Nursing Students Are More Than Just “Broke College Kids”

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This is to certify that I have examined this Doctor of Nursing Practice DNP project manuscript written by Jessica Lee Hoy and have found that it is complete and satisfactory in all respects, and that any and all revisions required by the final examining committee have been made.

Graduate Program Faculty

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DEPARTMENT OF NURSING
Abstract

College students face many challenges within the classroom as a key component of their growth. However, a background of poverty, housing, and/or food insecurity places higher education students at risk for course failure, attrition, and delayed or non-achievement of career goals. The Institute for Healthcare Improvement (McPherson et al, 2021) reports more students from disadvantaged backgrounds are entering post-secondary healthcare education programs, but this increase is not reflected in completion rates. Previous studies have shown financial hardships and negative academic outcomes can be overcome through mentoring. To determine the effectiveness of faculty mentoring for students from poverty, mentors who navigated from poverty and into nursing were matched with self-enrolled students who receive Pell grant funding. Pre-surveys were administered to gauge the student’s perceived levels of psycho-economic factors: going to classes, sleep, physical activity, proper nutrition, connection, centering, and financial concerns. Then they met with their mentors, who helped them develop strategies to succeed in courses and address these areas. The work was intended to increase course success and negate course failures and attrition. However, due to the COVID-19 pandemic, the project was terminated before completion. Some of the data gathered from the students during the self-selection process indicated the scope of the project was too narrow, and a financial qualifier may not be warranted. Instead, future projects should look at more factors than financial aid, such as previous academic progress, other educational inequity sources, and student psycho-social concerns to decrease course failure and attrition.
Keywords: nursing students, faculty mentor, mentor, poverty, postsecondary education, higher education, college, college students, intervention, equity, educational equity, and poverty intervention
Poverty in Nursing Students: More Than Just Being A “Broke College Kid”

The anecdote of being a “broke college kid” is a common association when thinking of higher education students. While this joke is based on facts and reality, poverty influences secondary education beyond funny stories. Recently, an informal poll was conducted among the first-year nursing students at a small private midwestern college which asked the question: “What do you wish (the faculty member) knew about you?”. One student responded, “I wish people knew that just because I’m white and a student here, doesn’t mean I’m rich” and another said, “I am working night shifts, so if I fall asleep in class, please don’t take it personally” (Hoy, personal communication, February 17, 2020). These students are doing their best to graduate from college and blend in with their colleagues. However, students from poverty face unseen challenges to their academic achievement and need help to successfully graduate from higher education.

Background

These experiences are becoming normal in higher education. According to research conducted by Temple University's Hope Center (Baker-Smith et. al., 2020), 43% of student respondents were food insecure in the prior 30 days, 48% were housing insecure in the previous year, and 16% were homeless (p. 7). Despite these factors, students enroll and attempt to persist in courses to achieve their academic goals. The Pew Research Center found in the academic year 2015-2016, 31% of students were in poverty compared to 1996 when only 21% of students reported as such. This difference is not reflective of society at large, which had an official poverty rate of 12% for both 1996 and 2016 (Fry & Cilluffo, 2019, p. 4). The study also examined the likelihood of
Nursing Students Are More taking student loans to help pay for college and found 38% of students in poverty used loans to help finance their education (Fry & Cilluffo, 2019, p. 12).

One tool that students from poverty have available to them to offset the financial burdens of college is the United States Federal Pell Grant (Federal Student Aid, n.d.). Pell Grant funding is reserved for the exceptionally needy higher education student. Undergraduate students in the United States are eligible for funding if their expected family contribution to education is less than $5,700. Eligibility is determined by data submitted by the student, and their parents if a dependent on taxes, to the Free Application for Federal Student Aid. However, this tool does not combat the psychosocial constraints of being a college student from poverty and most often does not fully remove financial stress. Outside expenses such as textbooks, housing, reliable transportation, gasoline, and food, make it difficult for students to remain focused on their education. Meeting these needs often means taking out student loans through the financial aid office. If the loans in the financial aid package are not enough to cover all their expenses, students are forced to take on work outside of their studies, sometimes working up to 40 hours per week or more to fully afford to pursue their education (Baker-Smith et. al., 2020).

Working towards equity in secondary and post-secondary health career education has become a national initiative from the Institute for Healthcare Improvement (IHI) (McPherson, et. al., 2021). They found that while enrollment gaps between lower-income and higher-income groups have lessened, the number of students from lower-income groups who graduate with credentials has not. This national trend shows the need for educational equity to have more people navigate through post-secondary
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education and enter the healthcare workforce, including nursing. Educational equity has a direct impact on health equity. For changes in health equity to be sustainable, the group(s) in question must be empowered through systemic changes such as having representation within the healthcare systems (World Health Organization [WHO], n.d.). Students with low socio-economic status must be supported equitably in their education to change the healthcare system from within for the betterment of this disadvantaged population.

The numbers presented by the Hope Center (Baker-Smith et. al., 2020) and the Pew Research Center (Fry & Cilluffo, 2019) are daunting but incomplete. Little has been written about private not-for-profit colleges or bachelor's degree level nursing students moving beyond their student poverty state and successfully beginning nursing practice. Most of the literature is focused on community colleges and/or public four-year institutions. For instance, only six percent of the Hope Center (2020, p. 5) study responses were from private not-for-profit four-year schools. At the project site, a small private not-for-profit midwestern college, there is only anecdotal evidence that nursing students have poverty interfering with their academic success. For this Doctor of Nursing Practice (DNP) project a decision was made to investigate the effect of increased faculty involvement in the form of mentoring to increase passing rates for students from poverty.

**Problem Statement and Needs Assessment**

The project site is a small private college in the Midwest. In the past two academic years, ten nursing course failures were reported across all cohorts with a total student population of 300. Of these failures, two changed their major, and five students
repeated courses to reattempt nursing school. The college lost three enrolled students due to course failure in nursing classes. The school and the nursing program find this number unacceptable and developed this project to reduce course failure and retain students.

Other professional education programs, such as engineering, have utilized equitable educational strategies to mitigate the effects of racism (Flowers & Banda, 2018). However, the effect of such strategies for nursing students has not been published. With the IHI (McPherson, et. al., 2021) focusing a light on reducing disparities in education to impact healthcare inequities, research must be conducted to determine appropriate pathways to achieve better outcomes for the nursing student and their future clients. This DNP project directly addresses the equity problems of students from poverty through a faculty mentoring intervention.

**Project Focus**

**Purpose**

The purpose of this DNP Quality Improvement project was to reduce course failure of students receiving Pell Grant support in the School of Nursing by fifty percent and increase student’s perceived time management, stress mitigation, and life management skills.

**Population, Intervention, Control, Outcome, Timeline (PICOT) Question**

This leads to the following Population, Intervention, Control, Outcome, Timeline (PICOT) question: For pre-licensure, Pell Grant eligible undergraduate nursing students, does a faculty mentorship program, compared to current practice enhance students’
perceived time management and stress/life skills, their self-reported ability to manage academic requirements, and decrease course failures during fall semester 2020?

**Aims**

1. By September 15, 2020, Pell Grant eligible students will be offered the opportunity to be assigned a faculty mentor.
2. By September 30, 2020, Pell Grant-eligible students opting to have a faculty mentor will be assigned one.
3. By the completion of Fall semester 2020, Pell Grant eligible students who participate in the faculty mentoring program will be successful in all nursing classes for that term, and eligible to participate in Spring Semester 2021 nursing courses.

**Objectives**

1. Student Affairs, Financial Aid, and the School of Nursing Traditional Undergraduate program will collaborate to identify nursing students who are eligible to receive a Pell Grant.
2. Students meeting the financial requirement will be offered the opportunity of a mentor. No student will be automatically assigned mentorship.
3. Faculty mentors will be volunteers and possess the following qualifications: recipients of Pell Grants for their educational journey, have been teaching at the college for at least one academic year and teaching in the Traditional Undergraduate Nursing program.
4. The mentoring relationship will be defined by:
   - Having at least 3 meetings
Meeting topics will include time management skills, stress/life management skills, and academic progress.

All topics addressed at all meetings

Theoretical Frameworks

Project support originates from Payne’s *A Framework for Understanding Poverty* (2001). To understand the problems faced by students from poverty, poverty and resources must be defined. According to Payne (2001), poverty is doing without resources. Resources come from many avenues. Traditionally, poverty has been solely associated with a lack of financial resources. However, money does not solely influence leaving or staying in poverty. People who can leave poverty also have emotional stamina, mental abilities, spiritual guidance, physical health, support systems, relationship/role models, and knowledge of hidden rules (Payne, 2001).

Of these, emotional stamina proves to be the most important because it prevents the individual from returning to previously established habits and patterns to navigate new hidden rules (norms) and situations unlike anything from previous experience (Payne, 2001). Role models teach and support the emotional stamina of the individual by giving guidance about norms, demonstrating appropriate responses, guiding the individual’s sense of purpose, and adding to the individual’s support system. Role models also influence mental and physical health through identifying potential shortcomings and methods or outside resources to improve the situation. This author believes that relationships, not monetary status, are the foundation for successfully moving out of poverty. Therefore, educators have a responsibility to offer a support
system, role modeling, and opportunities to learn so that the individual from poverty can make an informed choice about their progression from poverty.

Payne’s (2001) work directly relates to the proposed work at the project site. The college identifies student matriculation through the pre-licensure nursing program as an area of concern. Poverty, as defined by Payne, was found through analyzing student statements for failure in nursing courses. The student paid tuition and associated costs for the term but lacked resources such as a support system, mental health, emotional stamina, navigation of new norms, and spirituality. Therefore, interventions to support student progression must address more than financial poverty. Faculty mentors, who have moved themselves out of poverty, serve as role models to students and aid in emotional stamina, navigating hidden rules, and provide support to students from poverty.

The faculty mentor relationship utilizes elements of Erickson, Tomlin, and Swain’s nursing theory of modeling and role-modeling (Smith & Parker, 2015). The theorists explain the nurse’s role in the client’s pathway has three functions: facilitation, nurturance, and unconditional acceptance. These elements can easily be applied to the role of the nurse faculty mentor. As facilitators, the faculty mentor advises the student on how to navigate the educational landscape, as well as connecting students to physical resources, such as food or emergency shelter, which they may need but not know how to obtain. As nurturers, the faculty mentor provides holistic care and counsel to the student. Because the faculty mentor has navigated themselves from poverty, they have unconditional acceptance of the student’s situation and can recognize the student
Nursing Students Are More for who they are as an individual without preconceived or stereotyped understandings about what it means to have an upbringing that includes low economic status.

These nursing faculty mentor roles manifest five goals for any intervention: building trust, promoting the student’s positive orientation, promoting the student’s control over their position, affirm the student’s strengths, and setting mutual educationally related goals (Smith & Parker, 2015). These goals support the student while allowing them to control their educational direction with their sense of identity intact, if not strengthened. The student’s emotional stamina, mental abilities, and physical health are impacted by the nurse faculty mentor relationship through increasing their support system, access to role models, and caring relationships to aid in navigating hidden rules of academia. In this manner, both theories are influential for the project and emphasize the need for collaborative approaches to fully address the needs of nursing students from poverty.

**Literature Review**

**Search Qualifiers**

Worldwide, governments invest in multiple levels of education of their people. National grants are one of the ways these governments help fund higher education. In the United States, the program designed to offset the cost of higher education for those below certain income levels is called the Pell Grant (Federal Student Aid, n.d.). The search criteria for the project used more generic, universal terms for financial status. The evidence came from post-secondary education, only.

Search terms included: mentor*, higher education, college, poverty, college students, and intervention. The project leader also used the following limiters to filter
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results: English language, Peer-Reviewed, full text, and publication dates from 2015-2020. Because the study takes place in an educational setting and the intervention is educational in nature, the ERIC database was used. Initial term combinations and yields are listed in Table 1.

Table 1. Database search findings

<table>
<thead>
<tr>
<th>Search phrases</th>
<th>Initial Results (# of articles)</th>
<th>Limiter: English</th>
<th>Limiter: Peer-Reviewed</th>
<th>Limiter: Published 2015-2020</th>
<th>Limiter: Full text</th>
</tr>
</thead>
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<td>&quot;Higher education&quot; “poverty intervention&quot; Mentor*</td>
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<td>5100</td>
<td>2698</td>
<td>801</td>
<td>458</td>
</tr>
<tr>
<td>&quot;College student&quot; “poverty intervention&quot; Mentor*</td>
<td>3518</td>
<td>3477</td>
<td>1906</td>
<td>615</td>
<td>344</td>
</tr>
</tbody>
</table>

These articles were briefly reviewed to determine if the article addressed college students whose family is unable to help offset the costs of education (tuition, fees, books, housing). After this further examination of the literature search, eight articles were selected. The selected literature possessed a higher education setting, studied low-income students, and was published in a peer-reviewed journal see Table 2.

Evidence Appraisal

Once the evidence was examined for congruity with the topic and population, it was leveled. Leveling was determined using Melnyk and Fineout-Overholt’s (2019) adapted rating system for the Hierarchy of Evidence for Intervention/Treatment Questions. The Sneyers and DeWitt (2018) article is Level 1 evidence, a meta-analysis of 25 quasi-experimental studies. Four articles (Hollifield-Hoyle & Hammons 2015,
Mason 2019, Pinkneya & Walker 2020, Flowers & Banda 2018) were single qualitative methods studies and determined to be Level 6 evidence. The three remaining artifacts (Jury et al., 2017, Baugh et al., 2019, United States Department of Education, 2017) are Level 7 evidence.

All articles were analyzed for quality using tools provided by the Joanna Briggs Institute (2020). The research answered six to eleven questions about the evidence found in the article and the methods used by the article's author(s). The questionnaires showed that all eight artifacts included in the search were of good quality and therefore all are used.

The literature includes several types of research, meta-analysis, qualitative, mixed methods, practice guidelines, expert opinions, and literature reviews. It appears that the two most studied interventions are increasing student funds (through grants, loans, and scholarships) and academic study interventions like assigning a faculty mentor, assigning student mentors, and mandated study skills sessions. One study included academic probation as a potential motivator but found it had a negative effect on retaining students.

Faculty mentorship appears frequently in the article search, though the extent of the mentoring relationship is not greatly explored. Some mentorships were quite structured with assigned sessions and others informal. Sometimes the mentorship was mandated, other studies had the interaction be voluntary.

**Synthesis**

Published interventions to counteract a student's socioeconomic background of poverty fall into one of four areas: (1) peer mentorship where the student from poverty is
assigned a fellow student to aid with academic performance; (2) needs-based financial aid packages to offset the increasing costs of a college education; (3) academic probation with the intent of refocusing the student's efforts in the classroom or face expulsion from the college; and (4) faculty mentorship to develop a relationship with the student and provide guidance towards academic success.

Peer mentorship research found connecting students did increase academic performance, but the peer relationship did not alleviate financial or psychosocial constraints of students from poverty (Mason, 2019). In discussing the findings of a peer tutoring program on academic performance, Mason states "additional emphasis ought to be placed on multi-disciplinary collaboration with a variety of student support-related service providers to effectively address the collective needs of students" (p. 102). This reflection on higher education highlights the complexity of retaining students from any background, including those from poverty, and calls for an equally complex intervention strategy to address student needs. Therefore, academic institutions must implement interventions, or combinations of interventions, which have a larger scope than just academic performance.

The argument that poverty is a financial problem and can be solved by increasing the student's financial aid package has not been supported (Baugh et al, 2019; Jury et al, 2017). Needs-based grants are not enough to cover a student's education and taking on thousands of dollars in student loans detracts students from pursuing a higher level of education. Supporting students through a series of public and private loans is not proving to be a viable answer since "the potential burden of educational debt is a
primary reason why high-achieving children from disadvantaged backgrounds choose not to pursue a college degree" (Baugh et al., 2019 p. 671).

Debt-free education does not address the variety of disparities that students from poverty face. Counteracting socioeconomic concerns (SES) does not solve psychosocial concerns and “low-SES students may still experience more threat, more health problems, more negative emotions, and lower levels of motivation than their high-SES counterparts” (Jury et al, 2017, p. 34). Attractive financial aid packages can also hurt the institutions. Snyers & Dewitt (2018) found “aid can even have a negative effect on student success as students with a low probability of completion are induced to enroll due to the lower financial costs they incur for their education” (p. 211). Institutions choosing to focus on providing an attractive financial aid package are only addressing part of the problem of being a student from poverty.

Academic probation intends to refocus the student’s attention to the classroom. Disciplining academically underperforming students with potential and actual expulsion from the college produces mixed results. This practice "can motivate some students to improve their performance, while others are discouraged from making any attempt at all" (Snyers & Dewitt, 2018, p. 210). This intervention does not produce consistent positive impacts on a student’s academic performance and retention by a college.

Faculty mentorship has been supported in several studies as an effective intervention for students from poverty. These mentor relationships combat psychosocial strains by “providing ongoing support that was relational, characterised by genuine concern, human warmth and knowledge of the young person” (Pinkney & Walker, 2020 p. 8). Students expressed their poverty background hindered relationships with faculty
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because the faculty “could not relate to their situations, and that they felt negatively stereotyped because of their poverty” and that “poverty was not indicative of their inability to be successful academically but rather they viewed poverty as a challenge that they needed to overcome” (Flowers & Banda, 2018, p. 79; Hollifield-Hoyle & Hammons, 2015, p. 56). However, when the student felt supported through a mentoring relationship “the average intervention effect of mentoring on retention is equivalent to a 7.5% improvement in retention and a 5% increase in graduation for the intervention groups” (Snyers & Dewitt, 2018, p. 224). Overall, faculty mentoring improves student’s reflections on their academic career and impacts the college’s retention and graduation rates.

Based on the literature findings, a student-faculty mentor program for students from poverty was thought to increase the likelihood of said students passing nursing courses. Additionally, the project site utilizes peer mentorship, needs-based financial aid including loans, grants, and scholarships, and academic probation; the three other interventions found in the literature search. Adding the fourth dimension of faculty mentoring is a low-cost and evidenced-based intervention.

Project Design

Methods

The project utilized both qualitative and quantitative data collection in a quasi-experimental design and was modeled after the United States Department of Education’s (USDE) (2017) Practice Guide of Strategies for Postsecondary Students in Developmental Education, specifically Recommendation 2: Require or incentivize
regular participation in enhanced advising activities. The USDE has four steps to carry out this recommendation:

1. Recruit advisors (faculty mentors) and establish expectations for the frequency and intensity of contact with students.

2. Require or incentivizing in-person sessions.

3. Meet with advisors (faculty mentors) frequently and over a longer period. Offering regular meetings before, during, and at the end of semesters and at least twice per term is recommended.

4. Identify students who most need this level of interaction.

(USDE, 2017, pgs. 21 & 22)

According to the findings by the project site, most course failures were due to poverty. Because students from poverty overcome layers of difficulties to achieve academic success, the intervention utilizes a variety of resources. Student Affairs, Financial Aid, and the School of Nursing Traditional Undergraduate program collaborated to identify nursing students who receive Pell Grant funding (Federal Student Aid, n.d.). The project leader contacted the Dean of Student Affairs to learn the number of possible participants in the project and estimate the number of faculty mentors needed. Federal laws severely restrict the amount of financial information disclosed to people outside of the financial aid office. The junior cohort was surveyed to determine eligible participants. Students meeting the financial requirement were contacted via email and offered the opportunity for starting a relationship with a faculty mentor, how to participate in the project and with instructions on how to enroll. Once enrolled, the students were assigned, and participated in, at least three sessions with
the faculty mentor. At the end of the semester, the participants (students and faculty) were to be surveyed using Likert scales and open-ended questions. Student pass rates were also to be measured.

Faculty mentors were volunteers and possess the following qualifications: recipients of Pell Grants for their educational journey, have been teaching at the college for at least one academic year, and teaching in the Traditional Undergraduate program. The mentoring relationship was defined by having at least three meetings per semester, and meeting topics included time management skills, stress/life management skills, and academic progress. To be considered a successful mentoring relationship, all the topics were addressed at all the student-faculty mentor meetings. Also, project participants were to be given a survey with pre- and post-surveys with Likert scales and the opportunity to comment. See Appendices B and C for the surveys. Due to the limitations of the COVID-19 pandemic, the initial solicitation and pre-surveys were available for analysis. The project ended before post-intervention survey data could be collected.

IRB Statement

This DNP project was reviewed and approved as a Quality Improvement project by the project site’s Institutional Research Board (IRB) and St. Catherine University’s IRB. Please see Appendices D and E for the Site Approval and IRB Approval Letters.

Results

First, the junior cohort was surveyed for willingness to participate in a faculty mentoring program. Of the forty-nine responding students:

- Forty-four (89.7%) indicated they get stressed out with balancing school, work, and life obligations.
• Forty-seven (95.5%) felt they had four hours to meet with a faculty mentor during the semester.

• Nine (18.3%) were identified as financially eligible candidates by their student aid status as reported by dean of student affairs.

These nine students were contacted by the project leader and three students opted into the program. The students were divided between the two faculty mentors based on classroom rosters, to blind the mentors to the participants’ academic performance. The students were then asked to complete the pre-survey, participate in two mentoring sessions, and complete a post-survey. Due to unforeseen circumstances of a critical spike in the number of COVID-19 cases in the state of Minnesota, there are only pre-intervention survey results to disseminate. One of the mentors is also in the Air Guard, was activated for off campus, out of community response to the rapidly rising infection rate and was unable to fulfill their mentoring responsibilities. Pre-intervention survey Results Tables can be found in Appendices F through I.

The written responses were qualitatively evaluated for themes by the project leader to discover common themes within the open-ended written responses. Overall, when the participants were asked about their answers for the areas of psycho-social and physical concerns, most commonly they expressed sleeping problems ("sleep is always on the lower end" "I have never been a good sleeper"), time management concerns ("I feel like I never have enough time to work and time to spend with friends and family" "I am just trying to organize"), and financial worries (" . . . situate my financial issues, especially since I lost my job" "Money has always been an issue, but my parents help me out when they can"). The participants' goals were to pass their
Nursing Students Are More courses, retain information, and utilize their time effectively to meet deadlines. The themes found in the open-ended survey questions were time balance and finances ("my problem with procrastination and student loans" "I anticipate a hard time balancing the need to work and complete all my school" "studying . . . flashcards for tests are too much [many in number]"). Answers were also evaluated by Qualtrics, using the word cloud function in the program. Word clouds are displayed in Appendices J through L.

Although the data collection ended before the study could be fully completed, there are anecdotal reports of the three participants completing all their nursing courses for the term and moving into spring courses unencumbered and without the need to repeat any work. The two mentees who lost their mentor due to Air Guard activation were contacted after data collection ended and began a mentoring relationship with the DNP project leader who felt that these students had lost a great deal due to the pandemic and did not want them to lose any more opportunities and tools for success.

Discussion

Although the data collection was discontinued earlier than originally planned, the results indicated the work was appropriately timed and needed. The study showed a need for increasing student engagement through dynamic enhanced advising. Students from poverty are not the only students who desire such a relationship. Thirty-eight students who did not qualify for the study wanted to add a faculty mentor to their academic tool kit. Circumstantial evidence showed a positive relationship between faculty mentorship and three students’ academic success. While this finding does not show causation, it does speak to the powerful influence that a faculty may have on a student’s academic career. Because the project suffered significantly from COVID-19
pandemic limitations, the gathered data should be viewed as an assessment for further opportunities to enhance a nursing student’s education and success, rather than a conclusive intervention for students from poverty.

**Social Justice Considerations**

Doctor of Nursing Practice (DNP) projects, such as the one outlined in this paper, must be aimed at improving the lives of clients, giving them better opportunities to reach health goals to maintain or improve the client's dignity and respect. DNP projects can incorporate social justice into practice in multiple ways. First, having an awareness that there are social injustices in our society. Secondly, design DNP projects with a social justice focus to create more equity for disadvantaged clients. In this way, the client can reach similar desired states as everyone else. Lastly, evaluate whether the project met its intended goal, carry the information to other populations, and design further projects to create a more equitable environment.

The intervention site already has a sliding scale health center, a no-cost physical wellness center, a no-cost counseling center, a food shelf, and system-level programs for first-generation students, military veterans, and various cultural backgrounds including Asian, African American, Hispanic, and Native American cultures. Financially, the college supports students through scholarships and helps the student access state and federal education funding through the financial aid office.

This DNP project was designed as an equitable intervention to support students from poverty on their educational journey. Students from poverty may be able to hide the appearance of their disparity. However, the deeper impacts of poverty include lack of food or housing, stumbling over unwritten academic cultural rules, no reliable support
from home, poor physical health, and unmet spiritual needs. These problems must be mitigated for students with poverty in their background to create systemic, representative change in health care systems and achieve social justice for clients experiencing similar conditions on individual, community, regional, state, and national levels.

**Limitations**

The main limiter of this study was COVID-19. As mentioned in the results section, the spike in Minnesota infections in the fall of 2020 caused one of the mentors to bow out and be deployed to a rural area of the state. Minnesota had fewer than 4,000 occurrences before October 26, 2020, and more than 8,000 on November 10, 2020 (Minnesota Department of Health, 2021, January 15). The students assigned to this mentor had class conflicts with the remaining mentor and the academic research work associated with the project was canceled.

When the project was in its planning phase, there is no way an explosion of viral cases could have been predicted as a confounding issue. The situation was dire. Even public health official and presidential advisor Dr. Michael Osterholm stated in an interview with National Public Radio, "we're now entering the darkest days of the pandemic. I just can't think of a more perfect way for this virus to transmit effectively through our communities. We've set up right now, virtually, a perfect storm" (Aizenman & Stein, 2020, November 2). This perfect storm of viral expansion took many human lives and impacted thousands more. When weighing the benefit of the DNP project against the costs of human lives, the project end was a small sacrifice to impact the physical health of Minnesotans.
An additional limitation was the restriction on student data. At the time the project was conceived, the stakeholders were unaware of the tight restrictions on financial aid status. Discovering and developing a workable solution for the restrictions took four weeks away from the project window. This caused the DNP project leader to reduce the sessions from three mentor meetings to two by mid-December. This adjustment still corresponded with the USDE guidelines used for the intervention and was a supported solution to the reduced study window.

**Recommendations and Implications for Future Research**

Students from poverty will continue to be present in the collegiate population and their numbers may continue to grow. Considering in the academic year 2015-2016, 31% of students were in poverty compared to 1996 when only 21% of students reported as such (Fry & Cilluffo, 2019, p. 4), institutions will need to develop effective interventions to mitigate disparities outside of the classroom. With 48% of college students experiencing housing insecurity and 43% of them not being sure what their next meal is, meeting the rigorous standards for nursing school can be difficult, daunting, or nearly impossible (Baker-Smith et. al., 2020, p. 7). Having a multi-layered approach that utilizes peer mentorship, needs-based financial aid including loans, grants, and scholarships, academic probation, and faculty role modeling through mentorship appears to be a model that supports the student while having a minimal impact on the bottom line of the college.

The author feels students from poverty bring a unique viewpoint and experience to the college environment and nursing practice which enriches the community. Supporting them through their educational journey has individual, organizational, and
systemic benefits to the overall healthcare environment. Individually, the student is successful in their studies. Organizationally, students from poverty lived similar experiences to their future client populations and bring that perspective into the classroom and interactions with their peers. Systemically, once in the healthcare workforce, students from poverty possess a better understanding of this disparity and tools needed to overcome obstacles which can be used in health coaching of individual clients and policy development on many levels of the healthcare system. Therefore, post-secondary education must intervene to increase educational equity in this population, both for the short-term successes of the nursing student and the college, and for the health of the clients the student will care for after graduation.

When looking at future implications for the faculty/student mentorship program, the intervention may be more effective without a filter of poverty and instead used for students at risk due to many factors: disability, learning challenges, financial background, less than necessary executive functioning skills, and/or borderline academic performance. The project site has recently implemented an electronic advising database which allows the student to track their progress through their major and minor programs, investigate what courses are still needed for graduation, and monitor their cumulative grade point average. This work used to be one of the primary responsibilities of the faculty advisor. With this system in place, much of the time spent on what courses to take, etc., can be reallocated into a more dynamic relationship-building effort. The faculty may also be able to fit in two or more meetings in a semester, due to the changes in workload from the technology addition.
Future work with students’ academic success must recognize the profound effects of COVID-19. The pandemic and statewide closures of colleges and communities impacted students physically and mentally. One study by the National Institutes of Health (NIH) found 71.26% (Wang et al, 2020, p. 5) of college students reported an increase in stress and anxiety, while only 43.25% (p. 7) reported possessing adequate coping skills to navigate the pandemic’s changes to post-secondary education. Another NIH project found 71% of participants reported increased stress and anxiety (Son et al, 2020, p. 4), increased difficulty in concentrating (89%) (p. 5), disruptions in sleep patterns (86%) (p. 5), and increased concerns about academic performance (82%) (p. 5). These themes were echoed by Tasso et al, (2020) who found students feared themselves or people close to them becoming infected with COVID-19, discord about coursework delivery and instructional patterns, increased loneliness, decreased motivation, sleep alterations, and symptoms of anxiety and/or depression. Recommendations to mitigate the effects of COVID-19 include using data from sources such as the American College Health Association–National College Health Assessment and Healthy Minds Study to inform decision making, and prioritizing student support services with a focus on equitable access to resources (Lederer et al, 2020). The pandemic has created a population of students which suffered a traumatic impact on their education and further consideration for these circumstances may need to extend past the end of the pandemic.

Conclusion

This study serves as a starting point for further implementation and expansion of the faculty role in the success of students in higher education. Previous research
showed a positive relationship between faculty mentoring and student graduation rates. This study’s anecdotal reports found having a faculty mentor was associated with student success in the classroom and lowered attrition. More work needs to be done on a larger scale to determine if mentorship has an actual association with student academic success and is an effective intervention for students who struggle in higher education. The COVID-19 pandemic is harming students and causing trauma, above and beyond the stress normally associated with post-secondary education. This trauma further compounds the effects of poverty on the student, whose grades may suffer due to the increased anxiety about the health of their family, and they may face a choice between staying in school or leaving school to bring income to their family home, and/or not being able to afford school due to loss or reduction of hours in their own work.

A faculty mentoring intervention and more dynamic advising relationships are necessary coping tools for students in higher education. People who leave poverty have emotional stamina, mental abilities, spiritual guidance, physical health, support systems, relationship/role models, and knowledge of hidden rules (Payne, 2001). Nursing faculty mentor roles manifest interventions for the student’s academic success: building trust, promoting the student’s positive orientation, promoting the student’s control over their position, affirming the student’s strengths, and setting mutual educationally related goals (Smith & Parker, 2015). While the evidence from this project was not wholly collected due to the pandemic, valuable lessons were learned in the attempt. The next steps to lessen the effects of disparities on education should include increasing the eligible population from a student from poverty to students with academic risk factors.
such as disability, trauma, learning challenges, financial background, less than necessary executive functioning skills, and/or previous academic performance issues.

Although the intervention of faculty mentors for students from poverty is a small, granular academic support structure change, it has the possibility of impacting healthcare at the systems level. People from disparaged groups, such as from poverty, must have more power within the system to combat inequity in healthcare (WHO, n.d.). One way to bring more power is to better support people with health inequity in obtaining an education to become healthcare providers delivering care. Faculty mentoring is one tool to help bring balance to the healthcare workforce and create sustainable, positive change in healthcare delivery.
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https://www.who.int/healthsystems/topics/equity/en/
## Appendix A

Table 2. Evidence Summary

<table>
<thead>
<tr>
<th>Author and Date</th>
<th>Evidence Type</th>
<th>Sample and Sample Size</th>
<th>Setting</th>
<th>Findings</th>
<th>Limitations</th>
<th>Evidence level/Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eline Sneyers and Kristof De Witt 2018</td>
<td>Quantitative</td>
<td>experimental studies 25</td>
<td>literature</td>
<td>Student Faculty mentoring had the largest positive effect on student performance - answers the PICOT question directly</td>
<td>did not use peer-mentoring programs in the study - only faculty staff and professionals as mentors; articles were from 1995-2015</td>
<td>Level 1 - meta-analysis - JBI Good</td>
</tr>
<tr>
<td>Heather Hollifield-Hoyle Jim Hammons 2015</td>
<td>Qualitative</td>
<td>low-income college students 18</td>
<td>college - US</td>
<td>Forming a positive relationship with a campus faculty or staff member was important for the college transition and persistence of students from poverty - Answers the PICOT question directly</td>
<td>none listed - some questions could have been leading</td>
<td>Level 6 a single qualitative study JBI - Good</td>
</tr>
<tr>
<td>Henry D. Mason 2019</td>
<td>Quantitative and Qualitative</td>
<td>college students 10</td>
<td>college - South Africa</td>
<td>1:1 study skills sessions with a student mentor improved test scores and student attitude but did not mitigate outside socioeconomic factors - indirectly answers PICOT - student mentor not faculty listed: not an empirical study, no biographical info gathered re: socioeconomic status, the program participants may have had high motivation to use the skills - the program itself did not cause the effects on its own.</td>
<td>Level 6 - Mixed methods - JBI good</td>
<td></td>
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<tr>
<td>Study Authors</td>
<td>Study Type</td>
<td>Population Description</td>
<td>Study Details</td>
<td>PICOT Question Answered</td>
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<tr>
<td>Sharon Pinkneya,</td>
<td>Qualitative</td>
<td>Care experienced</td>
<td>Young people did not benefit from unspecified and generalized help, but ongoing relational support, characterized by genuine concern, human warmth, and knowledge of the young person. Also, the research emphasizes that supportive adults need to be non-judgmental, available, and responsive in providing practical help as well as emotional support. Answers the PICOT question without using a formal mentor.</td>
<td>The population was care experienced only - no other socio-economic factors considered</td>
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<tr>
<td>Gary Walker</td>
<td></td>
<td>(foster care kids) college students 23</td>
<td>college - UK</td>
<td>Level 6 a single qualitative study - JBI - good</td>
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<tr>
<td>Alonzo M. Flowers,</td>
<td>Qualitative</td>
<td>Black Male Engineering</td>
<td>Mentoring programs provided gifted Black males the needed enrichment and space that ultimately sent a message of inclusivity in the larger environment. - directly answers PICOT question</td>
<td></td>
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<tr>
<td>Rosa M Banda 2018</td>
<td></td>
<td>majors 8</td>
<td>college (2) - US</td>
<td>Black male engineering students were studied</td>
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<td></td>
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<td>Level 6 a single qualitative study - JBI good</td>
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<tr>
<td>Authors</td>
<td>Type</td>
<td>Provides</td>
<td>Background Information</td>
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<tr>
<td>Mickaël Jury, Annique Smeding, Nicole Stephens, Jessica Nelson, Cristina Aelenei, Celine Dranon 2017</td>
<td>Literature Review</td>
<td>Provides a context for the psychological barriers faced by students from poverty. 3 psychosocial interventions are presented at the end of the article. provides background for the intervention</td>
<td>Level 7 background information - literature review - JBI good</td>
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<tr>
<td>Aaron D Baugh, Allison A Vanderbilt, Reginald F Baugh 2019</td>
<td>Expert Opinion</td>
<td>Suggests undergraduate schools develop interventions to retain students from disadvantaged means to have a more diverse and representative medical workforce - provides background for the intervention</td>
<td>Level 7 Background information - expert opinion - JBI - good</td>
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<tr>
<td>US Department of Education</td>
<td>Practice Guide</td>
<td>Recommendations 5 (Teach the student how to become self-regulated learners) and 6 (Implement comprehensive, integrated, and long-lasting support programs). Provide a framework for the faculty mentoring program. Directly answers PICOT question</td>
<td>Level 7 Practice Guide JBI - good</td>
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</table>
Appendix B.

Pre-Participation Survey Instructions and Questions

1. Please provide the last 4 digits of your phone number

2. Please answer the following questions using the included scale.

   How well are you managing:

<table>
<thead>
<tr>
<th></th>
<th>Extremely well</th>
<th>Very well</th>
<th>Moderately well</th>
<th>Slightly well</th>
<th>Not well at all</th>
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<tbody>
<tr>
<td>Going to class?</td>
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<td>Getting good sleep?</td>
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<td>Moving your body (being physically active)</td>
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<td>Eating real food?</td>
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<td>Fostering connection with other people?</td>
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<td>Reflecting and centering?</td>
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<td>Money and financial concerns?</td>
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</table>

3. Please share comments or thoughts about your answers above.

4. What goals do you have for yourself for the semester?

5. What struggles (personal, academic, and/or financial) are you facing or anticipating for the semester?
Appendix C.

Post-Participation Survey Instructions and Questions

1. Please provide the last 4 digits of your phone number

2. Please answer the following questions using the included scale.

   How well are you managing:

<table>
<thead>
<tr>
<th></th>
<th>Extremely well</th>
<th>Very well</th>
<th>Moderately well</th>
<th>Slightly well</th>
<th>Not well at all</th>
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<tbody>
<tr>
<td>Going to class?</td>
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<td>Getting good sleep?</td>
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<td>Moving your body (being physically active)</td>
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<td>Fostering connection with other people?</td>
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<td>Reflecting and centering?</td>
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<td>Money and financial concerns?</td>
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</table>

3. Please share comments or thoughts about your answers above.

4. What goals did you have for yourself for the semester? Did you meet it/them?

5. I would recommend the mentorship program to another student.
   - Yes
   - No

6. What suggestions do you have for the program going forward?
Appendix D.
Site IRB approval

The College of St. Scholastica

Institutional Review Board

DATE: July 13, 2020
TO: Jessica Hoy, MSN
FROM: The College of St. Scholastica, Institutional Review Board
RE: Poverty in Nursing Students: More Than Just Being a "Broke College Kid"
SUBMISSION TYPE: New Project
ACTION: NOT RESEARCH
REVIEW TYPE: Expedited Review

Thank you for your submission of materials for your project. The College of St. Scholastica Institutional Review Board has reviewed your application and determined that the proposed activity does not meet the definition of research under the Code of Federal Regulations 45 Part 46.102 provided by the Department of Health and Human Services. As such, your project does not require ongoing review or approval from The College of St. Scholastica Institutional Review Board. We will retain a copy of this correspondence within our records.

Any modification to your project procedures that could change the determination of "not research" must be submitted to the IRB before implementation.

If you have any questions, please contact Nicole Nowak through the project email function in IRBNet or nnowak@css.edu. Please include your study title and reference number in all correspondence with the IRB office.

Best regards,

Nicole T. Nowak, Ph.D.
Chair, Institutional Review Board
The College of St. Scholastica
Duluth, MN 55811
Poverty in Nursing Students

Appendix E.

St. Catherine University IRB approval

St. Catherine University IRB

To: Jessica Hoy
From: David Chapman, IRB Co-Chair
Subject: Protocol #1452
Date: 08/23/2020

The protocol 1452, Poverty in Nursing Students: More Than Just Being A “Broke College Kid” has been verified by the St. Catherine University Institutional Review Board as a Quality Improvement Project, and accordingly does not meet the definition of “research” as to 45CFR46.102(d), which is “a systematic investigation, including research development, testing and evaluation, designed to contribute to generalizable knowledge.” Your protocol is thus exempt from IRB review and therefore no review or oversight by the St. Catherine University Institutional Review Board is required. You are approved to move forward with your project. You are approved to begin your quality improvement project at any time.

Please note that under this determination, you may publish your findings but you may not refer to this as a research study.

Please note that changes to your protocol may affect its exempt status. If the project changes such that you are conducting research with human subjects, please contact me directly or the IRB Coordinator to discuss any changes you may contemplate.

Thanks,

David Chapman,
IRB Co-Chair
dchapman@stkate.edu
Appendix F.

Pre-Survey: "How well are you managing:"

- Going to class: 67% Extremely well, 33% Very well
- Getting good sleep: 67% Extremely well, 33% Very well
- Moving your body (being physically active): 67% Extremely well, 33% Very well
- Eating real food: 67% Extremely well, 33% Very well
- Fostering connection with other people: 100% Moderately well
- Reflecting and centering: 67% Slightly well, 33% Not well at all
- Money and financial concerns: 100% Not well at all
Appendix G.

Pre-Survey Results to thoughts about managing the seven areas

Please share comments or thoughts about your answers above.

I would say most aspects are pretty average. Sleep is always on the lower end, since I have a weird sleep pattern, and I'm just trying to organize and situate my financial issues, especially since I lost my job.

I have always been good about attending class everyday. I have missed very few classes in my whole college career. However, because I prioritize going to class and school work I feel like I never have enough time to work, and time to spend time with friends and family.

In regards to sleep, I have never been a good sleeper. I usually get either 3 hrs a night or I can sleep as much as 12-14 hrs. I've talked to my doctor about it but nothing really has been done to help. In regards to class, I believe I have only missed 1 class, even though it is hard to focus on Zoom while being at home. I started working out, but not consistently. I have roommates therefore I usually always talk to them. I need to start reflecting and centering in regards to school, life and life outside of class. Money has always been an issue, but my parents help me out when they can.
Appendix H.

Students’ goals for the term

What goals do you have for yourself for the semester?

My goal is to pass my classes, feel confident in lab skills, and genuinely feel like I'm retaining information.

My goals for myself this semester are to stay on top of my homework, staying ahead of deadlines, and preparing for exams in advance to reduce my overall stress in the long run. Another goal I have for myself is to structure my time well so I still have time to do things I enjoy.

My goals at the moment are to pass my classes. I know this is a basic and obvious goal, but as we get deeper into the semester and the topics in class and life outside of class gets more difficult, it is hard to concentrate or keep up with everything.
Appendix I.

Students’ identified struggles for the term

What struggles (personal, academic, and/or financial) are you facing or ant...

Some struggles I am facing is my problem with procrastination, and student loans.

Similar to this past semester, I anticipate that I will have a hard time balancing the need to work and complete all my school in the little amount of time in the week.

Studying (trying to find that personal way that will help me study. I came to the realization that flash cards for tests are too much), I am anticipating the tests for the rest of the semester will be a struggle. Statistics is also a hard class for me (especially SPSS!)
Appendix J.

Word cloud for thoughts about the seven items
Appendix K.

Word cloud for struggles:
Appendix L.

Word cloud for goals: