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Author

Tellez Arriaga, Alvaro

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Breaking the Cycle: First Generation College Nursing Stude Community College	ents Attending a Rural
by Alvaro Tellez Arriaga	
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Approved:	
DocuSigned by: Lawa Wagner	Laura Wagner
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DocuSigned by: Lawa Wagner	Laura Wagner
Doctossigned (0.40 F	Garrett Chan
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Committee Members

Breaking the Cycle: First Generation College Nursing Students Attending a Rural Community

College

Alvaro Tellez Arriaga

Abstract

In order to attend college, first-generation nursing students face unique obstacles, such as recruitment, mentoring, and retention. This study describes a sample of first-generation nursing students. Specifically, the study details the physical, mental, social, economic, and diversity challenges rural first-generation college nursing students face. This study was conducted at a rural community college in a Medically Underserved and Health Professional Shortage Area. A total of 87 students were invited to participate from the first- and second-year cohorts of a rural associate degree RN program. Using standard questions from an already-validated national survey, a cross-sectional survey was constructed. 70% of applicants were the first member of their family to attend college. Results showed, the decision to attend college was influenced by parental and guardian encouragement in addition to personal motivation. More than 70% of respondents who applied to nursing school were uncertain or did not receive mentorship. At the beginning of nursing school, 15.9% of students felt a close relationship with the faculty, while 46.3% felt out of place. Significantly more first-generation college students (88%) than non-firstgeneration students (12%) had a strong interest (88%) in working in a medically underserved area. Using the open-ended survey questions, a number of themes regarding the significance of being a first-generation student were identified, including breaking the cycle of low educational attainment, financial challenges, empowerment and pride, pressure and uncertainty, as well as gratitude and motivation. Rural nursing health can improve health outcomes by expanding the workforce through recruitment and retention of first-generation college nurses.

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Background and Significance

Decline in the Nurse Workforce

In 2021, the number of direct patient care nurses in the United States workforce plummeted by more than 100,000 in a single year, a decline significantly higher than any seen in the previous 4 decades. Furthermore, numerous studies published during the COVID-19 epidemic have reported alarmingly high registered nurse (RN) burnout rates. The National Sample Survey of Registered Nurses has predicted a national deficit of 78,610 full-time equivalent (FTE) RNs in 2025 and 63,720 FTE RNs by 2030. Rural areas continue to be a challenge for the nursing profession, and the number of nurses required in each state varies considerably. The 10 states with the greatest anticipated labor deficits in 2035 are projected to be Washington (26%), Georgia (21%), California (18%), Oregon (16%), Michigan (15%), Idaho (15%), Louisiana (13%), North Carolina (13%), New Jersey (12%), and South Carolina (11%). Although the nursing shortage is nationwide, the shortage is greatest in rural areas.

Health Care Disparities in Rural America

Approximately 46 million Americans reside in rural areas,^{3,4} and disparities in access to health care in rural settings are a significant concern for the nation as a whole.⁵ In comparison with urban residents, rural residents are more likely to die prematurely from the five primary causes of death: cardiovascular disease, cancer, unintentional injury, chronic lower respiratory disease, and stroke. Rural residents are also more likely to be adversely affected by barriers to health care such as long distance to health care facilities and inadequate transportation to medical care, privacy and social stigmatization, low health insurance rates, low levels of health literacy, and health care worker shortages.⁶ Disparities also include access to health care, health practices, and even availability to healthy foods.³ A lack of access leads to poorer health outcomes, higher

rates of chronic illnesses, and less monitoring of care.⁷ In addition, rural populations had significantly higher rates of opioid abuse and deaths from 2012 to 2019, with a 45% higher mortality rate due to opioid overdose in rural settings compared to urban areas.⁸ The COVID-19 pandemic also heavily impacted rural areas' public health and health care—as seen, for example, in rural areas' lower vaccination rates.⁹

Farmworkers' Poor Health Outcomes

Farmworkers in rural health settings are at particular risk for poor health outcomes; the average life expectancy of a farm worker in the United States is 49 years old. 10 Chronic disease risk factors identified in the California Agricultural Workers Health Survey include overweightobesity (81% of farmworkers) and elevated rates of high cholesterol, high blood pressure (particularly in the 20–44 year-old age group) and diabetes all of which exceed those of the general U.S. population. Also, more than a quarter of farmworkers report having had occupational injury.¹¹ Exposures to pesticides and other occupational hazards, oral health problems such as caries and periodontal disease, infectious diseases such as tuberculosis and sexually transmitted infections, including HIV disease, and mental health problems such as depression and anxiety all disproportionately impact migrant and seasonal workers. These chronic diseases accelerate the aging process, and their disparate prevalence's in the rural community's older adults underscore the need for rural communities to be better prepared to care for members of this older age group. Eldercare workforce issues in rural areas specifically include not only the lack of an adequate workforce but also a lack of proven strategies for effectively recruiting a younger health care workers who would be motivated to care for older adults.12

Impact of Nurse Workforce Shortages on Nursing Homes

Nursing homes have been especially impacted by pandemic-related workforce shortages. As the pandemic progressed, the shortages of personnel—particularly direct care workers—escalated significantly in rural areas.¹³ These findings highlight the importance of establishing measures to prevent rural nursing homes from having personnel shortages in the aftermath of long-term natural disasters such as the COVID-19 pandemic. Nursing homes have long struggled with staffing shortages, but the COVID-19 pandemic has exacerbated the problem. Moreover, staffing shortages have been reported in both rural and urban nursing homes, but according to Kaiser Family Foundation, rural nursing homes have experienced more severe staffing shortages than urban nursing homes during the pandemic.¹³

In addition, counties with larger proportions of racial and ethnic minorities had lower rates of development in the supply of Rural Health Centers and Federally Qualified Health Centers. These lower rates of development may be due to a number of factors, including the fact that minority populations are more likely to face economic and social barriers to accessing health care, and that providers may be less likely to locate in areas with higher minority populations because of reimbursement rate and cultural competency concerns. ¹⁴ Racial and ethnic minority composition is just one aspect of the larger context in which these health care providers operate, and other factors such as geographic location, population density, and funding sources may also be important.

Another essential nursing workforce in rural settings are nurse practitioners (NP). NP autonomy and satisfaction in rural settings is an important topic that in recent years has been studied extensively. In rural areas, NPs often function as primary care providers and play a crucial role in meeting community health care needs. However, in these areas, autonomy and job

satisfaction can disparately affect NP retention and recruitment. ¹⁵ Compared to NPs practicing in urban areas, NPs in rural settings are more likely to report higher levels of autonomy. Rural-area NPs' higher likelihood of having autonomy may have been due to the fact that they typically have more responsibility and are required to work independently to provide care to patients. ¹⁵ In addition, rural NPs may have more opportunities to develop relationships with their patients, and rural NPs have a greater impact on the overall health of the community. Studies have also shown that in rural settings, NPs' job satisfaction is generally high. NPs employed in rural areas are likely report feeling valued by their patients and colleagues, and they appreciate the close-knit community that often exists in rural areas. ¹⁶

However, NPs in rural settings may also face challenges related to isolation, limited resources, and lack of professional support. NPs' efforts to enhance primary care have been well documented--particularly care for patients with complex health conditions who are living in rural locations. Nonetheless, the NP workforce is quite small, and constraints on their scope of practice have hampered NPs' ability to help relieve access issues. Rural NPs outnumber urban NPs per capita in 2019, yet continue to be in shorter supply when compared to physicians and registered nurses. 16

Education in Nursing Workforce

In order to address the ongoing staffing shortages in health care settings, increasing the supply of nurses in rural areas is critical. There are multiple types of professional nurses who work in rural settings; these include licensed vocational nurses, licensed practical nurses, and RNs. Each nurse has a different level of education, from an associate degree to a bachelor's degree and even a master's degree or doctoral degree. The shortage of health care providers in rural areas is a multifaceted problem that requires a multifaceted solution. Potential solutions

may include increasing funding for rural health care facilities, incentivizing health care providers to work in rural areas, and expanding educational opportunities to first-generation undergraduate and graduate nursing students. However, implementing these solutions and resolving the rural workforce shortage problem will require concerted efforts from policymakers, health care providers, and community members alike.

Improving Rural Nurses' Levels of Educational Attainment

Over time, the educational attainment of rural populations has increased, but has not kept pace with that of urban areas, especially in terms of attainment of college and graduate degrees. To fulfill increasing health care demands, especially in rural areas, rural areas must deploy greater numbers of nurses for practice in a variety of health care settings in order to ensure that rural areas have an adequate supply of nurses who can provide care with the necessary knowledge, skills, and competencies. ¹⁷ With modest growth in the number of students finishing RN pre-licensure programs each year over the past few years, interest in nursing as a profession and enrollment of new students in RN programs remain high. ²⁶ The future nursing workforce also must be ready to meet employer expectations for RNs to be prepared with at least a BSN degree and to respond to the growing demand for nurses to be ready to practice in specialty areas. These requirements include being able to fill more diverse roles in more diverse practice settings.

As a result of these deficiencies in health care access and quality, one solution to the workforce health care crisis in rural areas is to recruit nursing students who are the first in their families to attain a college degree. As a group, first-generation college graduates have multiple identities based on their gender, race, ethnicity, income, and geographic location. First-generation healthcare providers may have a unique perspective on the experiences of patients

from various backgrounds, resulting in better patient-provider relationships and health outcomes. Providing patients with access to healthcare providers who understand their lived experiences, cultural needs, and linguistic needs can reduce healthcare disparities and improve overall health outcomes. When it comes to recruitment, mentoring, and retention, nurses who are the first in their families to attend and graduate college may face unique obstacles. These obstacles may include a lack of knowledge about the higher education system, limited access to resources and support, and feelings of isolation or imposter syndrome in academic and professional settings. However, they are essential to improving our nation's health care. In order to better assist this rising RN workforce, this study describes a sample of first-generation nursing students who will be able to fill the persisting deficiencies in rural patient care. Specifically, the study describes the physical, mental, social, economic, and diversity issues experienced by rural first-generation college nursing students. Health care are supported by rural first-generation college nursing students.

Methods

Setting

This study was conducted at a rural community college situated in an area with a significant Latinx population, at 79.6%. Only 10% or fewer of the area's residents have a bachelor's degree or higher compared to 23% nationaly.²⁰ The college's location in a rural, agricultural region attracts students from the neighboring agricultural regions. The area is the nation's leading region for the production of fresh market vegetables; vegetables and fruits are cultivated on more than 0.275 million acres of the area's land. The college also sits in a region that is designated by the Health Resources and Service Administration to be both a Medically Underserved Area and a Health Professional Shortage Area (HPSA).²¹ The term Medically Underserved Area refers to a geographic location whose population does not have adequate

access to primary care services. These populations may be confronted by financial, cultural, or linguistic hurdles to health treatment. Health Professional Shortage Areas are areas that lack an adequate number of providers (e.g., primary, dental, and/or mental health care professionals) for the entire population.²¹

Sample

In April 2022, a total of 87 students from the first- and second-year cohorts of a rural associate degree RN program were invited to participate in the study. Students reside in the greater Central Coast of California.²² Through the university's Institutional Review Board (IRB) ethics approval was acquired.

Survey

A cross-sectional survey was developed using standard questions from already validated national survey. The data centered on demographic information, such as age, birthplace, race, bachelor GPA, and nursing specialization. The term "first generation college student" was operationalized using the Higher Education Act (1965) definition:

[a]n individual both of whose parents did not complete a baccalaureate degree; or . . . , [i]n the case of any individual who regularly resided with and received support from only one parent, an individual whose only such parent did not complete a baccalaureate degree (p. 3–4).²³

To obtain pre-administration feedback on the survey flow, three students not associated with the institution piloted the survey. Following completion of the pilot, the program administrator sent several emails and three reminders to the 87 students. The email included an attached letter that described the survey; to enable students to access the survey, the body of the email also included both a hyperlink and a quick response (QR) code. The survey was deployed

through Survey Monkey, and student responses were anonymous and confidential. Students received a \$25 Amazon gift card for completing the survey.

The questionnaire's final element consisted of an open-ended question designed to elicit qualitatively assessed responses from the student nurse participants. The question posed was "What does it mean (i.e., to elicit a wide range of responses) to be a first-generation college nursing student?" Given the lack of research on first-generation nursing students, participants were given the opportunity to elaborate on their survey replies regarding their perceptions and roles as first-generation student nurses.

Data Analysis

Data analysis included descriptive and inferential statistics (e.g., chi-square, t-tests) aimed at describing the sample of first-generation student applicants as well as comparing first generation students to those whose parents received at least a university degree. The survey data were analyzed using IBM SPSS Statistics version 29.^{24,25}

Qualitative content analysis of the open-ended questionnaire item was guided by methods described by Berg²⁴ and by Graneheim and Lundman.²⁵ A research assistant transcribed and uploaded the open text responses. An inductive approach to data analysis was completed whereby two research analysts independently coded the data using line-by-line open coding in which phrases and words were assigned codes that were meant to capture the meaning of what was being expressed (Stage 1). Stage 2 of the data analysis involved systematically collapsing and placing codes from all participant responses into their corresponding categories and related subcategories by subsuming the codes under higher order themes. To strengthen methodological rigor, we implemented a number of strategies including interrater reliability checks on codes and

independent coding by two analysts. When there were discrepancies between the two researchers, a third researcher was included.

Results

A total of 82 surveys were returned indicating a 91% response rate. Approximately 70% of applicants were first generation students, with the remainder reporting one or both parents having at least an associate degree or higher. The majority of participants (81.7%) were female, and the races of the participants were reported as White/Caucasian (48.78%), Asian (14.6%), Multiracial (12.2%), Black (4.8%), American Indian/Alaskan Native (1.2%), and Native Hawaiian/Pacific Islander (1.2%). Ethnicity of the participants was reported as Hispanic/Latino/Latinx (50%). Only 1.2% of applicants were either active duty or veterans of the military (Table 1). One-quarter of the respondents were fluent in Spanish with an additional 12 respondents fluent in another language (e.g., Tagalog, Cebuano). The mean age of students was 31.54 years with no significant difference between first generation college and those who were not [t=(-).27; p=0.77].

Of the students who completed the survey 24.4% were in their first semester, 41.4% second semester, 4.9% third semester and 29.3% in the fourth and final semester of their nursing program. Significant factors influencing participants decision to attend college included both parent/guardian encouragement (53.7%) as well as self-motivation (89.0%).

An overwhelming majority of students 75.6% reported family depending on them as a source of emotional support while 47.6% also had family depending on them for financial support well attending school. Common barriers experienced by nursing students include the application process, tuition costs, accessing school counselors, lack of information, and school distance. 73.2% of respondents were unsure of receiving mentoring support or did not receive

mentoring support during the admissions application process, while only 25.6% did. During the first weeks of nursing school, 15.9% students felt closely connected with faculty members, while 46.3% felt out of place, conversely 62.2% reported feeling connected with one or more of their peers. Currently, while in nursing school, 52.4% of respondents reported an increase of feeling closely connected with faculty members, 12.2% remained feeling out of place, and 78.1% reported feeling connected with one or more of their peers. Yet, when comparing first-gen to non-first-gen students, none of these barriers differed between the groups (Chi² tests; p>0.05) with the exception of one. First generation college students were more likely (94.4%) to be questioned about their future potential by high school guidance counselors than non-first-generation college students (5.6%) (chi²= 6.43; df=1; p=0.01).

Common funding sources reported by respondents included federal or state loans (63.6%), grants (42.9%), scholarships (40.3%), parents' savings or income (18.2%), savings (71.4%), personal credit cards (44.2%), and income from work while in nursing school (57.1%). First gen and non-First gen students were receiving similar sources of funding (chi² tests; p>0.05).

Respondents reported working full-time (10.4%), part-time (29.9%), and on-call or per diem (23.4%), while attending nursing school. A substantial amount (31.6%) of respondents had financial concerns and considered dropping out of college. Over 50% (n=42) of students had zero college loans with the mean amount of loans equal to \$9,283. Interestingly, non-first-generation college students were significantly more likely to carry greater mean student loan debt (\$21,404) compared to students who were first generation college (\$4,192) (t=1.40; df=69; p=0.007).

Participants reported having trouble accessing health care services (36.8%), study space that supports learning (36.8%), lacking educational materials and supplies (29.0%), transportation (23.7%), and childcare (22.2%), while in nursing school. Respondents reported having encountered bias or discrimination based on their race (36.4%), ethnicity (35.1%), national origin (22.4%), sexual orientation/gender identity (20.8%), and age (27.6%). A total of 87.4% reported being hard workers and 90.8% reported achieving goals that took years of work. Average commute times to school (25 minutes) and clinical (30 minutes) did not significantly differ between first generation and non-first-generation college students (p>0.05).

A significantly greater number of first-generation college students grew up in a rural or designated low-income area (88%) compared to those who were not first generation (12%) (chi² 5.90, df, 1, p=0.02). A total of 40.2% of respondents planned to work in under resourced communities after finishing their schooling with first generation college students significantly more likely to express an affirmative interest in working in this setting (87.9%) compared to non-first-generation college students (12.1%) (chi² 9.85; df=2; p=0.007).

The respondents overwhelmingly expressed an interest in continuing their career after completing the associate degree RN program with many students already matriculated in a RN-BSN bridge program. Over half of the students indicated interest in clinical care such as case management, leadership, education, or advanced practice positions such as those of NPs. In 1–3 years finishing the associates are in program, 89.2% of participants showed interest in completing their BSN while 59.1% planned on master's level education in nursing. 31.5% showing interest in a DNP education; only 15.4% participants showed interest in a PhD education.

Several themes were identified using the open-ended survey questions regarding the significance of being first generation students. Themes identified included breaking the cycle (as the first-generation student going into higher education), financial challenges, empowerment and pride, pressure and uncertainty, as well as gratitude and motivation. In terms of breaking the cycle into higher education, many first-generation students expressed breaking down the barriers of stigma, generational curses and serving as inspiration to future family members to pursue higher education. Financial struggles endorsed by student participants include having to work while completing coursework, hidden cost of higher education, and limited familial support due to limited understanding of college demands. Regarding empowerment and pride, students viewed being the first in their family to attend college as an honor and a duty to inspire younger generations to pursue their passions. First-generation students also expressed facing a great deal of pressure to succeed because they are the first in their family to attend college and will be learning and experiencing new things on their own. Finally, being first generation student means a lot to the respondents since they reported it gives them the opportunity to achieve their goals and make a life for themselves (Table 3).

Discussion

The intersectionality framework was used to guide this study in how the hierarchies of race, gender, and class inform the nursing profession regarding issues of social injustice and inequities. ^{24,25} Supporting first-generation nursing students in bridging the gaps is crucial. Consequently, we must have a deeper understanding of the experiences of first-generation nurses. This study describes the physical, mental, social, economic, and diversity issues experienced by rural first-generation college nursing students. Specifically, we found that the participants were first-generation to college, ethnically diverse, and reside in underserved

communities lacking several supports traditionally viewed to help students pursue a higher education. Despite this, the participants were highly motivated to continue their initial RN training beyond community college and noted they were making a difference among themselves, their family, and the rural communities from which they hail.

Compared to previous research by Wagner et al. where 30% of students identified as first generation, this study identified 70% of students identify as first generation. Similar demographics were seen in the student population such as the majority of students being female and of white/Caucasian race as well as those who identify as multiracial, Asian and Black. Compared to recent data, 50% of the students in this study identified as Hispanic. In prior research, 3.6% of applicants identified as active duty or veteran service members, whereas this study found less than half of that number at 1.2%. Compared to previous research where first-generation students were more likely to be older applicants, this study shows no significant difference in age between first-generation and non-first-generation students.¹⁹

A total of 80.2% of students were found to have federal loans, compared to 48.8% of students who did not, yet these differences were not significant when comparing first generation to non-first-generation college students. The significantly overall lower student loan burden for first-generation students was not surprising, yet there could be two reasons for this finding. First, first generation college students may be more likely to have greater financial aid packages thus reducing their student loan burden. While this study did not find differences in the types of student aid (e.g., loans vs. grants) between first generation college and those whose parents were educated, we did not collect data on the amounts of this aid other than their student load debt. The finding differs from other research that suggests first generation students owe more in student loans compared to non-first-generation college students.²⁷ Given the increased publicity

about the high student loan burden by Black and Hispanic students, further research should examine whether these student groups are less likely to take out more student loans and work more during their education.²⁸ One limitation of this study is we did not explore the proportions of student income, living expenses, and tuition to help answer this question.

When compared to the California newly licensed RN employment survey research report from 2020, our study reveals a similar distribution of gender, students taking a leave of absence, concerns about repaying student loans or educational debt, financial concerns leading to the consideration of dropping out, and food insecurity. ²⁹ In contrast, our study revealed that the number of Latino/Hispanic and African American and native Hawaiian/Pacific islander students was nearly four times that of white students. In addition, the study revealed 18.5% of students were concerned about losing their residence, compared to 11.5% who were not concerned. Our study also identified students with unstable housing; 3.7% of students compared to 1.9% did not have a stable residence.

Limitations

A few limitations were identified in this study. The fact that the study was a cross-sectional study conducted at a single rural site and focused on nursing students at a community college may limit its generalizability. In addition, this may further limit generalizability, as it may not reflect first generation students at the Bachelor of Science or Master level. First-generation students in other regions of the country may be of a different race or ethnicity than those in this region, and they may face a variety of obstacles within their own region. Despite these constraints, the farmworker communities in this rural region of California were represented by a highly diverse student body.

Implications

Rural first-generation nursing students face unique obstacles in pursuing their educational and professional goals. Often the first in their families to attend college, these students may lack the support and resources available to other students. In addition, rural areas may have limited access to healthcare facilities and educational institutions, making it difficult for students to locate nursing programs that meet their needs. These students face obstacles such as limited resources, a dearth of role models, financial hardships, a great distance from educational institutions, and limited employment opportunities. Despite these obstacles, there are strategies rural first-generation college nursing students can employ to overcome obstacles and achieve their objectives. These include seeking out mentors and support networks, using online resources and distance learning programs, and pursuing opportunities for scholarships and financial aid. These students can succeed in their nursing careers and have a positive impact on their communities by being proactive and persistent.

Conclusion

Rural nursing health can play a critical role in improving health outcomes of people living in rural areas, especially farmworker communities. Targeted solutions such as building capacity of the nursing workforce within can assist stakeholders in developing targeted solutions. Opportunities to expand the workforce through recruitment and retention of first-generation college nurses is one solution to tackling nursing workforce shortages in this underserved area.

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Table 1. Demographics of Students (n=82)

Variables	Frequency	Percent
Age		
Gender		
Male	14	17.07
Female	67	81.71
Non-binary	1	1.22
Race		
American Indian/Alaskan Native	1	1.22
Asian (all categories)	12	14.63
African American/Black	4	4.88
Native Hawaiian/Pacific Islander	1	1.22
White/Caucasian and Middle Eastern	40	48.78
Multi racial/ethnic	10	12.20
Ethnicity		
Hispanic or Latino	41	50.00
Non-Hispanic or Latino	41	50.00
Primary Language		
English	49	59.76
Spanish	21	25.61
Tagalog	4	4.88
Other	8	7.76
Military		
No	81	98.78
Yes	1	1.22
Semester		
1 st semester	30	24.39
2 nd semester	34	41.46
3 rd semester	4	4.88
4 th semester	24	29.27
Plan to work in an under-resourced community		
after program		
No	1	1.22
Yes	33	40.24
Unsure	48	58.54
My family depends on me as a source of		
financial support		
Strongly agree	16	19.51
Agree	23	28.05
Neither agree nor disagree	15	18.29
Disagree	15	18.29
Strongly disagree	13	15.85

Received mentoring support during admission application process No	Variables	Frequency	Percent
No	Received mentoring support during		
Yes 21 25.61 Unsure 11 11 Other 1 1 Mother's highest education 1 25.61 Do not know 5 6.10 Grade school 21 25.61 Some high school (did not complete) 13 15.85 High school diploma or GED 19 23.17 Some college (did not complete) 13 15.85 Associate's Degree 9 10.98 Bachelor's Degree 9 10.98 Some graduate school (did not complete) 1 1.22 Master's Degree 5 6.10 Doctoral Degree 0 0.00 Father's highest education 0 0.00 Bone tolk now 6 7.32 Grade school 14 17.07 Some high school (did not complete) 9 10.98 High school diploma or GED 20 24.39 Some college (did not complete) 11 13.41 Associate's Degree 7			
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Other I I Mother's highest education 5 6.10 Do not know 5 6.10 Grade school 21 25.61 Some high school (did not complete) 13 15.85 High school diploma or GED 19 23.17 Some college (did not complete) 13 15.85 Associate's Degree 9 10.98 Bachelor's Degree 15 18.29 Some graduate school (did not complete) 1 1.22 Master's Degree 5 6.10 Doctoral Degree 0 0.00 Father's highest education 0 0.00 Do not know 6 7.32 Grade school 14 17.07 Some high school (did not complete) 9 10.98 High school diploma or GED 20 24.39 Some college (did not complete) 11 13.41 Associate's Degree 7 8.54 Bachclor's Degree 1 1.22 Master's Degree	Yes	21	25.61
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Do not know S G.10	Other	1	1
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High school diploma or GED	Grade school	21	25.61
High school diploma or GED	Some high school (did not complete)	13	15.85
Some college (did not complete) 13 15.85 Associate's Degree 9 10.98 Bachelor's Degree 15 18.29 Some graduate school (did not complete) 1 1.22 Master's Degree 5 6.10 Doctoral Degree 0 0.00 Father's highest education Do not know 6 7.32 Grade school 14 17.07 Some high school (did not complete) 9 10.98 High school diploma or GED 20 24.39 Some college (did not complete) 11 13.41 Associate's Degree 7 8.54 Bachelor's Degree 11 13.41 Some graduate school (did not complete) 1 1.22 Master's Degree 3 3.66 Doctoral Degree 2 2.44 RN prelicensure program type 2 2.44 Associate degree in Nursing (ADN) 66 80.49 Associate degree in Nursing (LVN to ADN) 16 19.51	• • • • • • • • • • • • • • • • • • • •	19	23.17
Associate's Degree 9 10.98 Bachelor's Degree 15 18.29 Some graduate school (did not complete) 1 1.22 Master's Degree 5 6.10 Doctoral Degree 0 0 0.00 Father's highest education Do not know 6 7.32 Grade school 14 17.07 Some high school (did not complete) 9 10.98 High school diploma or GED 20 24.39 Some college (did not complete) 11 13.41 Associate's Degree 7 8.54 Bachelor's Degree 11 13.41 Some graduate school (did not complete) 1 1.22 Master's Degree 1 1 1.22 Master's Degree 2 2 2.44 RN prelicensure program type Associate degree in Nursing (ADN) 66 Associate degree in Nursing (LVN to ADN) 16 Family's current economic status Long-term poverty 6 7.79 Working class 22 28.57 Lower middle class 19 24.68 Upper middle class 3 3.90 Wealthy 0 0.000 Unsure 5 6.49 Academic Enrollment Status Full-time 70 90.91	-	13	15.85
Bachelor's Degree 15 18.29 Some graduate school (did not complete) 1 1.22 Master's Degree 5 6.10 Doctoral Degree 0 0.00 Father's highest education Do not know 6 7.32 Grade school 14 17.07 Some high school (did not complete) 9 10.98 High school diploma or GED 20 24.39 Some college (did not complete) 11 13.41 Associate's Degree 7 8.54 Bachelor's Degree 11 13.41 Some graduate school (did not complete) 1 1.22 Master's Degree 3 3.66 Doctoral Degree 2 2.44 RN prelicensure program type 3 3.66 Associate degree in Nursing (ADN) 66 80.49 Associate degree in Nursing (LVN to ADN) 16 19.51 Family's current economic status 22 28.57 Lower middle class 22 28.57	- ',	9	10.98
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Some graduate school (did not complete) 1 1.22 Master's Degree 3 3.66 Doctoral Degree 2 2.44 RN prelicensure program type 3 3.66 Associate degree in Nursing (ADN) 66 80.49 Associate degree in Nursing (LVN to ADN) 16 19.51 Family's current economic status 2 28.57 Long-term poverty 6 7.79 Working class 22 28.57 Lower middle class 22 28.57 Middle class 19 24.68 Upper middle class 3 3.90 Wealthy 0 0.00 Unsure 5 6.49 Academic Enrollment Status 70 90.91	Associate's Degree	7	8.54
Master's Degree 3 3.66 Doctoral Degree 2 2.44 RN prelicensure program type 3 3.66 Associate degree in Nursing (ADN) 66 80.49 Associate degree in Nursing (LVN to ADN) 16 Family's current economic status 19.51 Long-term poverty 6 7.79 Working class 22 28.57 Lower middle class 22 28.57 Middle class 19 24.68 Upper middle class 3 3.90 Wealthy 0 0.00 Unsure 5 6.49 Academic Enrollment Status 70 90.91	Bachelor's Degree	11	13.41
Doctoral Degree 2 2.44 RN prelicensure program type 3 3.49 Associate degree in Nursing (LVN to ADN) 16 19.51 Family's current economic status 19.51 Long-term poverty 6 7.79 Working class 22 28.57 Lower middle class 22 28.57 Middle class 19 24.68 Upper middle class 3 3.90 Wealthy 0 0.00 Unsure 5 6.49 Academic Enrollment Status 70 90.91	Some graduate school (did not complete)	1	1.22
RN prelicensure program type Associate degree in Nursing (ADN) 66 80.49 Associate degree in Nursing (LVN to ADN) 16 Family's current economic status Long-term poverty 6 7.79 Working class 22 28.57 Lower middle class 22 28.57 Middle class 19 24.68 Upper middle class 3 3.90 Wealthy 0 0.00 Unsure 5 6.49 Academic Enrollment Status Full-time 70 90.91	Master's Degree	3	3.66
Associate degree in Nursing (ADN) 66 80.49 Associate degree in Nursing (LVN to ADN) 16 19.51 Family's current economic status Long-term poverty 6 7.79 Working class 22 28.57 Lower middle class 22 28.57 Middle class 19 24.68 Upper middle class 3 3.90 Wealthy 0 0.00 Unsure 5 6.49 Academic Enrollment Status 70 90.91	Doctoral Degree	2	2.44
Associate degree in Nursing (LVN to ADN) 16 19.51 Family's current economic status Long-term poverty 6 7.79 Working class 22 28.57 Lower middle class 22 28.57 Middle class 19 24.68 Upper middle class 3 3.90 Wealthy 0 0.00 Unsure 5 6.49 Academic Enrollment Status 70 90.91	RN prelicensure program type		
Tamily's current economic status Long-term poverty 6 7.79	Associate degree in Nursing (ADN)	66	80.49
Family's current economic status 6 7.79 Long-term poverty 6 7.79 Working class 22 28.57 Lower middle class 22 28.57 Middle class 19 24.68 Upper middle class 3 3.90 Wealthy 0 0.00 Unsure 5 6.49 Academic Enrollment Status 70 90.91	Associate degree in Nursing (LVN to ADN)	16	
Long-term poverty 6 7.79 Working class 22 28.57 Lower middle class 22 28.57 Middle class 19 24.68 Upper middle class 3 3.90 Wealthy 0 0.00 Unsure 5 6.49 Academic Enrollment Status 70 90.91			19.51
Working class 22 28.57 Lower middle class 22 28.57 Middle class 19 24.68 Upper middle class 3 3.90 Wealthy 0 0.00 Unsure 5 6.49 Academic Enrollment Status 70 90.91	Family's current economic status		
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Middle class 19 24.68 Upper middle class 3 3.90 Wealthy 0 0.00 Unsure 5 6.49 Academic Enrollment Status 70 90.91			28.57
Upper middle class 3 3.90 Wealthy 0 0.00 Unsure 5 6.49 Academic Enrollment Status 70 90.91		22	28.57
Wealthy 0 0.00 Unsure 5 6.49 Academic Enrollment Status 70 90.91	Middle class	19	24.68
Unsure 5 6.49 Academic Enrollment Status Full-time 70 90.91	= =		
Academic Enrollment Status Full-time 70 90.91	Wealthy		0.00
Full-time 70 90.91		5	6.49
Part-time 7 9.09			
	Part-time	7	9.09

Table 2: First Generation to College Applicant Comparisons

	Not First Gen n (%)	<u>First Gen</u>	<u>P</u>	$\frac{Ch}{i^2 (df)}$
Ethnicity				
Hispanic/Latino	5 (12.5)	35	<.001	11
		(87.5)		.12(1)
Non Hispanic/Latino	19	22		
	(46.3)	(53.7)		
Work in Under resourced				
Setting	10	20/	007	0
Unsure	19	28(.007	9.
1 7	(40.4)	59.6)		85 (2)
Yes	4 (12.1)	29		
		(87.9)		
Grew up rural/low-income				
No	21(37.5)	35	.020	5.
		(62.5)		39 (1)
Yes	3(12.0)	22		
		(88.0)		
Potential questioned by high school counselor				
No	23	40	.011	6.
110	(36.5)	(63.5)	.011	43 (1)
Yes	(30.3)	17		73 (1)
1 65	(5.6)	(94.4)		
	(3.0)	(77.7)		

Table 3. Student responses to "What is a first-generation student?"

Breaking the cycle	 "Being a first-generation college student is empowering and scary. Empowering because I am able to break the chain and scary because there are many unknowns about the process." "To me it means to be able to get my degree despite the obstacles that are/were presented Also being able to pursue higher education and be able to break the cycle of not being or able to attain a college degree and be an inspiration to other members of my family." "To me being a first-generation student mean I have to break barriers and stigma surrounding first generation students." "As the oldest of my siblings, I feel that it is an opportunity to set an example and be a role model."
Financial challenges	 "First to go to get a degree and increase my opportunities in finding a job." "It has been difficult. My parents are hard workers and put their family first instead of furthering their education. They moved to America for a better future. As a first-generation college student, it is difficult through the expenses I pay for college and previous loans I had to take out so I can continue in a higher education." "To graduate with an associate degree, be able to help my family, work and have opportunities that my parents never had." "Financial challenges and lack of support from family who may not understand the demands of college."
Empowerment and pride	 "Being 'First Generation to College' makes me feel so proud. It is a lot responsibility too because you have to push through, complete that to be able to set the role model to inspire younger people in the family." "I am able to pursue things that interest me & make a career rooted in my passions. My family did not have the same opportunities that I have." "It's actually an honor and I hope to motivate my son, nieces, and nephews to continue their education." "Pride in knowing that I am representing my family and will be able to provide for them as they age."

Table 3. continued. Student responses to "What is a first-generation student?"

Pressure and "A lot of pressure is on you to succeed, even though you don't have the luxuries as other students." uncertainty "It means I'm the first one to receive a college education in my family. Having the support of your family but in a way still being a little lost because you don't have that guidance since this is new to both you and your family." "First-Gen means that you are the first in your family to attend a higher education institution, and venture into an unknown world of opportunity. It also means that you will be learning and experiencing a lot of new things on your own." "There is a lot of expectations from me after attending college." Gratitude and "Being 1st generation means a lot to me because I now know motivation that if I put my best effort I can get to my goals in life." "It feels great to be first generation to college. My parents are very proud. I've gained the admiration of those who I've most admired, my parents. Accomplishing a college degree means the whole world to me." "It is an honor and a privilege after all the sacrifices my parents have made for me." "It means that I have the opportunity to create a life for myself that I want."

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