier (Woods-Giscombe, et al., 2015). Amaro et al. (2006) discovered that the financial needs that ethnically diverse students identified included not only financial assistance in paying for school, but other financial resources for child care, food, shelter, and transportation.

Academic Needs

Underrepresented students in nursing have a higher attrition rate and lower graduation rates than that of their peers (Bleich et al., 2015). This is likely associated
with the academic barriers that students have discussed when interviewed or surveyed by researchers. Woods-Giscombe, et al., (2015) described a need of students for assistance in navigating administrative process of academia that were unfamiliar to them or family members when students were first generation college students. Adjusting to the workload of college level courses and teaching methods that might be unfamiliar to the culture have also been identified as barriers (Fuller & Mott-Smith, 2017). These academic issues stem from an overall lack of preparation for academia that is sometimes present for students from underrepresented backgrounds (Amaro et al., 2006).

**Language Needs**

The language barriers for underrepresented students in nursing are variable depending upon the level of familiarity with the English language. As pointed out by Mulready-Shick (2013) linguistic development of students is an important consideration for faculty teaching English as second language students. Although students may have a proficient in conversational English does mean that the transition to college level nursing courses will be smooth. Underrepresented students discussed the need to adjust to a “new world” of language (Mulready-Shick, 2013) and learn a new English language of nursing (Hansen & Beaver, 2012). Language barriers can impede understanding in courses where lecture is the primary source of learning and make taking multiple choice or other written testing difficult (Hansen & Beaver, 2012). A lack of tolerance or understanding on the part of faculty about the need for extra time for communication in a second language can be perceived by students as disrespectful and embarrassing (Fuller & Mott-Smith, 2017).
Cultural Needs

The literature about cultural barriers for underrepresented students includes the themes of a need to acculturate to the dominate culture, feelings of isolation or invisibility, and a lack of role models in the discipline of nursing. Part of the experience for underrepresented students in nursing includes the need to acculturate by learning how to navigate cultural behavior. Knowing how to participate in cultural norms is a point identified in a study conducted by Woods-Giscombe, et al. (2015) and Fuller & Mott-Smith (2017). Underrepresented students also identify feeling lonely, isolated, and unacknowledged in the academic and the clinical setting (Gardner, 2005). A lack of connection or inclusion by peers impeded academic work for students making them feel unable to join study groups (Arieli, Maschiach, Hirschfeld, & Friedman, 2012). Wong, Seago, Keane, & Grumbach (2008) reported that students felt a lack of interaction between themselves and peers and faculty in nursing school. Ackerman-Barger & Hummel (2014) communicated narratives of students that struggled to cope with ways to overcome discrimination. Students in studies by Amaro et al. (2006) and Veal et al. (2010) mentioned the need for role models from their cultural background. It is important to have an awareness of the barriers that have been identified through research for students from underrepresented backgrounds in nursing.

Of significance is the lack of information about barriers for underrepresented students prior to application to a nursing program. In efforts to identify ways to better retain and graduate nursing students from underrepresented backgrounds the focus of research has been on admitted nursing students from diverse backgrounds. The experience of students who have not yet applied to nursing programs has not been
investigated. Students who are thinking about applying but choose not to may experience barriers that are different from those that have been included in studies of underrepresented nursing students or graduates.

**Interventions for Increasing Diversity**

Interventions for increasing diversity is an area of study that is increasing in the literature of the discipline of nursing. These interventions are primarily targeted at helping students from underrepresented groups overcome barriers to success in nursing. Interestingly, Fuller & Mott-Smith (2017) found that often faculty perceive that students are better supported than students perceive that they are. This highlights the importance of seeking out student perceptions of needs and barriers. Travers et al. (2015) reported on a study looking at the influence of state legislation related to diversity in nursing program. The findings suggest that state funding tied to diversity recruitment and retention might encourage schools to more proactively adopt diversity initiatives.

**Personal Needs**

The personal barriers identified by students included financial needs, time, and family issues (Amaro et al., 2006). Resources to help students navigate financial aid and provide scholarships and stipends are interventions that are mentioned (Loftin et al., 2013). Tuition is certainly a barrier faced by many students. Colville et al. (2015) describe the efforts of a community college to provide social work resources to students. In this retention program, students were assigned a social worker to help them develop stress management skills and find solutions to housing, childcare, domestic violence, and financial problems. This is a unique component of a retention strategy for
underrepresented students, but as demonstrated by evidence these are needs that many students have (Amaro, et al., 2006).

**Academic Needs**

Academic support is the most common intervention discussed in the literature about retaining underrepresented students in nursing. There is consensus that students often struggle with being academically prepared for the rigors of college level nursing courses. Some programs have undertaken projects to provide pre-entry tutoring, mentoring, or support for high school students or pre-nursing students (Murray et al., 2016; Nnedu, 2009). Woods-Giscombe et al. (2015) discuss the importance of the application and admissions process and discuss the need for support in navigating the experience. When admissions criteria are based on academic measure only, there is cultural bias present. There is a need to make admissions more cross culturally relevant (Bleich et al., 2015). The research on holistic admission is encouraging about the ability to increase the diversity of student populations by considering more about the whole person in addition to academic performance (Urban Universities for Health, 2014). Although, there are barriers for nursing programs for implementing holistic admissions processes (Glazer et al., 2016) models have been researched that have been successful (Scott & Zerwic, 2015). In person or one-on-one orientations have been identified as an academic intervention that ensure that students understand how to manage technology and other student resources (Escallier & Fullerton, 2009; Veal et al., 2010). Regular contact with academic advisors has been used to help students navigate academia (Veal et al., 2010; Woods-Giscombe et al., 2015). Tutoring in the form of professional tutors and peer tutoring has been used as an intervention to help underrepresented students stay...
enrolled and have success in nursing programs (Loftin et al., 2013; Murray et al., 2016; Tab, 2016).

**Language Needs**

Interventions for language barriers experienced by students who do not speak English as their first language are not as common in the literature but have been discussed. Faculty development to adjust teaching style to better accommodate students such as lecturing less, speaking more slowly, or not calling on students in class unexpectedly (Mulready-Shick, 2013). Increasing the diversity of nursing faculty to include those who speak more than one language can also help students to feel more understood and included (Mulready-Shick, 2013). Students who struggle with English may also have deficits when it comes to test taking in the traditional multiple-choice format. Tutoring or support for these students to navigate the kinds of tests that are common in nursing would be helpful (Hansen & Beaver, 2012).

**Cultural Needs**

To help students overcome cultural barriers Bleich et al., (2015) indicates the importance of developing communities of support and inclusion. This can be in the form of student clubs and organizations (Murray et al., 2016). The relationship between mentoring for underrepresented groups and retention in nursing programs is well tested. Mentors who can meet with students regularly to build relationships and monitor progress are needed (Colville et al., 2015). Wilson et al. (2010) evaluated a mentoring program in a nursing program to increase diversity and found evidence that a mentoring program could assist in increasing diversity in nursing education and practice. However, there is
also evidence to support the need to train faculty mentors (Escallier & Fullerton, 2009). It should not be assumed that all faculty would adapt easily to this role. Faculty development to provide culturally competent and relevant teaching has also been demonstrated to help faculty feel able to teach diverse student populations (Escallier & Fullerton, 2009; Veal et al., 2010). Faculty who know how to adapt teaching respond to students can avoid unintentionally making students to feel unwelcome or invisible in the learning environment (Bleich et al., 2015). Finally, the lack of role models in nursing is a cultural barrier that could be mitigated by increasing the diversity of the faculty in nursing programs (Veal et al., 2010). However, it must be recognized that there are cultural barriers for faculty in academia as well and issues associated with fair retention and tenure of faculty should also be examined (Bleich et al., 2015).

**Recruitment Strategies for Increasing Diversity**

Recruitment efforts are mentioned by several authors and primarily include efforts to collaborate with local high schools to provide information about nursing programs (Colville et al., 2015; Murray et al., 2016). Kneipp et al. (2014) describe an effort to provide accurate information about the discipline of nursing and resources to respond to resistance that might be met within their culture. This project was in response to research identifying that many students did not have an accurate understanding of the role of a nurse. Rosenberg and O’Rourke (2011) suggest that market research would be helpful in targeting potential underrepresented groups for recruitment. Cultivating an understanding of how to reach these students might increase the effectiveness of recruitment strategies. It is important to note that much of the recruitment undertaken by nursing programs is based on what administrators and faculty members think are the
needs and barriers of underrepresented and students. Much of this information has been gained through research including current nursing students, and there is a gap in the knowledge about the experience of those who chose not to apply to a nursing program after considering it.

**Relevance for This Study**

The purpose of this study is to explore the experience of being a pre-nursing student perceived by underrepresented students who are considering nursing as a career but have not yet applied. Although there is much that is known about the experience of underrepresented nursing students, care must be taken to not overlook variations in that experience for students who are considering applying for a nursing program and chose not to apply. It would be anticipated that there would be similarities but there may be differences as well. Interventions that have been used to help retain underrepresented nursing students have had some success. However, interventions to help students overcome personal and language barriers have not had the equal attention as academic and cultural barriers. Many projects intended to increase diversity of nursing students have been described, but are not empirically evaluated (Georges, 2012). Because of the large scope of these projects there is difficulty in knowing which interventions implemented were most useful. Recruitment strategies for underrepresented nursing students have been based upon experience, but not much evidence has been gathered from the population being recruited about what barriers and/or needs are present. Efforts to recruit underrepresented students could be more intentional and productive if based on research findings. Success in recruiting and retaining underrepresented students in nursing is the pathway to increasing the diversity of the nursing workforce and
potentially, the reduction of health care disparities for minority populations. This study is important to the discipline of nursing because an exploration of the experience of underrepresented students when considering applying to a nursing program has not been undertaken. As such, there is more to be learned to help promote diversity in nursing schools and the nursing profession.

**Conclusion**

To summarize, Yoder’s (1996) work regarding the process of responding to ethnically diverse students will assist in framing the discussion in relationship to what is known about this population of students in nursing. This framework will also put those responses in the context of what interventions might be successful as nursing educators respond to the needs and barriers of underrepresented students who are deciding to apply to a nursing program.
CHAPTER III
METHODOLOGY

The purpose of this research was to explore the lived experience of underrepresented students in nursing when they are making the decision to apply to a nursing program. It is imperative that nursing programs increase the diversity of student populations in order to fill the need for a more diverse nursing workforce. Knowledge development in nursing needs to be culturally relevant and respectful (Meleis, 1996). In order to develop knowledge that will increase applications to nursing programs from underrepresented students in nursing we must explore the social realities that face students from this demographic. It is for this reason that descriptive phenomenology was selected as the research design for this study. Overall, the findings from this study inform the decisions made by nursing educators about how best to recruit, retain, and graduate more underrepresented nurses into the workforce.

Research Design

The research method used for this study was descriptive phenomenology. At the foundation of descriptive phenomenology is the desire to understand the experience of individuals as the experiences occur without objectification of the experience (Heidegger, 1962). This is inherent in the quest to capture the experience as the participant experiences it. Not as reflected upon later (Van Manen, 2016). The focus is placed upon exploring the meaning of a person’s being-in-the-world, what experiences mean to that
person, and how those meanings influence the choices made by the individual (Lopez & Willis, 2004). In the context of this study, the descriptive phenomenology approach guided the solicitation and documentation of experiences of students from underrepresented populations in nursing while they were deciding to apply to a nursing program. Additionally, the stories of participants describe how the meaning from those experiences swayed decisions about entering the profession of nursing or applying to a nursing program.

Phenomenology began as a philosophical school of thought and evolved into a methodology for conducting research (Van Manen, 2016). As a philosophical movement, various scholars have changed the ideas about phenomenology over time (Lopez & Willis, 2004). The tradition of descriptive phenomenology was originated with Edmund Husserl (Van Manen, 2016). As described by Husserl (1970) the purpose of descriptive phenomenology was to let human experience show itself just as it is. Phenomenological research originates with a sense of wonder about what an experience is like in the moment for an individual (Van Manen, 2016). Descriptive phenomenology is a process for drawing out and making visible what is normally hidden in human experience (Spielgelberg, 1976). Understanding is gained from descriptions of life experiences that allow the researcher to explore what people experience rather than what they may consciously think they know about an experience (Solomon, 1987). Documentation and analysis of descriptions provided by participants who are from underrepresented backgrounds in nursing and are living through the experience of making the decision to apply to a nursing program provide understanding of the meaning of participant’s
experiences and help identify potential changes in practice for nursing educators (Lopez & Willis, 2004).

Assumptions inherent in use of descriptive phenomenology as a research method include the belief that human experiences have value and should be the subject of research (Husserl, 1970). The participants in this study offered insight into the unique experience of underrepresented students that are making decision about applying to a nursing program. This experience is perhaps different from the experience of other students and is important to consider how it may inform increasing the diversity of the nursing workforce. An additional assumption is the existence of a lifeworld as described by Heidegger (1962) which is the idea that individuals are influenced by the world in which they live and that one cannot conceptualize themselves and their experience as separate from the world in which they exist. Study participants experiences are intertwined with their environment and culture. This provides them with an experience that is individualized. An assumption of situated freedom is present in this research. Situated freedom means that individuals are free to make choices, but this freedom is circumscribed by the conditions of the environment in which the individual exists and that individuals make meaning from reality created by their situated freedom (Sartre, 1993). Students from underrepresented backgrounds are free to make decisions about what profession to enter and what nursing programs to apply to. However, the situated freedom in which they exist may influence how they see the profession of nursing or the process of application to a nursing program. Another philosophical assumption made in this research is the idea of transcendental subjectivity, which means that the researcher’s impact on the process of research is continually monitored and pre-conceptions are set
aside through a method of bracketing (Drew, 1999). Openness to the perceptions of participants without attaching meaning from the researcher will be imperative to capturing the experiences of participants as described without interpretation (Grove, Burns, & Gray, 2013).

Hearing the descriptions of experiences by underrepresented students to explore the meaning of those experiences was the purpose of selecting descriptive phenomenology for this study. In order to increase the number of underrepresented nurses in the workforce, the discipline must admit more students from these backgrounds into nursing programs. An essential component of this process is attracting these populations of students to apply to nursing programs. Efforts to recruit students has focused on the obvious potential barriers such as academic preparation, access to programs, and financial support (Gordon & Copes, 2010; Melillo et al., 2013; Noone, Carmichael, Carmichael, & Chiba, 2007). The research question presented for the present study requires information about the experience of underrepresented students beyond the obvious reasons for not participating in a nursing program. Descriptive phenomenology provided a mechanism to collect the lived experiences that included the feelings, thoughts, and perceptions that have informed the decision to apply to a nursing program.

**Sampling**

A combination of purposive and snowball sampling of undergraduate students enrolled at a western, public, non-research intensive university with a competitive nursing program were recruited for this study. With a total student population of about thirteen thousand, the university has between five hundred and five hundred and fifty
students who have pre-nursing declared as their major. Of those, only half choose to apply to the nursing program. The admission rate to the nursing program is approximately fifty percent (M. Henry, personal communication, March 3, 2018). The target population for data collection were students eighteen years of age and older who are considering nursing as a major and who self-identify as being from an underrepresented ethnic or racial background. These selection criteria provided informants with knowledge about the experience of selecting a major in nursing for underrepresented students and provided for rich data about the lived experience (Merriam & Tisdell, 2016). The selection of students who are considering nursing filtered out students who have not considered nursing as a career choice. While conducting interviews with students in the purposive sample the sample size will be expanded using snowball sampling (Grove et al., 2013). The sample size for a qualitative study utilizing phenomenology is best described as an adequate amount of interviews to reach saturation of data or redundancy in responses (Creswell, 2014; Merriam & Tisdell, 2016). Typically, the sample size for a descriptive phenomenological study is between three to ten participants (Creswell, 2014). For this study a sample of thirteen participants was reached. Interviews were conducted between June and September 2018. In order to determine when saturation of data or redundancy in responses was obtained, data analysis was done simultaneously with data collection (Merriam & Tisdell, 2016).

**Procedures**

Following approval from an internal review board (Appendix A), a liaison from the nursing department at the data collection university was contacted who had access to the email information of all students who had expressed interest in nursing as a major.
Email invitations (Appendix B) were sent out to potential participants. Recruitment of participants occurred at the beginning of the semester and was repeated for two semesters to obtain an adequate sample size. When students contacted the researcher to accept the invitations, dates and times for interviews were confirmed and consent forms (Appendix C) were sent to students. Participants were asked to sign consent forms and return the signed copy via email. Interviews were conducted at a distance using Zoom as a communication modality and lasted an average of twenty seven minutes. At the beginning of the interviews, the purpose of the study was explained and participants were given the opportunity to ask questions. Consent forms were reviewed and participants were asked if they have any questions about their participation. Recording (audio and video) began after answering of questions about the consent form.

The method for gathering lived experience description through personal interviews described by Van Manen (2016) was followed. Participants were asked to give direct descriptions of their experience as a pre-nursing student and when making a decision about applying to a nursing program. The researcher was careful to avoid questions that elicited responses about opinions or perceptions about the application process itself, although sometimes opinions were offered unsolicited. The purpose of the interview was to gather information about what the lived experience was like for the participant while it was happening not what thoughts the participant has about the experience now that it is past. This is the difference between the pre-reflective experience and the objectified reflection of the experience (Husserl, 1991). Although it may not be possible to capture the true lived experience, the interview aimed to capture it as closely as possible.
The interviews (Appendix D) began by the researcher asking participants to self-identify their age, gender, and racial and ethnic backgrounds. This was followed by asking for a description of the experience of being a pre-nursing student and then about selecting a major. This question was followed by asking students to describe the experience they have had with making the decision to apply to a nursing program. Additionally students were asked, “What has been the easiest experience of being a pre-nursing student?” and “What has been the hardest experience of being a pre-nursing student?” Optional follow up questions were asked including: What happened as they went through this experience? What feelings or moods were present? What did you do? What did you say? What did you think? The researcher transcribed interviews prior to data analysis. Once data analysis was complete, the researcher sent a copy of the transcript and analysis results to both the research advisor and the participant by email. Participants had the opportunity to provide clarity or add any information they would like to include. Only one participant chose to do so.

All participants’ identify was kept confidential through the use of pseudonyms. The participants’ demographic information was aggregated and no single person was identified by any data. Interview audio and video recordings were deleted following transcription. Transcripts and the thematic analysis were de-identified by the researcher prior to sharing with the research advisor. All transcripts, field notes, journal entries, and data analysis are kept in locked file cabinets by the researcher, and will be erased or destroyed three years after the completion of the study. All digital forms of data were stored in a password-protected file on the researcher’s private computer. All consent forms will be retained by the Research Advisor securely in an on-campus office for a
period of three years, and will be destroyed after this time. Data analysis was ongoing throughout the data collection to inform the number of interviews needed.

**Data Analysis**

Thematic analysis as traditionally used in the social sciences needed to be modified for the use of descriptive phenomenology (Van Manen, 2016). Van Manen (2016) instructs that many processes for abstracting and coding to look for themes from empirical data are inadequate to the task of recovering structures of meanings in the human experience. As such, an adaptation of thematic analysis for phenomenological research designed by Van Manen (2016) for thematic analysis was followed in this research study.

The first step in the data analysis was adoption of the phenomenological attitude by the researcher, which includes the epoche (Appendix E), reduction or bracketing (Husserl, 1970). Bracketing by the researcher means suspending judgements, biases or preconceived theories that may interfere with gleaning insights from the experiences of study participants (Creswell, 2013). The meaning derived from the thematic analysis must be what emerges from the descriptions of lived experience and not the meaning attached to those experiences by the researcher. For this study, the researcher used reflective journaling to identify all previous experiences and potential biases related to the experience (Grove et al., 2013). In the Husserlian tradition of descriptive phenomenology, this was the first step in the data analysis.

Thematic analysis of lived experiences provided by participant’s occurred on three levels. The reflective method for seeing meaning in texts as described by Van Manen (2016) was utilized for thematic analysis. Transcripts were analyzed for meaning
on the level of the whole description, the level of the question answers, and at the level of
the sentence, phrase, expression or single word (Van Manen, 2016). Utilizing this
method the researcher first read the whole experience of the participant. At this level of
analysis, the researcher reflected on what the main significance of the account is. A
phrase was sought that expressed the wholistic meaning of the data. Second, the
researcher searched the transcripts for sections that were essential or revealing about the
phenomena that was being described. This was often at the level of the answer to each
question. At this level, the researcher sought out statements or phrases that seem
particularly essential to the story told by the participant. These provided exemplars of
thoughts, feelings, and experiences provided by participants. The third level of analysis
included a detailed reading of each sentence and word. In the detailed reading, meaning
was sought by asking what it is that each sentence says about the experience for this
participant. The findings on all three levels of analysis from each interview were then
compared, contrasted, and synthesized to identify themes that describe the phenomenon
(Van Manen, 2016).

Research Validity and Reliability

Credibility

Potential threats to the credibility of this study will be addressed through use of
triangulation, member checks, and adequate engagement in data collection. It is
acknowledged that because of the qualitative nature of this study there are potential risks
to credibility due to the perceptions of reality on the part of the participants and the lens
through which the researcher views the findings (Maxwell, 2013). Denzin (1978)
proposed four methods of triangulation to address internal validity or credibility of a
research study. Of the four methods for triangulation, multiple methods of data collection and multiple sources of data were used in this study. Multiple methods of data collection included triangulation of the data with the findings in the literature about experiences of underrepresented students in nursing. These findings helped to validate the information given in interviews. Thus, the multiple methods of data collection included interviews of participants and documents already published about the phenomena (Merriam & Tisdell, 2016). Some element of triangulation also occurs as patterns began to emerge in the data and participants stories. Saturation lends to natural triangulation in phenomenological results as Merriam & Tisdell (2016) describe. Member checking occurred following the transcription of the interviews. Each participant was given the opportunity to review the analysis of interview transcripts and add additional information or make clarifications. One participant chose to provide feedback on the transcript and data analysis. The participant stated that the data analysis “looks amazing. You definitely did a great job. Thank you again for giving this opportunity to make my voice heard!” Despite the lack of quantity of responses, the participant validated the findings of the researcher and supported the credibility of the analysis. The research advisor for this study also served as a peer reviewer of the transcripts and data analysis. This was a valuable element of establishing credibility (Merriam & Tisdell, 2016). The researcher engaging in the reduction of bracketing also reinforced the credibility by minimizing the bias of the researcher and reducing the risk of incorrect interpretation of the participants stories by attaching meanings held by the researcher (Creswell, 2013). Adequate engagement in data collection means that data collection and data analysis occurred simultaneously and data collection continued until saturation of data or redundancy of
data occurred (Creswell, 2013). The ongoing data analysis informed the number of interviews needed to ensure credibility of the data. The researcher identified redundancy of data following interview nine, but continued data collection to a sample of thirteen to ensure redundancy and reinforce credibility.

**Dependability and Trustworthiness**

The dependability of a qualitative research study is the degree to which the results of the study are consistent with the data that is collected (Lincoln & Guba, 1985). Trustworthiness is related to the rigor of the research methods used by the researcher (Patton, 2015). Along with measures taken to establish credibility described previously, field notes of the research were kept to establish dependability (Merriam & Tisdell, 2016). The researcher kept a detailed record of reflections, how problems are addressed, and all interactions with the data through the analysis process. Additionally, precise descriptions of research methods and adherence to the research procedures will speak to trustworthiness (Creswell, 2013). This will allow other researchers to assess the dependability of the results of this study based on the data and the processes undertaken.

**Transferability**

The ability to generalize data from a phenomenological study such as this can present challenges for research. Primarily the purpose of phenomenological description is to come to an understanding of what is universal or essential about a phenomenon (Van Manen, 2016). Providing thick, detailed descriptions of settings, participants, and findings can help readers extrapolate the findings from this study to other situations in which findings of this study might be applied (Lincoln & Guba, 1985). In an additional attempt to address issues of transferability adequate engagement in data collection to
reach saturation or redundancy in data collection will help to establish the typical nature of the findings (Merriam & Tisdell, 2016). Data redundancy can provide insight into the experience that most individuals in the target population have.

**Ethical Considerations**

Approval was obtained from the Institutional Review Board at the university where data collection will be collected (Appendix A). Participants were invited to participate by email using official university email addresses (Appendix C). The researcher following completion of the study did not keep contact information for students. Recordings of interviews were destroyed following transcription. Student names and personal information were not kept on the transcripts of the interviews. Consent forms (Appendix D) were sent out to students prior to participation. Participants were informed of confidentiality and their right to withdraw from the study at any time. Risks to participants were minimal in nature for participation in the study. The interviews lasted an average of twenty seven minutes. The researcher did not have the ability to influence acceptance into the nursing program at the data collection school in any way. The foreseeable risks were not greater than those that might have been encountered in a social setting or in a conversation with a peer about career choices. All participants were provided with resources for the university counseling center, academic advising, and cultural centers following participation. The benefits to the participants may include learning something about themselves and potentially participating in improving the future for underrepresented students seeking nursing as a career. Students were offered a twenty-five dollar gift card for participation in the study.
Conclusion

The research design was selected to explore the lived experience of underrepresented students in nursing when they are making the decision to apply to a nursing program is descriptive phenomenology. Descriptive phenomenology allowed for exploration of the experience of students and provided insight into unique features of the experience that are perceived by individuals and may deter from selecting nursing as a career. Because not much is known about the experience of underrepresented students who have not yet applied to a nursing program description of the experience is needed to lay a foundation for further research. The sample population was undergraduate students enrolled in a public university, who are considering nursing as a major, and who self-identify as being from an underrepresented racial or ethnic background. Phenomenological interviews were used to collect the experiences of students. Van Manen’s (2016) method of thematic analysis of lived experiences guided the evaluation of transcripts.
CHAPTER IV

FINDINGS

The purpose of this research was to explore the experience of underrepresented students who are considering nursing as a career but have not yet applied to a nursing program. The research question asked was: What is the lived experience of students who have declared pre-nursing as a major and are underrepresented racially or ethnically in nursing when making the decision to apply to a nursing program? To answer this question, a descriptive phenomenological study was undertaken. Interviews were used as the data collection method. Study participants were asked to describe their experience as a pre-nursing student. The data was analyzed using an adaptation of thematic analysis designed by Van Manen (2016). This data analysis method included examination of the interviews at the level of the whole interview, the interview question answers, and the individual sentences or phrases in the interviews. This chapter includes a description of the sample, and the results of the data analysis that seeks to describe the experience of underrepresented pre-nursing as they are deciding to apply to a nursing program.

Sample

The sample was selected using a combination of purposive and snowball sampling of undergraduate students at a western, non-research intensive university with a competitive nursing program. Email invitations (Appendix A) to participate in the study were sent out to all students who had declared pre-nursing as their major. The students
then self-selected to participate by contacting the researcher via email. The final sample included 13 participants. The data reached saturation after nine interviews. To ensure adequate data collection, four additional interviews were conducted. The sample included nine female participants and four male participants. The age range was 18 to 42 years old. The average age was 20.8 years old with a median age of 19 years old. The interview questions (Appendix C) asked participants to describe their personal experience while selecting a major, being a pre-nursing student, and deciding to apply to a nursing program. The length of the interview ranged from 18 to 45 minutes. The average interview length was 26.8 minutes and the median length was 22 minutes. During the interviews the participant’s experiences, feelings, and thoughts about being a pre-nursing student from an underrepresented background were solicited and documented.

Operationally, racial or ethnic underrepresentation in the discipline of nursing was defined as African American, Asian, Hispanic, American Indian/Alaskan Native and Native Hawaiian/Pacific Islander (AACN, 2015). Participants were asked to self-identify the racial or ethnic backgrounds that they identified with. The final sample included the following participants: 1 Native American, 7 Hispanic, and 5 African American participants. The demographic makeup of the university where the study was conducted is 58% white, 20.4% Hispanic, 4% African American, and 0.3% Native American (University of Western United States [pseudonym], 2018). The surrounding community makeup is 55% White, 39.4% Hispanic, 2.2% African American, and 1% Native American (United States Census Bureau, 2017). The student population attending the university is less diverse than the community in which it resides. Interestingly, both the
community and the university communities encompassing the study participants are more diverse than the racial or ethnic makeup of nurses in the United States (AACN, 2015)

The Lived Experience

The words most used to describe the experience of being an underrepresented pre-nursing student were “stressful”, “difficult”, “overwhelming”, “serious”, “terrifying”, “hard”, and “intimidating”. Students described feeling alone as a member of their underrepresented background and a sense of fear that they were not understood by their peers, teachers, or the nursing program they wanted to be admitted to. Being an underrepresented pre-nursing student includes a feeling that they must work harder than their White peers to be successful. Common was a feeling of responsibility to prove that individuals from the culture or background which they represent are capable of being successful in healthcare professions. One example of this is Alice who stated “I think it’s [being an ethnic minority] made me feel like I have to be more competitive to represent my background.” The experience includes the stress of the academic workload of prerequisite courses and the pressure to earn high grades to be admitted to a competitive nursing program. A vulnerability exists among these pre-nursing students as they try to compete for a position in a nursing program. This stems from a fear of not being seen as an individual but rather as a grade point average or as merely their application. Additionally, the vulnerability that comes from a lack of control over their future academic and professional career is part of the experience. Discouragement and self-doubt are emotions that come and go throughout the experience as the difficulty of the competition is faced. Financial pressures and mental health issues must be navigated as part of the experience for some of the underrepresented pre-nursing students. In addition
to the stressful parts of the experience is a sense of purpose and hope. The students experience great motivation to pursue careers in nursing. They want to represent their cultures, give back to the community, support their families, and provide care to others. These are the parts of the experience that make enduring the stress worth the effort.

Ultimately the interviews were interpreted as an expression of pre-nursing students from racially or ethnically underrepresented backgrounds who are feeling they are in a stressful situation and who are experiencing a feeling of isolation and a perception of discrimination. Many of the stressors this population of students experience are not directly related to the racial or ethnic background of the student. However, the isolation and perception of discrimination that is related to the underrepresented status of the students adds a level of pressure to an already difficult and stressful experience of trying to be academically successful enough to compete for acceptance in a cohort of a nursing program.

The remaining portion of this chapter will describe in detail the aspects of the experience of being a pre-nursing student from an underrepresented background in nursing that contribute to the overall findings from the interviews. The study participants described significant stressors that are directly related to the experience of being an underrepresented pre-nursing student and stressors that are not directly related to the experience of being an underrepresented pre-nursing student. In addition there were descriptions from the participants of other aspects of the experience such as motivations for being a nurse, overcoming obstacles, and support that is needed that will be addressed. Each of these aspects of the experience of being an underrepresented pre-nursing student contributes to the overall description of the lived experience.
Stressors Directly Related

Feeling Different

Feeling different as a consequence of racial or ethnic status was mentioned by the study participants. Comments made by participants included “not seeing other students who look like me” or “not seeing teachers who look like me”. Overall, comments were made during interviews about not seeing others in pre-nursing courses that were from similar racial or ethnic backgrounds as themselves. Some participants mentioned that this lack of diversity was in contrast to what they see in the student body generally at the university (Lucy). The idea that passing as white may be of benefit was raised by one of the participants when discussing the lack of diversity of pre-nursing students. It was an acknowledgment that being white may be an advantage either socially or academically.

Other participants added that they perceived that they were less understood or that they had different struggles than their white counterparts. Although most participants spoke of other pre-nursing students as understanding the academic load and the rigor of the experience, the idea that socially or emotionally, there is an aspect of the experience that was not understood by others that did not share a common racial or ethnic background. Brittany expressed this by saying:

The minorities that I do come across it is always an exciting thing because we can relate to each other outside of just school and we can be, I don’t know what the word is but, we can hang out and talk about things that I can’t talk about with my other friends which is super nice.

One pre-nursing student who stated that they were able to pass as white and had an advantage in many ways because of this, also felt that passing as white meant that they were less understood by others because of dueling identities brought on by being from one racial or ethnic background but being perceived as from another. Lucy expresses this
when they state: “When they see my family they know I’m Native American but when
they just see me they can’t really tell. It’s kind of hard.”

Fear of discrimination due to racial or ethnic status was mentioned by participants
whether it be discrimination from the faculty of prerequisite courses, the nursing program
itself, or in the future from potential employers. One student (Robert) described an
experience of discrimination with an academic advisor who discouraged the student from
pursuing nursing as a career due to either gender or ethnic status or both. Robert
described this fear of discrimination from the nursing program as “fear that I might be
stopped at the door”. Beth describes fear of discrimination as:

*I feel like this is something that still goes around. It’s still an issue sometimes.
Like when you have to pick between two people who look different. That you
have to pick one over the other to be more traditional. It’s still a problem, but
probably not as big a problem as it was. Like maybe I can lose out on a chance to
have a job or be rejection because of my nationality.

Interestingly, the four male participants also expressed this feeling of not seeing
others who looked like them about being male as a pre-nursing student. This minority
status of being male was felt by all male participants in the study. The perceived
difference as a gender minority was in addition to the difference felt as a racial or ethnic
minority. Steven expressed this sentiment by saying that “Especially in the nursing
college because I would go into these 200 or 300 people lecture halls, and they were just
predominately be white kids and more precisely they’d be all white women.”

**Having Something to Prove**

The theme of having something to prove or having to work harder than others to
be successful was mentioned throughout the interviews. This was expressed by
participants as feeling that they would need to put in extra study time or do more work
than the other students in the prerequisite courses to be competitive enough to get accepted to a nursing program. Barbara expressed this as:

Definitely being a minority and also being female I definitely feel that being a pre-nursing major and student I have to work twice as hard as the person sitting next to me. Because of you know the things I face, what I mean by that is that because of color of my skin and because I am a female, I am always going to have to work harder. Because there are a lot of stereotypes about how people like me can’t do certain things; people like me are undermined for even thinking that they can do these types of jobs or these types of things.

Additionally, students expressed a concern that as a minority applicant they would need to prove themselves in ways that other pre-nursing students would not. Melissa describes the need to prove the ability of underrepresented students to be successful by saying “we need to show that minorities can do this.”

**Stressors Not Directly Related**

The participants in the study discussed academic pressure as a significant source of stress that impacted their experience as a racially or ethnically underrepresented pre-nursing student. This category of stress was mentioned by all participants. The phrases used by the students included pressure to maintain a very high grade point average to be considered for acceptance into a nursing program as well as discussion of the workload of several difficult courses that all needed to be taken during the same semester to keep pace with the recommended course outline. Time management to manage the academic workload successfully was a related to the stress caused by academic pressure that most participants brought up when discussing their school experience.

**Vulnerability**

The idea of vulnerability was present in the descriptions of all study participants. Vulnerability stemmed from not being seen as an individual. Participants expressed
concern that although they felt they would be good nurses, their grades may not reflect a holistic picture of who they are. Knowledge of being judged by the faculty in the nursing program for admissions was also a source of vulnerability. Concern about not getting accepted to a nursing program made students feel vulnerable about their future career. Finally, vulnerability stemmed from feeling at the mercy of faculty members who are teaching prerequisite courses that may control the participants academic or career future.

One source of vulnerability was the fear of not being seen as an individual person but rather as a collection of course grades. “I am more than my grades” was a sentiment shared by ten of the thirteen participants. A general curiosity on the part of the participants about how grades determined the quality of nurse that one would be was expressed by six participants.

Steven expressed:

One thing that I have definitely experienced is that they (the nursing program) really know how to weed kids out. Because that’s at least the one good thing they do. You realize that if you want to be a nurse you stick it out. But then again, I don’t know if they’re actually weeding out the right way because I’ve had a lot of kids say they’re gonna switch majors or they give up because it’s so hard [to get high enough grades].

Melissa stated:

They’ll just pass me over and go on looking for someone else who’s a better candidate for the program if my grades aren’t high enough. Like somebody who did better in a chemistry class would be a better candidate for nursing school. You put all your hard work into this and no matter how much you try, I don’t know if they look at who tried or not. It’s who succeeded or not.

Study participants expressed a vulnerability that originated from feeling judged by faculty members or from being compared to others. The quantity of pre-nursing students generally created a feeling of being one of many and needing to compare themselves to the performance of other students. Beth mentioned that “to be a pre-nursing student is
kind of like you are just one of a lot of pre-nursing students. It’s kind of like I’m getting lost in all of the pre-nursing students.” This participant goes on to discuss how it is intimidating knowing that you are being compared to all of these other pre-nursing students. Steven described this vulnerability as knowing that students were being “weeded out” as possible nurses. The stress brought on by the vulnerability of being judged by others and knowing that the attributes being used to make these judgements feel to some degree out of your control creates a feeling of vulnerability that was expressed by the pre-nursing students who were interviewed for this study.

A concern about not being able to get in to a nursing program was expressed by all but one of the participants. The word fear was commonly used to describe this concern. Although self-doubt is a cause of this concern, the vulnerability created by the uncertainty of whether or not a student will be able to get in to a nursing program was a significant source of stress for participants. Barbara articulated this vulnerability and stress:

When I think about applying to the nursing program I am terrified. So terrified. Because it is something that I have wanted to do for a very long time. There is always that thought in the back of my head, like what if you don’t make it. No matter how much I don’t want to think about that you know it is there.

A feeling of vulnerability stemmed from knowing that their future career or opportunity to be a nurse was at the mercy of forces outside of themselves that they could not control. These forces included the decisions by course faculty about curving grades for courses or tests, determinations about rounding grades made by faculty, and decisions being made by the faculty of the nursing program about admissions criteria. An example of the vulnerability from the interview with Nancy who said “some classes are hard and I know 78’s and 79’s don’t count as well as B’s but I just know that some teachers end
with their curving at 79.45 and then you are just kind of stuck.” This student was expressing the vulnerability of the decision to draw the line between a C+ and a B- at 79.45 rather than 79.4. These decisions are typically made by individual faculty and are not standardized across courses or academic departments. Given the competition to get into a nursing program participants feel like these small decisions might have a large impact on their ability to achieve career goals.

**Competition**

The participants described stress that resulted from the competition with other pre-nursing students. The participants were all aware that they were competing for a limited number of seats in the nursing program. Most expressed concern about not being able to be competitive enough and as a consequence not get in to a nursing program. The competition creates an environment where students feel as described by Melissa there is “no room for error”. Pre-nursing students were described by participants as being “as competitive as they can” (Alice). One participant described an experience where other pre-nursing students intentionally sabotaged them in an effort to earn a higher grade in a class to be more competitive (Steven). The feeling of competition was a significant source of stress for study participants.

**Discouragement and Self-Doubt**

In the telling of experiences many of the participants described feelings of being discouraged or experiencing self-doubt as a result of being a pre-nursing student. Feelings of self-doubt were expressed as feeling “maybe I can’t do this” (Barbara) and “maybe I am not cut out for this” (Nancy). Self-doubt seemed to be intermingled with a sense of discouragement by the same participants. Beth described a friend who was a
pre-nursing student who quit working towards a nursing program after becoming overwhelmed from the academic workload and expressed concern that she too would eventually not be able to endure the pressure. In this story she expresses a combination of discouragement and self-doubt. Another participant describes discouragement from feeling like they may not be good enough even though “I’ve done all the work to get in” (Brittany). Some participants included that visiting with the academic advisor was a source of discouragement. Robert described discrimination from the academic advisor that was discouraging and Nancy describes the discouragement encountered with the academic advisor in the following description of an appointment:

A lot of times its always ending on a note of “make sure you have a backup plan” “what is your backup plan if you don’t get in?” or “we saw that you may have got a C in this class so these are some of the options for the second route program”. Sometimes I am like OK, well that’s not like a “maybe try again” or “maybe try this resource of like this type of tutor or that type of tutor” it’s never really like “what can we do to help” it’s more straight forward. If you are not cutting the bar, think about a second program because this probably isn’t for you. It’s not as encouraging as it could be.

Application Process

The application process itself was cited as a source of stress by several study participants. “Navigating the application process” described as figuring out the right things to do or getting the application “right” was a concern expressed. George expressed concern about knowing the requirements for getting into the nursing program. Another participant described feeling pressure to do extra things outside of school such as volunteer work or working as a nurse’s assistant to try to improve chances and make the application look better (Darla). This pressure to improve the application by doing extra work and get the application “right” is exemplified by Barbara:
Even though building the application is going to be hard, I want to make sure I do everything I can and need to do to make sure my application is just set up for success and the way that it should be.

**Financial Pressure**

Financial pressure was expressed as both a worry about not being accepted to a nursing program and having wasted money on school as well as a pressure that interfered with academic success due to having to work full time as a student trying to get into a nursing program. Participants perceived a financial stress if they did not get into a nursing program. Whether this is due to student loans is not known, but was mentioned by two study participants. Lucy stated this by saying “I’m concerned about getting into the program and being accepted. I have this fear because I’m paying a lot of money to go here and if I don’t get accepted here then that would be my biggest fear.” Two participants suggested that the financial pressure of needing to work full time was potentially hindering their academic success. There was an expressed feeling that students who did not need to work because their parents were paying for expenses would have an easier time getting into a nursing program. This stress is present in the day to day of making ends meet as well as knowing that other students have an advantage academically.

I mean they may have parents to help them through college so they don’t have to stress about other stuff they can just put their whole life towards their career. They don’t have to worry about bills or food. Their parents are just helping them. So I think that’s just kind of a worry I guess. If I have to work for everything myself is there going to be time to focus on 100 percent on getting into the nursing program (Alice).

**Mental Health Issues**

Concern about mental health was a source of stress that was present in the narratives of many of the participants, although only explicitly verbalized by some.
Melissa described stress brought on by needing to stay mentally focused and staying mentally healthy. Lack of time for self-care was an added source of worry as it caused concern about maintaining mental health through this experience. Another participant was more explicit in verbalizing concern over mental health describing anxiety, depression, and mental breakdowns that had occurred at times of final exams.

Both finals weeks I’ve had mental breakdowns. I’ve cried. I’ve called family members crying because it’s been terrifying. That need to perform and just with that need to perform I feel like during finals week if I don’t do well I’m not going to become a nurse (Steven).

Other Aspects of the Experience

Motivation

Every participant described a strong motivation to be a nurse. The most commonly mentioned motivation was a desire to help others, to care for others, or to give back to the community. Additionally, all study participants described a nurse who was an example to them and inspired them to pursue nursing as a career. These were nurses who had cared for them personally or for a family member. Some of the participants had family members who were nurses. Throughout the interviews there were several mentions of high school programs that exposed students to health care professions or outreach programs that participants had been part of while in high school. These programs had piqued the interest of some participants and provided motivation for this choice. Some participants describe the advice of other nursing students or the interactions with the nursing program as part of the motivation they had to select nursing as a major. Nursing was perceived as a good job and that provided motivation for participants in choosing to become nurses. Finally, participants expressed a motivation to
be a nurse in order to increase the diversity in nursing because of the lack of understanding for minorities that they perceived in healthcare.

Support

Support needed. The support needed that was expressed by participants included individualized academic advising, emotional support or mental health support, and the need for back-up plans or alternative pathways. The pre-nursing students who mentioned a need for individualized academic advising described the frustration at receiving generic plans of study that may have not been very helpful to them personally. For example, Steven identified that given their anxiety disorder it would have been helpful for the academic advisor to alter the plan of study to accommodate the individualized need. Two of the participants expressed a need for emotional support or mental health needs. These participants felt that the overwhelming nature of the academic workload and the competition of the process merited some support for students who needed it. Back-up plans were mentioned by the participants for the study. This was expressed as a source of stress that manifested out of the possibility of not being accepted into a nursing program. These participants described variable levels of knowledge about alternative pathways into nursing and other career choices that would be viable for them if they were unable to get into the nursing program that they were seeking.

Sources of support. A common thread in the descriptions provided by the study participants included sources of support that they relied upon to continue in their pursuit of admission into a nursing program. Every participant listed other pre-nursing students as a source of support. Often mentioned as study groups for prerequisite courses and as others that understood the common experience of being a pre-nursing student. One of the
participants (Nancy) described these peer groups as other pre-nursing student from similar racial or ethnic backgrounds as them self however most participants did not. Participants included the nursing academic advisor as a source of support. This support came in the form of appointments made on a regular basis to discuss registration and the application process to the nursing program. Maria described the nursing academic advisor as providing information about alternative pathways into nursing and by doing so reduced the stress experienced by the student. Both nursing and non-nursing faculty were cited as a source of support by six of the participants as were family and friends. Spirituality was a significant source of support mentioned by participants. Overall, all students mentioned the need for support and the places where they were able to turn to for support as important parts of the experience of being a pre-nursing student.

**Overcoming Obstacles**

Overcoming obstacles was a theme that emerged from the interviews that included things that were found to be helpful, things learned about self, and academic skills acquired while being a pre-nursing student. Most study participants described something that had helped them to overcome barriers or obstacles they had encountered along the way in the experience of being a pre-nursing student. Finding meaning in the academic work had provided perspective on the prerequisite courses. An example of finding meaning in the academic work is what Charles has to say:

I appreciate that I can apply what I’ve learned in the schooling out to what I’m doing in the medical field. I can now explain things and they make sense. Before I felt like I was blinded in the medical field and I was doing things just because people were telling me that I should do them. And now I feel I got a better knowledge of why I am doing the things that I’m doing.
The ability to maintain a determined mindset and a positive attitude was a something that had helped some overcome difficulty. Melissa describes this: “Definitely my mentality is really what’s getting me through these few years before I apply to the nursing program.”

The older participants (Robert and Charles) both describe age and maturity as attributes that have helped them overcome some of the challenges that they have faced during this experience.

Study participants reported learning about themselves that they can work harder than they may have previously thought. Charles captures this feeling in the following self-description:

I transitioned into that person who wants to keep learning; that person who wants to do more; that person who if something goes wrong isn’t going to beat themselves up about it and give up but is going to try harder to do better the next time.

As well as learning that they can overcome obstacles by working harder the participants also described learning to overcome negative self-images that had been learned from past discrimination. This included the development of courage and self-discovery. Robert provided a description:

Those old voices, the ones that say, “What do you think you are doing? You don’t belong here. This isn’t for you”. Man, talk about really push through all of that. I had stepped into a place of vulnerability and I just stayed there. I worked really hard but I was an open store, but it was like this open wound. It opened a wound from way long ago. But being able to be successful in it, oh my gosh I have experienced so much healing at the same time.

Academic skills learned included the ability to be a confident student and stress coping skills. Participants reported having learned to study in groups which had made them more successful (George), learning to ask questions in class, going to office hours and asking for help (Barbara) as strategies to become confident students. Stress coping
skills were also a positive outcome for some participants when learning to overcome obstacles in the experience of being a pre-nursing students. One example of this was positive self-talk described by Melissa where they describe pep talks they give to themselves when they are feeling discouraged or stressed.

**Conclusion**

The experience of underrepresented students who are considering nursing as a career but have not yet applied to a nursing program is described by participants as stressful. The stressors include various sources. Some of the stressors that are an integral part of the experience are directly related to the status of being an underrepresented pre-nursing student. Other stressors that are experienced are not directly related to being an underrepresented pre-nursing student. Additional aspects of the experience include motivation, needed support, and overcoming obstacles. Overall, the experience can be described as stressful including the common sources of stress experienced by pre-nursing students but with additional sources of stress from feeling different than others and having something to prove. Feeling different includes a sense of aloneness and fear of discrimination. Pressure from needing to work harder than others and be a representative of a racial or ethnic background are stressors that add to the experience. Purpose is a driving aspect of the experience that propels students forward and causes them to overcome obstacles and persevere. Overall the experience is described as stressful and discouraging as well as motivating and overcoming.
CHAPTER V

DISCUSSION

The nursing workforce needs to represent the racial and ethnic makeup of the general population in order to provide culturally competent care and reduce health care disparities (Sullivan Commission, 2004). To accomplish the diversification of the nursing workforce, nursing education has focused on recruitment and retention of underrepresented students admitted to nursing programs (Amaro et al., 2006; Bednarz et al., 2010; Loftin et al., 2013; Tab, 2016). Understanding of barriers to retention and graduation for underrepresented nursing students has laid a foundation for increasing the retention and graduation of students from diverse racial or ethnic backgrounds. The existing gap is in understanding of the barriers faced by underrepresented students who might be considering nursing as a career, but have not yet solidified that decision by applying to a nursing program. Without an adequate amount of individuals from underrepresented backgrounds in nursing applying to nursing programs, the efforts to admit, retain, will not be sufficient to increase the diversity of the nursing workforce. It is expedient to move forward in diversifying the nursing workforce in order to reduce the health care disparities faced by minority population in the U.S. (Williams, et al., 2014).

The purpose of this research study was to describe the experience of students who have declared pre-nursing as a major and are underrepresented racially or ethnically in the discipline of nursing. The research questions asked: What is the lived experience of
students who have declared pre-nursing as a major and are underrepresented racially or ethnically in nursing when making the decision to apply to a nursing program? The participant’s experiences include descriptions of stress and the vulnerability of the experience of being an underrepresented pre-nursing student. Also, there appears to be a dichotomy that exists between what the participants feel nursing is and what nurses do compared to their experiences as pre-nursing students. The implications for nursing education include guidance for responding behaviors to help bridge the cultural barriers for underrepresented students. The findings of this study also reinforce the importance of increasing the representation of minority populations among nursing faculty as well as staff who work in higher education. The study participants also describe recruitment strategies that had assisted them in deciding to pursue nursing as a career that had been successful. This can inform future efforts to recruit a diverse population of applicants to nursing programs.

**Features of Stress**

The primary finding from this study is that the experience of being an underrepresented pre-nursing student is stressful. Multiple sources of stress exist for these students including feeling different than others, perceiving a need to work harder than other students, academic workload, competition, the application processes, financial stress, and mental health issues. Some of these sources of stress such as academic workload, competition, mental health issues, and financial stress are likely common to all pre-nursing students and other sources of stress such as feeling different than others and perceiving a need to work harder than other students to be successful are likely unique to the population of underrepresented pre-nursing students. Overall, the study participants
were excited at the prospect of becoming a nurse, but had a sense of unhappiness due to
the stressful nature of the situation.

Although there is not much research that has been conducted about the stress in
pre-nursing students, the sources of stress identified through this study are consistent with
the sources of stress found for nursing students generally (Labrague et al., 2018;
Pryjmachuck & Richards, 2007). It is not surprising that the academic workload is a
significant source of stress that was mentioned by all participants in this study. Pre-
nursing students are typically taking a full time workload of difficult science courses that
are used as admission criteria for nursing programs (Schmidt & MacWilliams, 2011). The
competition for placement in nursing programs is intense for all pre-nursing students. In
2016, it is estimated that more than sixty thousand qualified applicants were turned away
from nursing programs due to a lack of positions available in the programs (AACN, 2017).
Mental health and financial issues compound the stress for students and make
coping more difficult (Gibbons, 2010). Because all pre-nursing students are subjected to
the same admissions criteria and application process it is reasonable to conclude that
these sources of stress are common among all pre-nursing students. It is unknown if
there is a higher incidence of financial stress and mental health issues among
underrepresented pre-nursing students. Clearly, financial stress and mental health
problems exist in all populations. However, due to the disparities in socioeconomic
status and in access to health care that are present for underrepresented populations (Barr,
2014), these sources of stress for pre-nursing students may be experienced more acutely
by this particular population.
Feeling different than other pre-nursing students was a source of stress mentioned by participants and led to feelings of aloneness and of not being understood. This is a source of stress that is probably not experienced by pre-nursing students who are not part of an underrepresented group. This finding is consistent with studies of underrepresented nursing students (Alicea-Planas, 2017; Fuller & Mott-Smith, 2017; Neubrander & Metcalfe, 2016; Veal et al., 2010). The participants in this study felt different than other students but also different than their faculty members and academic advisors. This barrier might contribute not only to a feeling of not being understood by faculty (Amaro et al., 2006) but also a lack of role models for success in nursing (Phillips & Malone, 2014) and a perception of discrimination that might be present in the admissions process (Ackerman-Barger & Hummel, 2014). The current study confirms the findings of feeling different than peers and the stress from this that has been found in nursing students are also found in pre-nursing students (Amaro et al., 2006). However, pre-nursing students are in a more vulnerable position for attrition from nursing because they do not have the security of being accepted into a program yet. This may cause these students to give up more easily than students who have been admitted to a program.

The sample for this study included four male participants. These participants experienced the feeling of being different not only from the perspective of racial or ethnic status but also from a gender perspective. The current make-up of the nursing workforce is 9.6% male (AACN, 2015). These participants face a potential for feeling discriminated against due to compounding aspects of underrepresentation. Although the focus of this study was racial and ethnic underrepresentation the male participants shared this source
of stress which has been validated through previous research (MacWilliams, Schmidt, & Bleich, 2013).

An interesting finding from this study was the perception on the part of most participants that they would need to work harder than their non-underrepresented peers in order to be successful in being accepted into a nursing program. Whether or not the students actually do have a need to work harder is less important than the perception of the need to do so. This compounds the stress of all of the previously mentioned sources of stress. Although there is an argument that using grade point averages and standardized test scores as a primary admissions criteria do create a barrier for underrepresented students (Sullivan Commission, 2004) which may validate the perceptions of study participants. Pre-nursing students seem to perceive discrimination similarly to nursing students from underrepresented backgrounds (Ackerman-Barger & Hummel, 2014).

The framework used to examine the barriers for underrepresented students used to review the literature for this study (Yoder, 1996) identified that students perceptions of barriers influenced the expectations of the educational experience as well as the perceptions of interactions with faculty (Amaro et al., 2006). The categories of barriers used to examine the research were personal needs, academic needs, language needs, and cultural needs. Each of the sources of stress identified by the study participants in the current study were validated through this framework. The participants in this study did not have language barriers that were reported and consequently that aspect of the experience of racially or ethnically underrepresented students did not come out in the findings.
The study participants all mentioned factors related to socioeconomic status, although there was not a question asked about this by the researcher. Some participants mentioned financial stress specifically, others discussed the educational achievements of their parents or lack thereof. It is clear that this was something that added to the experience of the participants in both positive and negative ways. The study participants who described financial stress while in school or who described backgrounds that included uneducated parents or coming from backgrounds in poverty also reported higher levels of stress as part of the experience of being an underrepresented pre-nursing student. As individuals from underrepresented backgrounds have a higher incidence of being from a lower socioeconomic status this is an important factor to consider in the experience of students (Barr, 2014). The relationship between stress experienced by underrepresented pre-nursing students and financial status is one that could be investigated further.

The features of stress experienced by underrepresented students can help guide efforts to support student success and promote larger applicant pools of diverse students to nursing programs. Interventions to reduce barriers for nursing students from underrepresented backgrounds that are in place include providing social supports (Colville et al., 2015), assistance navigating financial support for education (Loftin et al., 2013), academic support (Murray et al., 2016), and mentoring programs (Wilson et al., 2010). These types of supports need to be more prevalent across programs and reach out to pre-nursing students as well as nursing students. The financing of support for pre-nursing students is likely to be a barrier to schools who desire to provide these services. The study participants also mentioned the need for academic advising that was more
personalized. The availability of more academic advisors for pre-nursing students might facilitate more individualized advice as well as better referral to student services that are available. The student experience is innately stressful and being in competition for placement in a nursing program adds to that level of stress. It is unrealistic to think that stress can be eliminated and that may not be a desirable outcome (Gibbons, 2010). However, in light of needing to increase the diversity of the nursing workforce the discipline of nursing education needs to reach out to potential applicants from underrepresented backgrounds and ensure that additional barriers are not contributing to attrition from pre-nursing programs of study.

**Vulnerability**

The vulnerability described by the participants of this study was an unanticipated component of the findings. A sense of vulnerability came from not having control over some of the academic outcomes, the admission process, and a feeling that students would not be seen as more than their grades. Knowing that these factors could prevent participants from gaining admission into the nursing program and consequently be a barrier to a career path left students feeling at the mercy of others in a position of power. This finding raises questions about the transparency of grading and admissions policies which are variable from one educational institution to another. Although nursing programs can address this vulnerability through holistic admission models (Urban Universities for Health, 2014; Scott & Zerwic, 2015) the academic policies of university departments offering prerequisite courses would be difficult and too extensive to change. It is likely that this sense of vulnerability is common to all pre-nursing students to some
degree as they are all experiencing the same variable grading practices and admissions
experiences.

In addition to the vulnerability that underrepresented pre-nursing student’s likely
share with all other pre-nursing students, it also seems likely that this vulnerability is
perceived at higher levels by the underrepresented students. When viewed in context
with the sources of stress that are unique to the underrepresented pre-nursing students
such as feeling a need to work harder than their peers and feeling like they do not see
others that are like them, it seems fair to say that the sense of vulnerability may be higher
than that of other pre-nursing students. The feeling of vulnerability experienced by the
participants of this study may be a manifestation of the invisible nature of the institutional
racism that are present in social institutions such as universities (Yosso, 2005). An
implication of this finding is a need to question the sources of oppression for
underrepresented pre-nursing students and seek possible solutions (Crotty, 2012). If left
uninvestigated these sources of oppression will lead to discouragement, possible
discrimination and a continuation of the disparity in the racial and ethnic makeup of the
nursing workforce (AACN, 2015).

The Dichotomy between Nursing as a
Career and Nursing Education

One aspect of the experience of being a racially or ethnically underrepresented
pre-nursing student is the existence of a strong motivation to be a nurse. The study
participants described experiences with nurses who had influenced them to become
nurses as well as desires to make the world a better place by providing care to others in
need. The tone used by participants when describing the reasons why they wanted to
become a nurse was one of joy and conviction. It was very interesting to hear the change
in tone when asked to describe the experience of being a pre-nursing student. Frustration, stress, self-doubt, and anxiety were the prevailing emotional states of the participants. It is as though the experience of being a pre-nursing student is the opposite of what the participants thought being a nurse was or would be like. The participants spoke of nurses as caring, working together, and watching out for each other. Whereas nursing faculty were perceived as “weeding them out” and other pre-nursing students as competition capable of sabotage. This leaves one to wonder if nursing education is perceived as the antithesis of the discipline of nursing.

It is known that incivility exists in the nursing workplace that includes practicing nurses (Hickson, 2013) as well as with nursing students in the clinical setting (Tecza et al., 2018). Incivility has been documented in nursing educational settings such as classrooms where faculty have bullied or otherwise have been uncivil toward nursing students (Koharchik, 2018). This raises the question about the roots of this incivility. It is possible that the incivility in nursing schools is feeding the incivility in the nursing workforce. The inverse could also be true. A possible line of research would be to explore what the influence of the pre-nursing/nursing student experience has on how nurses are socialized coming out of pre-licensure education. Incivility is likely not a problem that can be solved entirely, however understanding the origins of incivility could help promote better strategies for prevention.

**Study Limitations**

The limitations of this study include the inclusion of a single university for data collection. The study participants were all students who had declared pre-nursing as a major at the same a western, public, non-research intensive university. There may be
limitations related to the geographic location of the students and the racial and ethnic makeup of the student body present at this location. Additionally, the sample for this study included four male participants out of the total of thirteen. This is a higher proportion of male participants than are present in the nursing workforce and likely nursing student populations. The larger proportion of male participants may have influenced the results. The overall length of the interviews was a limiting factor. Longer conversations with each participant may have allowed for a more thorough gathering of data. Another limitation for this study was the minimal feedback in the member checking process despite the fact that the participant confirmed the findings of the researcher. Only one participant responded when given the opportunity to review the analysis of their interview.

**Implications for Nursing Education**

Because the sources of stress experienced by the participants are similar in nature to the sources of stress described in research about underrepresented nursing students (Amaro et al., 2006) this strengthens the findings made by Yoder (1996) that identified the bridging pattern of responding to underrepresented students as positive and reducing perceived barriers on the part of students. Bridging includes behaviors on the part of faculty that help facilitate the bridging of cultures for the student between the culture of origin and the dominant culture present in the nursing program. According to Yoder, bridging behaviors include a positive attitude about increasing diversity in the nursing program, placing value through action and word on diversity, and being respectful of cultural differences and encouraging maintenance of cultural identity rather than conformity to a dominant culture. Pre-nursing students included in the sample for this
study had the most contact with academic advisors rather than faculty in nursing programs. This highlights the need for promotion of bridging patterns of responding for the staff of nursing programs as well as faculty. Due to the overall finding of the experience as stressful and the expressed desire for more support, an additional recommendation emerging from this research is improving access to counseling for students who are in need of help.

The perception of feeling different than others in nursing programs emphasizes the need to increase the diversity of nursing faculty, researchers, and policy makers. Faculty from diverse backgrounds will not only have greater life experience with diversity in general (Yoder, 1996) but diversifying faculty will increase leadership positions held by underrepresented minority groups in nursing (Phillips & Malone, 2014). These efforts will make individuals from underrepresented groups more visible in the academic setting and influence the development of programs and admission policies that are more inclusive. Although increasing diversity in the faculty of nursing programs may take time to impact the students at the pre-nursing level through admission policies that are holistic and role modeling, this is an important step in changing the culture of nursing education and influence the diversity of the nursing workforce.

Awareness of the potential discrimination experienced by underrepresented students cannot be overstated. The descriptions shared by study participants of the experience of being a racially or ethnically underrepresented pre-nursing students brings to light potential differences in the experience between this population of students and the general population of pre-nursing students. The perception held by the study participants that they may need to work harder to be successful reinforces the idea that race or
ethnicity can influence how social institutions function (Yosso, 2005). This may be an invisible barrier to students from diverse backgrounds who seek to enter nursing as a profession. By critically reflecting upon the status quo of the experience of being a pre-nursing student, inequities and injustices can be brought to light and potentially remedied (Chinn & Kramer, 2015).

In the research literature on increasing diversity in the nursing workforce several authors have described efforts to recruit a more diverse pool of applicants to nursing programs (Colville et al., 2015; Murray et al., 2016). The findings from this study did validate some of the recruitment strategies that have been successful in bringing applicants from diverse backgrounds. Specifically, high school classes about healthcare professions were a source of motivation to consider nursing as a career. Involvement in clubs such as Health Occupations Students of America, and various outreach programs to involve high school age students in healthcare professions. Some of the participants mentioned completing internships while in high school that gave them access to shadowing a nurse in a clinical setting. This information is encouraging and informs the body of research about recruitment of nursing students. Certainly, recruitment using proven methods could be targeted in areas with larger proportions of racially or ethnically underrepresented backgrounds in the nursing workforce as an intervention to increase diversity.

**Future Research**

Descriptive phenomenology was selected as the method for this research because the lived experience of racially or ethnically underrepresented pre-nursing students needed to be explored to further efforts to increase the diversity of the nursing workforce.
Through this research, some light is shed upon the important factors that might influence students when trying to decide whether or not to apply to a nursing program. By identifying the sources of stress that are part of the experience, research tools could be selected or developed to measure the relationships between the types of stress and interventions designed to help them (Creswell, 2014). Through the findings of this study and the work of researchers that have explored stress in nursing students (Amaro et al., 2006; Junious, Malecha, Tart, & Young, 2010) tool development to measure stress in pre-nursing students could be undertaken. This would facilitate larger studies to measure stress in pre-nursing students generally, tease out the differences in the stress of pre-nursing students from different backgrounds and identify the relationships between various sources of stress for pre-nursing students. For example, exploration of the relationship between socioeconomic status and stress for students from different backgrounds and what is the prevalence of financial stress for pre-nursing students from various backgrounds.

**Conclusion**

The features of stress that were described by the participants included sources of stress that are likely common to all pre-nursing students and some sources of stress that are likely unique to underrepresented pre-nursing students. Vulnerability from being a student in a competitive environment and feeling a lack of control over outcomes was an important aspect of this stress and is likely perceived to a larger degree by the students who are from diverse backgrounds. The students who participated in this study described a dichotomy between how they perceived nurses and the actual experience of being a pre-nursing students that might be important information about the roots of incivility in
nursing. Support was found for some recruitment efforts that are currently in use to attract more diverse populations as applicants to nursing programs. Finally, the findings of this study could inform the development of a tool to measure stress in pre-nursing students. The findings from this study in combination with the work of others who have explored the experience of underrepresented nursing students (Amaro et al., 2006) and the experience of nursing faculty responding to underrepresented students (Yoder, 1996) could lead to progress in increasing the diversity of nursing students and the nursing workforce. Increasing the diversity of the nursing workforce will lead to more research and leadership that can improve the health of the nation as a whole (Phillips & Malone, 2014).
REFERENCES


https://doi.org/10.1177/1043659604273546.


APPENDIX A

INSTITUTIONAL REVIEW BOARD APPROVAL
Thank you for your submission of Amendment/Modification materials for this project. The University of Northern Colorado (UNCO) IRB has APPROVED your submission. All research must be conducted in accordance with this approved submission.

This submission has received Expedited Review based on applicable federal regulations.

Please remember that informed consent is a process beginning with a description of the project and insurance of participant understanding. Informed consent must continue throughout the project via a dialogue between the researcher and research participant. Federal regulations require that each participant receives a copy of the consent document.

Please note that any revision to previously approved materials must be approved by this committee prior to initiation. Please use the appropriate revision forms for this procedure.

All UNANTICIPATED PROBLEMS involving risks to subjects or others and SERIOUS and UNEXPECTED adverse events must be reported promptly to this office.

All NON-COMPLIANCE issues or COMPLAINTS regarding this project must be reported promptly to this office.

Based on the risks, this project requires continuing review by this committee on an annual basis. Please use the appropriate forms for this procedure. Your documentation for continuing review must be received with sufficient time for review and continued approval before the expiration date of May 23, 2019.

Please note that all research records must be retained for a minimum of three years after the completion of the project.

If you have any questions, please contact Sherry May at 970-351-1910 or Sherry.May@unco.edu. Please include your project title and reference number in all correspondence with this committee.
Dear Katie,
Thank you for making the requested changes. I am recommending approval of your submission.
I wish you well in your research.

Sincerely,

Wendy Highby, IRB Reviewer

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within University of Northern Colorado (UNCO) IRB’s records.
APPENDIX B

INVITATION TO PARTICIPATE EMAIL
Dear Pre-Nursing Student,

You are invited to participate in an individual interview about your experience while deciding to apply to a nursing program. Qualifications for participation include being 18 years of age or older, having considered applying to a nursing program, and self-identifying as being a member of an underrepresented ethnic or minority group in nursing (African American, Asian, Hispanic, American Indian/Alaskan Native, and Native Hawaiian/Pacific Islander). The interviews will be conducted online and will last approximately forty-five to sixty minutes. This research is being done to help increase the diversity of the nursing workforce through better understanding of the experience of underrepresented students while deciding to apply for a nursing program. You can contribute to these efforts through your participation.

Your participation in this study will be confidential, and will have no influence over any future acceptance to a nursing program. As a thank you for participating, you will be sent a twenty-five dollar visa gift card.

If you would be interested in participating, please contact the student researcher via email. If you know of anyone who might be interested in participating in this research study, feel free to forward this email to him or her.

Katie Bagley

Bagl1852@bears.unco.edu
APPENDIX C

CONSENT FORM
CONSENT FORM FOR HUMAN PARTICPANTS IN RESEARCH

Project Title: The lived experience of underrepresented pre-nursing students: An exploration to diversify the nursing workforce.

Researcher: Katie Bagley, MSN RN; Doctoral Student; bagl1852@bears.unco.edu

Research Advisor: Melissa Henry, PhD RN Melissa.henry@unco.edu

Purpose and Description: The purpose of this research is to explore the lived experience of underrepresented students who are considering nursing as a career but have not yet applied. To better understand the experience of students from underrepresented racial or ethnic backgrounds who are considering applying to a nursing program, I am seeking to spend approximately one hour discussing your experience while going through this process. The interviews will be conducted one-on-one with the student researcher online at a distance. You will be asked questions about your experience, thoughts, and feelings about becoming a nurse and applying to a nursing program. Your identity and responses will not be known to anyone in the nursing program, including the research advisor. The interviews will only be conducted by the student researcher who is not connected to the undergraduate nursing program at in any way. The interviews will be video recorded for the purpose of the research. Following transcription of the interview, the audio and video recordings will be destroyed and your identity will not be attached to the transcript of the interview in any way. You will be given the opportunity to read the results once they are complete and make any clarifications that you feel are important.

The cost for participating in this study is the time invested to participate in the interview. You will receive a twenty-five dollar gift card as a thank you for participation. Foreseeable risks are not greater than those that might be encountered in a classroom environment or a conversation with a colleague about one’s educational or career choices.

Participation is voluntary. You may decide not to participate in this study and if you begin participation, you may still decide to stop and withdraw at any time. Your decision will be respected and will not result in loss of benefits to which you are otherwise entitled. Having read the above and having had an opportunity to ask any questions, please sign below if would like to participate in this research. A copy of this form will be given to you to retain for future reference. If you have any concerns about your selection or treatment as a research participant, please contact Sherry May, IRB Administrator, Office of Sponsored Programs, 25 Kepner Hall, University of Northern Colorado, Greeley, CO 80639, 970-351-1910
Participants Signature__________________________________ Date____________
Researchers Signature__________________________________ Date____________
APPENDIX D

INTERVIEW GUIDE
Interview Guide

1. Explain the purpose of the study. “The purpose of this research is to explore the experience of underrepresented students who are considering nursing as a career but have not yet applied to a nursing program. An understanding of this experience may help those in nursing education make better decisions about how to diversify the nursing workforce through recruitment to nursing programs.” Do you have any questions?

2. Review the consent form. Do you have any questions about participation?

   Begin Recording the Interview

3. What is your age and gender?

4. What racial or ethnic background do you identify with from the following:
   African American, Asian, Hispanic, American Indian/Alaskan Native, and Native Hawaiian/Pacific Islander?

5. Describe your experience of being a pre-nursing student.

6. Describe to me your experience of selecting a major.

7. Describe to me your experience with making the decision to apply to a nursing program.

   The Following are Follow-Up Questions That May Be Asked:

8. What experiences have influenced your decision-making? How?

9. What has been the easiest experience of being a pre-nursing student? What has been the hardest experience of being a pre-nursing student?

10. What happened as they went through this experience? What feelings or moods were present? What did you do? What did you say? What did you think?
EPOCHE

In an attempt to assume the phenomenological attitude this writing will describe the personal experiences of the researcher in relation to the phenomena being investigated. Van Manen (2014), described the process of identifying all experience the researcher has with a phenomena of interest as “suspending or removing what obstructs access to the phenomenon” (pg. 215). Husserl introduced the idea of the epoche to describe the process of setting aside the ideas that are taken-for-granted and may interfere with the ability to be open to the phenomena as it presents itself in the research (Van Manen, 2014). In this spirit, the following is a journal of the personal experiences of the research as a pre-nursing student. These views will be acknowledged and set aside while conducting interviews and analyzing data for the current study so as to not use these taken-for-granted assumptions be a lens through which the data is interpreted.

Journal

I am a female and I am forty-five years old at the time of this journaling. I applied to nursing school in 2006 when I was thirty-four. I was a non-traditional, first generation student who had four children in elementary and junior high school. I self-identify as being white.

I first considered applying to nursing school when I was about eighteen years old and attending the University of Utah. I took the prerequisite courses for that nursing program, but found that getting good enough grades to get admitted to the program challenging. I retook several classes attempting to achieve high enough grades. I was struggling to understand how to be the kind of student that got A’s in classes at the University. At the time I spoke with the academic advisor for the nursing program a few
times, but felt very discouraged at my prospects of being able to get into the program. I
do not remember any advice or help being offered to me about how to be successful.
There were documents available (this was before the internet, so I had to travel to the
nursing school to obtain information) that outlined clearly the criteria for admission and
the academic advisor was honest about my chances with low grades. It was discouraging.

One example of a good experience I had was in taking Math 105 (college algebra)
which was a prerequisite course for the nursing program. The courses had large
enrollments (I think about 200 students) and graduate students in mathematics taught
them. All of the times that I took the course the instructor spoke a language other than
English. I had taken the course two times and failed in both attempts. In the third
attempt, I decided to seek out help from the tutoring center, which was available. I was
able to sit down one-on-one with a tutor (who was an upper division student in
mathematics) who spoke the same language as I did. It was comforting to realize that my
questions were not stupid, but stemmed from a fundamental misunderstanding I had
about math and the concepts I needed to be successful. On my third attempt, I got an A
in Math 105. Something that I learned from the experience that I carry with me is that
students need someone who can understand them and give them the attention needed to
clarify their misconceptions about the underlying concepts of a course in order to be
successful. I think that underrepresented students often face this challenge when try to
navigate higher education. Prerequisite courses to nursing can be a big obstacle for those
that would like to be nurses but fell as if they do not belong in higher education.

After a couple of years of trying to get the grades needed for admission, I gave up
trying, concluding that it might be too difficult or that I did not have the skills or maybe
time in my life to be able to be a nurse. Due to life events, I then dropped out of college to raise a family.

When I came back to school about a decade later, I came back knowing that I wanted to get into a nursing program because I needed a job that I would enjoy and that would pay reasonably well. I started by visiting the web site for the nursing program at Utah Valley University (the internet had become a thing). I found the information I needed about the criteria for admission. The school used GPA from prerequisite courses and a test score from the TEAS test for admission. Applicants were ranked and the top sixty students were admitted. I was informed that the prerequisite courses I took at the University of Utah were not valid because they were too old. This was a good thing, however, because I knew I would need to retake them to get high enough grades anyway. I felt like I needed to get straight A’s in these courses in order to get in. I do not think that I was too inaccurate in that assumption. I think because I was older and perhaps more mature I felt confident that I could get the grades I needed. In part because of the experience I had years earlier with the math tutor I knew the key to success was understanding the underlying concepts of a course. That was an advantage that many students did not have. In a way, the process felt like a game. I knew if I understood the rules for getting in, I could strategize to make sure that could make the cut. Motivation also came from the need I had to start a career to help support my family. I did not have the luxury of failing as I did when I was younger. At least, that was how I felt at the time. I proceeded to take the classes I needed and I was able to get A’s in all of them. I think that was possible because of a culmination of circumstances: I was older, I had learned how to be a successful student, and I had taken all of these classes before even
though it had been a long time. When I applied to the nursing program, there were 320 applicants for 60 spots. I got in with a 4.0 GPA in my prerequisite courses.

Overall, my confidence and my ability to not be distracted from what I needed to do was what helped me be successful in being admitted into a nursing program. I acknowledge that my confidence came from a place of privilege of having attended a University before and having the ability to have learned by trial and error how to be successful. Many students could not have afforded to fail and stay in school continuing to pay for classes. I had not ever been told that I could not make it.

Assumptions that I have about how students will answer the questions in the interviews include feelings of discouragement because of the competiveness of getting into a nursing program. Also, feelings of not belonging in what is perceived as a “white” profession or school. Students might also express experiences of discrimination in health care setting that might discourage students from selecting nursing as a profession. I assume, because of the research on the topic that I have read that students may feel unsupported by faculty, academic advisors and families (Yoder, 2006). The lack of support might make students feel discouraged, and contribute to academic difficulty.