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RESEARCH - QUALITATIVE

Connecting lived experiences of pre-nursing students during COVID-19 with learner well-being: A qualitative inquiry

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Abstract

Aim: To explore pre-nursing students' experiences and identify factors influencing their well-being as learners during COVID-19.

Design: A qualitative descriptive design was used.

Methods: Short answer study data ($n = 289$) were collected in Fall 2020 as part of a larger IRB-approved survey-based study focused on pre-nursing students. Participants were presented with three short answer questions designed to elicit a description of their experiences as a pre-nursing student. NVivo and reflexive thematic analysis were used to analyse participant responses.

Results: Six themes related to learner well-being emerged from the data. Learner well-being was supported by achieving academic goals, experiencing positive feelings about current course content, creating connections with peers and envisioning themselves as nurses in the future. Negative contributors to pre-nursing student well-being included managing fears of program rejection and juggling multiple roles and demands. Online learning necessitated by COVID-19 created opportunities for loneliness and isolation from peers, technological difficulties and additional psychological stress, which also contributed negatively to learner well-being.

Conclusion: These findings illustrate pre-nursing students' experiences and provide support for the influence of the learning environment and factors within the individual on the well-being of learners.

Impact: Students preparing to apply to nursing programs are an understudied population and little is known about their well-being as learners. Survey-based open-ended short answer questions can be utilized to gain rich insight into their experiences. The study themes and sub-themes can be utilized for discussion and reflection in courses with pre-nursing students and as a starting point for additional conversations between pre-nursing students and educators regarding improving the support of well-being in learners. Additional research and evidence-based interventions that promote learner well-being in pre-nursing students are needed as they prepare for nursing program admission and to support their academic progression.

Patient or Public Contribution: Members of the public were not involved in the design or conduct of the study, analysis, or interpretation of the data, or in the preparation of the manuscript because the study focus is on gaining an understanding the experiences of pre-nursing students and their well-being.

1 | INTRODUCTION

The International Council of Nurses [ICN] (2021) has estimated that approximately 13 million nurses will be needed to meet a global nursing shortage in the future and by 2027 more than 1 million new nurses will be needed to avoid a United States (U.S.) nursing shortage (American Association of Colleges of Nursing [AACN], 2020b). Growing the pipeline of nursing students is one solution to meeting the increased demand worldwide for nurses and strategies to increase enrolment in nursing schools has been a focus of leaders in nursing programs (AACN, 2020b; ICN, 2021). During the first year of the pandemic in the U.S., first time university student enrolment declined an unprecedented 13.1%, (National Student Clearinghouse Research Center, 2020) while enrolment in nursing programs increased by 5.6% (AACN, 2021). Pre-nursing (PN) students who are ready to apply to nursing programs are under-recognized as a crucial population that is needed to ensure the continuing stream of nursing students into nursing programs across the globe.

Due to COVID-19, the AACN (2020a) released guidelines encouraging all nursing didactic courses to move to online modalities to support course progression and provided guidance for addressing the challenge of clinical completion requirements. Understandably, during the first year of the pandemic pre-licensure nursing students reported increased levels of stress related to the abrupt transition to online learning, decreased clinical experiences and the negative effect on the pandemic on their psychosocial well-being (Michel et al., 2021). Little is known about the experiences of PN students and their well-being as learners during this time. These students bring their experiences to nursing school and into the profession, so understanding them is a first step to mitigating future burnout and threats to learner well-being.

1.1 | Background

Many nursing schools in the U.S. require students to complete pre-requisite courses before they are accepted into their program. For this study, PN students are defined as those who have declared nursing as their major but have not begun formal upper-division nursing education training, including clinical courses. They come from a variety of academic backgrounds, including traditional first-time freshman, transfer students and second baccalaureate holders (Urban et al., 2022). As they prepare for admission to a nursing program, PN students experience the tension that exists between successful completion of pre-requisite courses and pre-program requirements and the unknown territory of professional socialization required within a clinical nursing program (Packard & Hoffman, 2016). Unfortunately, not all PN students meet the academic requirements necessary for

admission into a nursing program and many qualified applicants continue to be turned away due to shortages in the availability of experienced faculty and clinical sites (AACN, 2020b).

Few research studies focus on PN students and curriculum recommendations are the most common (Olukotun et al., 2018; Owen & Amar, 2020; Watwood et al., 2018). In the U.S., state boards of nursing determine the number of didactic and clinical hours needed in courses in an undergraduate program, and there is no clear consensus regarding which, if any, nursing courses should be completed prior to program entry (National Council of State Boards of Nursing, 2019). Qualitative research related to PN students is scarce. Bumby and Litwack (2021) utilized a qualitative phenomenologic design that explored academic interventions aimed to facilitate U.S. PN students' transition from preliminary courses to nursing school. Packard and Hoffman (2016) qualitatively explored U.S. PN students' perspectives on this unique stage of education and attitudes towards caring. Participants described high levels of stress, the difficulty of meeting the academic expectations required for program admission, and the challenge of managing daily emotional and personal struggles. A circle of support that consisted of friends, faculty and other university resources was essential to help guide and direct them in their PN journey (Packard & Hoffman, 2016).

1.1.1 | Conceptual framework

In 2019, the National Academies of Sciences, Engineering and Medicine (NASEM) described the importance of monitoring and supporting the well-being of healthcare clinicians because of its' associations with high-quality patient care and the need to prevent clinician burnout. Additionally, they recommended that health professions educational institutions 'have a responsibility to create and maintain positive learning environments that support the professional development and well-being of students and trainees (learners)' (NASEM, 2019, p. 11). According to the NASEM (2019), learner well-being can be positively or negatively influenced by the learning environment and factors within the individual. The learning environment consists of curriculum and training experiences, grading utilized to measure progression, educator behaviours and peer support. Factors within the individual which influence learner well-being are personal physical and mental health, life stressors and coping and self-care strategies. The NASEM (2019) suggests that when learner well-being is not supported burnout is more likely to occur. Outcomes of burnout can include difficulty retaining academic information and skills, reduced quality of patient care, risks to academic integrity and learner attrition. Research has focused on the learning environment and emotional well-being with pre-licensure Pakistani nursing students (Tharani et al., 2017) and types

of feedback strategies that can be utilized to increase learner well-being in nursing students in England (Bond et al., 2021). Research focusing learner well-being in PN students is lacking.

Limited research has been conducted with PN students, both prior to and during the pandemic. More research is needed to reveal and describe the realities of PN students' experiences as they prepare to apply to nursing programs and to seek greater understanding of how these realities may influence learner well-being. The purpose of this study is to explore pre-nursing (PN) students' experiences and identify factors that may influence their well-being as learners during COVID-19. The findings of the proposed study will add to what is known about PN students, increase nursing educators' awareness of learner well-being, and demonstrate the importance of developing evidence-based programs to support well-being in this population.

2 | THE STUDY

2.1 | Aims

1. To describe the experiences of PN students preparing to apply for nursing program admission.
2. To analyse the experiences reported by PN students using the lens of learner well-being, a topic that has not been explored in PN students.

2.2 | Design

This study utilized a qualitative descriptive approach to explore short answer study data collected as a part of a larger research study with PN students. As described by Sandelowski (2010), qualitative descriptive studies offer an interpretative approach to qualitative data and are designed to result in study findings that are closer to the data as given. Data may be collected using a variety of methods, including short-answer survey-based data, and common data analysis techniques for qualitative descriptive studies are content or thematic analysis (Hyejin et al., 2017).

2.3 | Sample/participants

Participants for this study were recruited from an Introduction to Nursing course offered in Fall 2020 using convenience sampling. In addition to 75 h of general education and science courses required by the university, Introduction to Nursing is one of three pre-requisite nursing courses that students must successfully complete before applying for admission to this large public undergraduate Bachelor of Science in Nursing (BSN) Program in the southwestern U.S. Once admitted to the nursing program, upper division pre-licensure nursing courses are typically taken in the last four semesters, during the students' junior and senior years. This nursing program offers two tracks: a 15-month accelerated online program and a traditional, 18- to 24-month campus-based program. Seven sections were offered in a 5-week format for students intending to apply to the accelerated online program. Nine sections were designated as traditional on-campus sections and would have been held as in-person courses, however these were also offered in an online format due to COVID-19.

To be eligible to participate in this study, PN students must have been able to read and understand English, be at least 18 years old at the time of data collection and enrolled in any section of an Introduction to Nursing course offered from September to November, 2020. Total enrolment in all sections of the Introduction to Nursing course during the study period was 1395 students. Students who were already enrolled in the pre-licensure BSN program, along with RN to BSN students, and those students who were less than 18 years old were excluded from participation in this study. Potential participants were recruited using e-mail and course announcements with a link to the online study survey. The survey could be completed in a location of the participants' choosing using a phone, tablet, or computer.

2.4 | Data collection

Demographic data collected in the observational study (Urban et al., 2022) were re-analysed for only those participants who provided short-answer data. Demographic data collected included information about their age, sex and race/ethnicity. To describe the academic characteristics of the sample, participants indicated whether they were a first-generation college students and if they had earned a previous associate or higher degree. They were asked to indicate their number of completed undergraduate hours, the number of hours they were currently enrolled in, and if they were concurrently enrolled in more than one academic setting. Participants were also asked to indicate whether they intended to apply to the accelerated online or traditional campus-based pre-licensure program, what semester they intended to apply, and to describe the number of hours worked weekly.

Four optional open-ended questions were presented to study participants at the end of the larger, web-based survey. These questions were designed to encourage the participants to share their thoughts and feelings to gain insight into their experiences as PN students. Participants were instructed in this section of the survey that they could type or voice text their answers within the survey. The survey questions were as follows:

1. Please share three words that describe what it is like to be a pre-nursing student—and give a short explanation for why you picked each one of these words
2. What are some of the negatives or difficult things about being a pre-nursing student?
3. What are some of the positives or good things about being a pre-nursing student?
4. How has the COVID-19 pandemic affected you as a pre-nursing student?

Surprisingly, out of the initial 364 respondents, a majority (n = 289) chose to respond to three or more questions in this section. Due to the large volume of short answer data from the first three questions (1408 responses), the fourth survey question regarding the specific effect of COVID-19 on participants will be analysed and reported separately.

2.5 | Ethical considerations

Prior to conducting the research study, approval was obtained from the university Institutional Review Board (Protocol #: 2020-0982) and the study was conducted in accordance with the standards set by the U.S. Federal Policy for the protection of human subjects in 45 CFR part 46, subpart A. The research protocol was determined by the IRB to be minimal risk. Prior to entering the study survey, potential participants were informed that participation was voluntary, anonymous, and not linked to a nursing course grade or extra credit.

2.6 | Data analysis

The initial step of data analysis was to review the qualitative data provided by study participants and remove a participant's data from the dataset if they answered two or fewer of the short answer questions. This resulted in the removal of 75 individuals from the original dataset. Continuous demographic variables are reported as mean ± standard deviation, and discrete parameters are reported as n and percent (%).

NVivo (QSR, released March 2020) was used to analyse study question #1 (three words). Participants' three words were separated from their explanations of why they chose the words (if given), and an exploratory analysis of these individual words was performed using NVivo's explore and word frequency query function. This analysis is performed by NVivo, which groups words by their associated synonyms. Due to the large number of responses to this question, the researchers presented the analysis of the 20 most frequent words based on this grouping. Because we had separated the three words from the text that explained them, this allowed Nvivo to create a word cloud from their individual words offered in question #1. The researchers did not choose to use the 'stop words' function in this analysis. Stop words are words which can be designated prior to NVivo analysis by the researcher and eliminated. The researchers also did not identify a minimum length of the words for NVivo to ignore in the explore and word frequency query function (QSR International, n.d).

Reflexive thematic analysis (TA) was used to analyse study question #1 (explanatory content), #2 (negatives) and #3 (positives). TA is a method of analysing text-based qualitative data with a goal of identifying common ideas, topics, or patterns of meaning which occur repeatedly (Clarke et al., 2015). It follows a six-step process which begins by (1) reading the content multiple times and (2) identifying words and phrases within the content that relate to the research purpose. This content is then described or summarized into one- or two-word codes (3). The researchers then review the codes that were created, look for patterns among the codes and start combining them into themes (4). When a list of themes is generated, the researcher then (5) describes or defines the central thought of the theme and connects them with their related codes and (6) writes up the analysis (Clarke et al., 2015).

2.7 | Rigour

This cross-sectional research study was guided by the consolidated criteria for reporting qualitative research (COREQ) guidelines (Tong et al., 2007). The COREQ guidelines assist researchers to improve the quality of reporting for qualitative studies and help to provide a framework for readers to understand the design, methods, data analysis and findings of qualitative studies. The lead researcher, RU, is Registered Nurse and researcher with experience in conducting qualitative studies. LJ is a Registered Nurse, PhD student, and a pre-nursing course instructor. KD is a senior honours student and a student nurse in our pre-licensure nursing program. RU and LJ worked together to analyse study question #1 using Nvivo. Each researcher individually coded the remaining study data and created a codebook using the steps of reflexive thematic analysis as described by Clarke et al. (2015), providing evidence for confirmability and dependability (Korstjens & Moser, 2018). Once this was completed, the research team met together on multiple occasions to actively discuss the identified codes and to jointly develop the study themes and sub-themes. In qualitative studies, rigour is demonstrated by using a consistent method to analyse the study data and the creation of an audit trail to show how the study content, codes and themes are connected. When a contextually rich, thick and meaningful written summary of the findings is created, this provides additional evidence of rigour and allows the reader to reflect on whether the findings are transferrable to their own nursing program's setting (Korstjens & Moser, 2018; Nowell et al., 2017).

3 | FINDINGS

A total of 289 participants provided short answer data for analysis. The average age of the study participants was 28 (SD = 9.1). Most of the sample (89.7%; n = 259) were female and either white (30.5%; n = 88) or Hispanic/Latino (26%; n = 75) Almost half of the sample indicated they had a previous degree (44.6%; n = 129) and 44% (n = 130) were a first-generation college student. Most (86.1%; n = 167) reported an intention to start in a nursing program within two semesters and 57.4% (n = 166) intended to apply to an accelerated online (AO) BSN program. For additional information, please see Table 1.

TABLE 1 Demographic and academic characteristics of the sample

Variable	Sample characteristics (n = 289)	Mean (SD) range
Age in years M, (SD), range		28 (9.1) 18–60
Sex	Male *n* = 30 (10.3%) Female *n* = 259 (89.7%)	
Race/Ethnicity %	Asian *n* = 44 (15.2%) Hispanic/Latino *n* = 75 (26%) Black *n* = 67 (23.3%) White/Non-Hispanic *n* = 88 (30.5%) Other 14 (5%)	
1st Generation College Student	Yes: *n* = 130 (44.9%)	
Previous Degree	Yes: *n* = 129 (44.6%)	
Total UG hours completed	0–24 h: *n* = 38 (13.2%) 25+ h: *n* = 250 (86.8%)	
Semester hours enrolled M, (SD), range		11 (3.8) 3–23
Concurrently enrolled in more than one academic setting	Yes: *n* = 43 (14.9%)	
Semester intending to start program	Spring 2021: *n* = 40 (13.9%) Fall 2021 or later: *n* = 167 (86.1%)	
Intended Nursing Program	Traditional On-Campus (OC) BSN: *n* = 123 (42.6%) Accelerated Online (AO) BSN: *n* = 166 (57.4%)	
Hours worked per week	Not working this semester: *n* = 81 (28%) 1–24 h/week: *n* = 69 (23.9%) 25+ h/week: *n* = 139 (48.1%)	
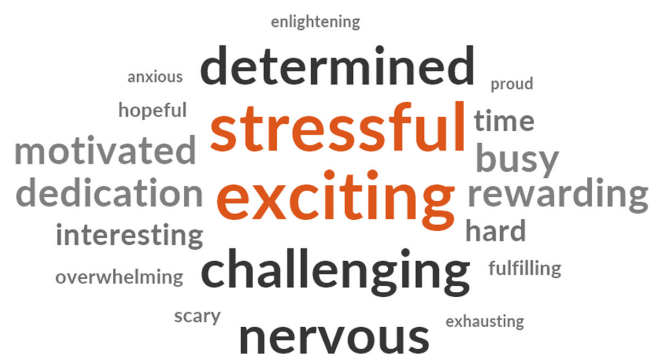
FIGURE 1 Three words

3.1 | Study Question #1: Please share three words that describe what it is like to be a pre-nursing student—and give a short explanation for why you picked each one of these words

Participants were asked to share three words that described what it was like to be a PN student, which resulted in a total of 857 individual words for analysis. An exploratory analysis of these words was performed using NVivo and a word cloud was created (see Figure 1).

The word font size in Figure 1 represents frequency, with larger font indicating the words that were used more often by study participants. The words in red, stressful and exciting, represent the two most commonly used words by participants and were used 94 and 106 times respectively. The analysis from the explanations offered for question #1 was used to complement or enrich the discussion of the study themes and sub-themes that emerged from study questions #2 (negatives) and #3 (positives).

3.2 | Study Question #2: What are some of the negatives or difficult things about being a pre-nursing student?

3.2.1 | Under pressure

Although some participants did not identify any negative or difficult things about being a PN student, a feeling of pervasive worry, anxiety or nervousness was described by many related to their decision to apply to a competitive application nursing program. Applying to nursing programs is a multi-step process which can be confusing to PN students, whether they have completed all their hours at the same university or are applying as transfer students. They also understand that they are being evaluated based on their performance

and shared a growing and uncomfortable realization that they were also competing against newly made friends from their pre-requisite courses. As a result of this awareness, one student shared:

> There is very little room for error right now. Every single grade matters because your grades are what will speak for you when it comes time to apply to the program. I am not being evaluated... the numbers on the transcript are being evaluated and that is a scary, stressful thought. The ramifications of a bad test, or a misunderstanding of information, are elevated because the program is so competitive.

PN students also realized with dread that there are more applicants to the program than available spaces. The fear of rejection and uncertain academic future also contributes to their feelings of stress and anxiety and helps to foster self-doubt. Participants reported feeling stressed and overwhelmed, with some admitting that their self-care might be slipping and that keeping their mental health in balance could be challenging. '*It's tough. Many people are mentally hard on themselves and it affects their schoolwork and day to day life*'. Another student admitted, '*Remembering to eat and get at least 5h of sleep is something I'm working to improve on*'. Participants described the pre-requisite courses to be fast-paced and time-consuming to master.

3.3 | The sacrifice

PN students in this study reported experiencing what they feel is a new normal of being busy and giving up many things as they prepare for applying to a nursing program. One student described the course load at this level as '*HEAVY, difficult and stressful. I feel I have no time for anything other than school*'. To manage the academic demands at this level, they are reducing the amount of time spent with friends or family. As one student expressed: '*It is definitely hard to have to say no at times to ensure I am able to get my schoolwork done, but there is a mutual agreement with my family that it is necessary*'. This also means they may miss fun events or time off for scheduled breaks or holidays because they need to focus on increasing academic responsibilities, as illustrated by this participant's comment:

> You have to learn how to cope with the amount of studying and whether you are ready or not to put that much time and effort into a career. Also not participating in many events and functions and even spending many holidays and weekends studying for upcoming exams or completing many projects. Many people leave this major because they like to hang out with friends and family, but you have to be ready to sacrifice it all for this major.

Experiencing financial worries is also common among PN students. Many reported adjusting their current work schedules or feeling a

need to work harder to meet their academic and financial needs. Some respondents had experienced job changes (an increase or decrease in working hours) related to the pandemic. Others expressed their concerns about getting into the program, where the ability to work may be diminished and the need to take out more loans is needed. As one student concluded: '*You have to make sacrifices in your life, because in the end it will pay off*'.

3.4 | Online challenges

In the Fall 2020 semester, all PN students attended online classes to reduce the transmission of COVID-19 and students had to learn to navigate online learning systems. Some participants reported that they did not mind learning virtually as they were already planning to apply to the Accelerated Online nursing program while others acknowledged the struggle of learning to master the initial challenges of online learning. Online learning was seen as a negative by a third group of participants who felt that it impacted their ability to be successful, as one student admitted:

> I genuinely strongly dislike having anything to do online. In person lectures, tutoring, labs, study groups, projects, help me understand whatever material I need to learn for a course. With online, I often feel like I'm learning nothing and I'm jealous of those who don't become negatively affected by it.

Some PN students encountered difficulties with staying focused on their studies and managing distractions, which may have been due to the online course format or other stressors encountered because of the pandemic. As one participant succinctly stated regarding time management: '*time ...there just isn't enough of it*'. Feeling a perceived lack of timely help from professors when online, experiencing technical difficulties, and managing anxiety about online testing requirements were identified as additional challenges to online learning. As one student explained: '*Being a student online can be more challenging than in person learning. I feel that sometimes it takes the professor too long to answer questions that I feel are important*'. Some participants also expressed that they missed the sense of accountability that they associated with in-person learning.

For some respondents, online learning during COVID-19 may have contributed to an increased sense of isolation or loneliness. They reported missing time spent in study groups and being able to go to coffee shops to study. One participant described themselves as '*a very extroverted person, so it's hard to not see classmates and professors face to face*'. Male students also shared that they sometimes found themselves to be excluded or left out during academic activities by female students, as explained by this participant: '*I am a male a minority in the demographic of pre-nursing students, and for some reason, my other classmates seem to not want to work with me because of my gender*'. For more information on study themes, sub-themes and additional quotes related to the negatives of being a PN student, see Table 2.

TABLE 2 The negatives: Study themes, sub-themes and select participant quotes

Themes	Sub-themes	Participant quotes	Demographic info
Under Pressure	Pervasive worry, anxiety, or nervousness	*The upcoming application to nursing school with all the requirements for it is stressful and overwhelming to learn about.*	*18 Female White/Non-Hispanic OC-intended*
		The pressure of getting accepted into nursing school is something that is constantly weighing down on my mind. I often get anxious thinking about whether or not my grades will be good enough and if my hard work will pay off in the end.	*19 Female Other OC-intended*
	Stressed and overwhelmed	*I am not only a pre-nursing student, but I am a wife and a mom, too! Being able to juggle all three and still manage to get by can be exhausting sometimes.*	*25 Female White/Non-Hispanic AO-intended*
		The pressure sometimes affects my mental health. I had a rough go on my journey to get here, and in the process I find myself feeling I might not belong here.	*22 Female Other AO-intended*
		It is stressful, and everyone tells you it's going to be terrible, but that it's worth it. It just gives one an ominous feeling about everything.	*25 Female Other AO-intended*
The Sacrifice	Giving up many things	*It definitely is time consuming, and you must set your own priorities, so I am pushing friends away and missing out on 'college experiences'.*	*19 Female Hispanic/Latino OC-intended*
		I know I have to spend a lot of time studying which takes time away from being with my family that I do not get to be with a lot.	*18 Female Asian OC-intended*
		Working full time and balancing my studies takes away from my wife and kids, but it is a necessary sacrifice now for the stability later in life.	*26 Male White/Non-Hispanic OC*
	Financial worries	*My hours at the hospital were cut. That's a good thing for my study habits, however I desperately need an income to pay for tuition and materials. I am stressed with finding a new job.*	*22 Female Other AO-intended*
		Many of us worry about how to deal with paying back tremendous student loans.	*31 Female Asian AO-intended*
		I worry about how retaking courses because I did not get a good enough grade will affect other factors such as scholarship, money...	*21 Female Asian OC-intended*
Online Challenges	Navigating online learning	*It was an extra challenge for me to learn the ropes quickly to successfully navigate an online class as this is my first time taking online classes. I quickly got the hang of it.*	*46 Female Black AO-intended*
		Online testing and testing anxiety are something I have trouble with.	*34 Female Hispanic/Latino AO-intended*
		I have a lot of difficulty learning online because I have a hard time paying attention and feel like I learn better in person.	*20 Female White/Non-Hispanic OC-intended*
	Encountering and managing distractions	*Being online has made it much more difficult for me to actually do work and study. It does not feel as though I am in school because I do not need to attend classes, which makes it very difficult for me to stay on track with all my classes and actually learn.*	*19 Female Hispanic/Latino OC-intended*
		One of the difficulties is that personally I work full-time and need to focus on school as well so managing both is a little difficult. Nursing covers a lot of material and it's time consuming, so that's one of the hardest parts about pursuing a nursing degree. Time management is the most difficult part of being a nursing student.	*25 Female Asian AO-intended*
		I am older so it does take longer for me to really learn and absorb information. Also, as a single mom, I have to keep working so balancing work and school is challenging, but not impossible.	*48 Female White/Non-Hispanic AO-intended*
	Feeling Isolated	*Sometimes I wish I had someone in the program to talk to...but I'm coping.*	*46 Female Black AO-intended*
		I cannot meet with most of the students in my class because the only times I see them are during Microsoft Teams lectures. It is hard to form study groups when we do not get to talk to each other in person.	*18 Female White/Non-Hispanic OC-intended*
		I like to be around other people when I learn and near my professor when they are teaching.	*19 Female Black OC-intended*

3.5 | Study Question #3: What are some of the positives or good things about being a pre-nursing student?

3.5.1 | Constantly learning

One positive aspect of being a PN student is that they feel that they are constantly learning. In the process, they are learning more about themselves and especially whether '_going into nursing is right for me_'. In their pre-requisite courses, they are gaining insight into what it might be like to be a nurse and receiving information about different career paths available in nursing. They are also formally and informally gathering information about the steps needed to apply to the nursing program, which represents '_the start of my nursing journey…I cannot wait to be able to apply_'!

In their final prerequisite courses, they are learning content designed to help prepare them to be successful in nursing school and practice. Although some of the courses are challenging, most PN students are excited to focus on content that they feel is '_more interesting and relevant_' than the non-nursing core courses required by the university. Challenging courses often produce mixed feelings within PN students, as one student offered: '_I am equally as nervous and excited for some of the more challenging courses that we are required to take_'. PN students see this time as an opportunity to continue to build a firm foundation in preparation for their next courses in the nursing program. They are also learning to utilize their critical thinking skills as they take content previously learned in their science courses and apply it in pre-program courses like pathophysiology and pharmacology. Sometimes, there are even enlightening moments where it all starts to come together, and as this student described: "_You learn new things and when you finally understand it you get the 'A-Ha' moment, and suddenly you feel smarter than anyone in the room._"

Lastly, as PN students are preparing to apply to nursing programs, they are also continuing to grow in their use of self-discipline and time management skills. They are learning new study strategies and refining their test-taking skills. Learning to balance life's responsibilities and avoid procrastination is a process that takes time and experience to acquire. As one student shared: '_We learn the value of hard work and persistence. We learn to be dedicated to our goals. We learn to plan for the future ahead_'.

3.6 | Finding community

Participants in this study shared a strong desire to connect with other PN students preparing to enter program to make new friendships. These PN students realize that connecting with others prior to entering the program could result in friendships that strengthen over time and with ongoing shared academic experiences. Another participant wrote: '_You and other pre-nursing students will take the same classes, meaning you guys might see each other semester after semester, and that is how lifelong friendships begin_'. Additionally, '_meeting other students of different backgrounds who have the same goal and

mindset as you and a wide range of interests_' was also seen as a positive of seeking new friendships.

One benefit of these friendships is to share information and to give and receive support for the journey ahead. Studying together or forming study groups for difficult courses is viewed as a benefit by some PN students, as this participant expressed: '_It is hard not to go to the university for study groups; I thrive from study groups_'. Other PN students appreciated when their peers informally shared information about applying to the nursing program that they may not have known. Study participants also identified the importance of being able to give and receive encouragement as they prepared for admission to the nursing program. As one participant shared, '_It's very close-knit community and everyone's always open to helping each other out and creating positive energy_'. The ability to commiserate together about academic hardships: assignments, tests, teachers and program admission requirements help PN students to bond, feel understood and cope with their ongoing stressors.

3.7 | Envisioning the future

An important positive of being a PN student is that they are beginning to see the future that they are envisioning for themselves, and it's exciting. They are taking important steps towards achieving their academic goals and professional dreams. Participants shared: '_It is an amazing feeling knowing my dreams and goals are that much closer_' and '_I look forward to my future as a nurse_'. Most of the study participants were planning to apply to the nursing program within the next onw or two semesters. To reach their goal, they must be motivated and determined to complete their final courses and requirements for admission successfully. Feeling hope about getting into the nursing program also helped them to continue their forward progress. As one student shared, "_I can finally say 'I am a pre-nursing student and it be a true statement'._"

Although data collection occurred 6 months into the COVID-19 pandemic, PN students in this sample also shared their perceptions regarding the benefits and rewards of pursuing a career in nursing. Some participants expressed a desire to complete the nursing program and become a nurse to be an example for younger siblings, extended family members or friends. Others expressed feelings of pride at the choice of their profession and the future ability to help others in need, especially during the pandemic. Others described their drive to be a nurse as a '_calling_', '_dharma_' or '_just what I was meant to do_'. For more information on study themes, sub-themes and additional quotes related to the positives of being a PN student, see Table 3. For additional information regarding the quotes used in the narrative of the findings, see Table 4.

4 | DISCUSSION

Utilizing short answer data from 289 PN students collected 6 months into the COVID-19 pandemic, our study aim was

TABLE 3 The positives: Study themes, sub-themes and select participant quotes

Theme	Sub-themes	Participant quotes	Demographics
Constantly Learning	Is nursing right for me?	*Learning about the profession before getting into nursing school makes sure that we really want to be a nurse.*	*18 Female Asian OC-intended*
		I am gaining more knowledge for my career and getting to know what nursing school and nursing is about.	*21 Female Hispanic/Latino OC-intended*
		I really get to see if it is the field I see myself working in for the rest of my life.	*18 Male Hispanic/Latino OC-intended*
	Interesting and relevant content	*I am learning material that I find enjoyable and will be able to apply it to help care for others.*	*24 Female Hispanic/Latino AO-intended*
		I like that I have learned about medications for conditions that affect people close to me. I am now more knowledgeable about some of the medications and feel proud that I know so much about the drugs and how they work to fix the issue.	*32 Female Black AO-intended*
		Being a pre-nursing student has allowed me to think more critically and from other points of view that I otherwise may not have considered before.	*19 Female Other OC-intended*
	Learning to balance responsibilities	*My self-discipline and time management skills are improving.*	*25 Female Asian OC-intended*
		I get the feeling that I am more put-together than before when I consider that I am now a 'pre-professional' student.	*22 Female Other AO-intended*
		I am forced out of my comfort zone to accomplish tasks I had not before this experience.	*27 Female Black AO-intended*
		Discipline: learning to manage time is essential to reaching your goals and prioritizing what is more important.	*32 Female Hispanic/Latino AO-intended*
Finding Community	The importance of making connections	*I think it is so important to be able to connect with others so that we can grow as better nurses together.*	*19 Female White/Non-Hispanic OC-intended*
		Meeting people who share the same goals or are in the same boat as you and knowing that everyone is going through the same thing.	*25 Female Asian AO-intended*
		You tend to encounter the same people in these classes, making it easier to make friends and create study groups.	*19 Female White/Non-Hispanic OC-intended*
	Sharing information, supporting each other	*I feel like the pre-nursing community tries to support each other a lot.*	*19 Female Hispanic/Latino OC-intended*
		Even though we all fight to get into the program we always help each other when we need to.	*20 Female Hispanic/Latino OC-intended*
		You can help keep each other accountable and motivated and strive to do your best.	*19 Female Hispanic/Latino OC-intended*
		You never feel alone at a time of stress.	*19 Female Asian OC-intended*
Envisioning the Future	Taking steps towards my goals	*Very excited about what the future has in store for me ahead!*	*28 Female Asian AO-intended*
		My self-confidence has increased, and my parents are happy that I am moving forward to become a Registered Nurse. I am very happy these days and very determined towards my goal to become nurse in future.	*25 Female Asian OC-intended*
		Being able to be working towards what I have always wanted to do is a good thing. Learning new challenging things for the future gives me the push.	*46 Female Black AO-intended*
		I love the fact that I am super close to finishing something I started a lifetime ago.	*38 Female White/Non-Hispanic OC-intended*
	Benefits of a nursing career	*It is very motivating to know that I am doing something good or putting good back into the world, especially at a time like this.*	*20 Female Black OC-intended*
		You are working towards a career that is extremely important. You know you will be doing good things for people in the future.	*20 Female White/Non-Hispanic OC-intended*
		I'm looking forward to a future job that pays well and getting to meet and take care of people from all walks of life.	*47 Male White/Non-Hispanic AO-intended*

TABLE 4 Quotes from the narrative with demographic information

Themes	Participant quotes	Demographic Info
Under Pressure	*There is very little room for error right now. Every single grade matters because your grades are what will speak for you when it comes time to apply to the program. I am not being evaluated... the numbers on the transcript are being evaluated and that is a scary, stressful thought. The ramifications of a bad test, or a misunderstanding of information, are elevated because the program is so competitive.*	*38 Female White/Non-Hispanic OC-intended*
	It's tough. Many people are mentally hard on themselves and it affects their schoolwork and day to day life.	*26 Female Black AO-intended*
	Remembering to eat and get at least 5 h of sleep is something I'm working to improve on.	*29 Female Black AO-intended*
	HEAVY, difficult and stressful. I feel I have no time for anything other than school.	*19 Female White/Non-Hispanic OC-intended*
The Sacrifice	*It is definitely hard to have to say no at times to ensure I am able to get my schoolwork done, but there is a mutual agreement with my family that it is necessary.*	*30 Female White/Non-Hispanic AO-intended*
	You have to learn how to cope with the amount of studying and whether you are ready or not to put that much time and effort into a career. Also not participating in many events and functions and even spending many holidays and weekends studying for upcoming exams or completing many projects. Many people leave this major because they like to hang out with friends and family, but you have to be ready to sacrifice it all for this major.	*19 Female Hispanic/Latino OC-intended*
	You have to make sacrifices in your life, because in the end it will pay off.	*19 Female Asian OC-intended*
Online Challenges	*I genuinely strongly dislike having anything to do online. In person lectures, tutoring, labs, study groups, projects, help me understand whatever material I need to learn for a course. With online, I often feel like I'm learning nothing and I'm jealous of those who do not become negatively affected by it.*	*19 Female Hispanic/Latino OC-intended*
	time...there just is not enough of it.	*28 Female White/Non-Hispanic AO-intended*
	Being a student online can be more challenging than in person learning. I feel that sometimes it takes the professor too long to answer questions that I feel are important	*51 Female Black AO-intended*
	a very extroverted person, so it's hard to not see classmates and professors face to face	*19 Female White/Non-Hispanic OC-intended*
	I am a male a minority in the demographic of pre-nursing students, and for some reason, my other classmates seem to not want to work with me because of my gender	*18 Male Hispanic/Latino OC-intended*
Constantly Learning	*I am equally as nervous and excited for some of the more challenging courses that we are required to take.*	*18 Female Asian OC-intended*
	You learn new things and when you finally understand it you get the 'A-Ha' moment, and suddenly you feel smarter than anyone in the room.	*20 Female Hispanic/Latino OC-intended*
	We learn the value of hard work and persistence. We learn to be dedicated to our goals. We learn to plan for the future ahead.	*23 Female Asian OC-intended*
Finding Community	*You and other pre-nursing students will take the same classes, meaning you guys might see each other semester after semester, and that is how lifelong friendships begin.*	*26 Female Black AO-intended*
	meeting other students of different backgrounds who have the same goal and mindset as you and a wide range of interests.	*19 Male Asian OC-intended*
	It is hard not to go to the university for study groups; I thrive from study groups	*24 Female White/Non-Hispanic OC-intended*
	It's very close-knit community and everyone's always open to helping each other out and creating positive energy.	*25 Female Asian AO-intended*
Envisioning the Future	*It is an amazing feeling knowing my dreams and goals are that much closer.*	*35 Female White/Non-Hispanic AO-intended*
	I look forward to my future as a nurse.	*37 Female White/Non-Hispanic AO-intended*
	I can finally say 'I am a pre-nursing student and it be a true statement.	*42 Female White/Non-Hispanic AO-intended*

two-fold. The first was to describe the experiences of PN students who were in various stages of applying for nursing program admission by asking them to share (and explain) three words that described their experiences and to specifically identify the negatives and positives of being a PN student. Second, the goal was to connect these experiences to learner well-being, a topic that has not been explored in PN students. The research team used an inductive approach, which allowed the data to suggest the themes rather than using pre-conceived themes based on a theoretical framework or the researchers' personal experience. Participants' responses to the three study questions were a complex mixture of negative and positive thoughts, feelings and experiences and several unique findings are presented here.

When asked about the negatives of being a PN student at this point in their academic journey, participants reported feeling under a great deal of pressure related to meeting the requirements for admission and earning a coveted spot in the group of students chosen to begin the nursing program each semester. Pre-requisite coursework was often described as stressful and difficult, with some participants acknowledging the mental health challenges they faced. In their qualitative study, Packard and Hoffman's (2016) PN participants describe similar perspectives and challenges. COVID-19 added additional complexity to the stressors already faced by PN students. Increased levels of stress, depression and anxiety were reported in nursing students during the first year of the pandemic (Kim et al., 2021; Michel et al., 2021). Prior to the pandemic, Ríos-Risquez et al. (2018) noted that emotional exhaustion experienced in the context of academic burnout was the most relevant predictor of psychological well-being of nursing students. These studies provide pre-and intra-pandemic clues about learner well-being in nursing students, which is important because stress and negative emotions can reduce learning, inhibit recall and interfere with the application of knowledge and skills (Vogel & Schwabe, 2016). Studies that focus on stress, burnout and other mental health variables in PN students are lacking.

PN students in this study shared the perspective that they are making sacrifices in many areas, including valuable time spent with family and friends and difficult choices related to working or assuming additional debt to pursue their academic and professional goals. These sacrifices represent the influence of individual factors on learner well-being. In a qualitative study with non-traditional senior level Associates' degree students, Priode (2019) discovered that self-sacrifice was an important component of learning to manage the demands of nursing school, employment and family. This perception of making sacrifices is a novel finding in pre-nursing research and may have implications for learner well-being.

Taking courses online due to COVID-19 was a change in the learning environment and was identified as a challenge by some study participants who identified a preference for in-person learning. For these students, learner well-being was most likely affected. This is consistent with the findings of Tharani et al. (2017) who noted that the quality of the learning environment is a key influence on the emotional well-being of pre-licensure nursing students. Nurse educators who work in online courses need to continually self-reflect on the strategies that they are using to engage online students and look for ways to improve them.

In response to the question about the positives of being a PN student, an overarching theme was the feeling of excitement and that they are constantly learning a variety of things, including new academic knowledge, navigating the application process and discerning if nursing is the right path for them. Students placed a high value on learning, despite the barriers that the pandemic provided. Unlike Lovrić et al. (2020) who found a lack of motivation in undergraduate nursing students during COVID-19, these PN students revealed their growing dedication, passion and motivation for the profession. They also expressed pride in their future goals and referred to nursing as a 'calling', consistent with a similar theme identified by Packard and Hoffman (2016). PN students in this study utilized a positive future orientation to help them as they prepared for nursing school admission.

The academic and personal benefits of connecting with PN peers and creating friendships that might last was frequently reflected among the positives shared by participants. This is consistent with the findings of Bumby and Litwack (2021) and Packard and Hoffman (2016) in which PN students reported that building a community positively contributes to the transition to nursing and provides support for the overall experience. He et al. (2018) reported that personal well-being in undergraduate nursing students who attend a primarily online program was positively associated with support from significant others, family and friends, further underscoring the importance of building friendships and peer networks to learner well-being.

It is important to consider how this study's themes and sub-themes related to the negatives and positives of being a PN student inter-relate with the study's conceptual framework of learner well-being as suggested by the NASEM (2019). According to the NASEM (2019), the well-being of learners can be either positively or negatively influenced by the learning environment and factors within the individual. Pressures related to program application and admission, challenging pre-nursing course work, and an unanticipated shift to online learning represented a potentially negative influence from the learning environment on learner well-being. Changes in mental health, giving up time with others and fun activities to pursue academic demands, juggling financial worries and feeling socially isolated due to the pandemic represented a potentially negative influence from individual factors on learner well-being. Study themes and sub-themes that represent positive individual factors supporting learner well-being include excitement about learning nursing-relevant content, successfully balancing responsibilities, and developing a positive view of their future in nursing. Developing a community of pre-nursing peers where support can be given and received represents a potentially positive influence of the learning environment on individual well-being.

4.1 | Limitations and strengths

Study limitations included the use of a single study site, convenience sampling and qualitative short-answer data. With convenience

sampling, the target population may not be truly represented in the study sample. Using short-answer qualitative data provided a large amount of qualitative data to analyse but does not allow an opportunity to gain additional insight into participants' thoughts and perceptions using follow-up questions. Additionally, data were collected during COVID-19 and may not realistically represent PN student experiences during non-pandemic times. Study strengths included a large sample size and the racial and ethnic diversity of respondents. An additional strength was the use of three researchers for data analysis and the use of NVIVO to analyse one study question.

4.2 | Recommendations for education and future research

As they actively prepare to apply to nursing programs, PN students are experiencing a great deal of pressure, stress and uncertainty which can have a negative influence on learner well-being. PN educators need to ask themselves what can be done to mitigate the challenges and reduce learner stress in the PN learning environment. How can we capitalize on the excitement that they feel at this stage of nursing education? When interventions to manage academic and psychological stressors are developed and offered in PN programs, coupled with reliable and valid outcome measurements, learner well-being can be supported. Today's PN students will be tomorrow's pre-licensure students. Why wait until they are officially in a nursing program before an investment is made in their well-being as learners? The framework of learner well-being coupled with additional research can be used to guide initial efforts to support PN students. These efforts can then be utilized to form the foundation of additional efforts to support learner well-being in nursing students and nursing program progression.

Nurse educators who work with PN students have a vested interest in developing a deeper understanding of their experiences and how these influence learner well-being. Research with PN students is sparse. More research is needed to understand the determinants of learner well-being from the perspective of PN students and during non-pandemic times. Well-written qualitative research can also be used to begin discussions with current PN students about their experiences and encourage reflection on how these relate to learner well-being. If they see themselves and their experiences reflected in the content shared by study participants, they may feel relieved to know they are not alone in what they are thinking and feeling.

5 | CONCLUSION

This study was designed to explore PN students' experiences and identify factors influencing their well-being as learners. The magnitude of answers received from PN students provided a rich description of their unique perspectives, not only during their time of preparation for nursing school, but also during the COVID-19

pandemic, revealing a blend of conflicting emotions. This new knowledge provides insight that can be used to develop evidence-based strategies to better support learner well-being and to mitigate the stressors they will experience in nursing school, and beyond.

CONFLICT OF INTEREST

No conflicts of interest have been declared by the authors.

PEER REVIEW

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DATA AVAILABILITY STATEMENT

Due to the sensitive nature of qualitative data, the authors elect to not share data.

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