

# Some Factors that Influence Students' Experiences, Engagement, and Retention in a Practical Nursing Program

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*This paper reports on qualitative data from a larger study that was designed to identify some of the factors that influence practical nursing students' experiences, engagement, resilience, attrition, performance in the program and professional licensing examination. Some descriptive statistics were included in this paper in order to provide context of the demographics of the students in the program. We explored and identified some factors that influence practical nursing students' experiences and attrition in the practical nursing program at a community college in the Prairie Region in Alberta. Students enrolled in the program during Winter 2015 term were invited to participate in the study. 263 students consented to participate in the study and completed an online survey on student engagement and belongingness. A total of three focus group discussions (FGDs) were conducted to gather more information on students' experiences. Exit interviews were completed with 21 students who dropped out of the program. Thematic analysis was done on FGDs and exit interviews. The themes that emerged from the data as main factors that influenced student experiences include institutional, social, and cognitive factors. Exit interview data shows that students "depart" due to financial, academic, family, and career choice changes.*

*Cet article fait état de données qualitatives tirées d'une plus grande étude conçue pour identifier quelques-uns des facteurs qui influencent les expériences, la participation, la résilience, le taux d'attrition et le rendement des étudiantes infirmières au sein du programme et lors de l'examen d'accréditation professionnelle. Des statistiques descriptives sont présentées de sorte à fournir un contexte démographique des étudiants dans le programme. Nous avons exploré et identifié des facteurs qui influencent les expériences et le taux d'attrition des étudiantes infirmières dans un programme de soins infirmiers auxiliaires d'un collège communautaire dans la Prairie Region en Alberta. Nous avons invité les étudiants inscrits au programme pendant le semestre d'hiver 2015 à participer à l'étude. Au total, 263 étudiants ont accepté d'y participer et ont complété une enquête en ligne portant sur la participation des étudiants et leur sentiment d'appartenance. Trois discussions ont eu lieu avec des groupes de consultation afin de recueillir davantage d'information sur les expériences des étudiants. Des entrevues de départ ont eu lieu avec 21 étudiants qui ont quitté le programme. Les discussions des groupes de consultation et les entrevues de départ ont été soumises à une analyse thématique. L'analyse a permis d'identifier des facteurs qui influencent les expériences des étudiants. Parmi ceux-ci, notons des facteurs institutionnels, sociaux et cognitifs. Les données des entrevues de départ indiquent que les étudiants quittent le programme pour des motifs financiers, académiques, familiaux ou en raison d'un changement de choix de carrière.*

Despite the increase in higher education access, student engagement and retention continue to be a major issue in higher education. In Canada, students in colleges are more likely to dropout compared to student in universities, with dropout rates of 22.6 % and 15.1% respectively (Finnie & Qiu, 2009). Given the evidence produced by Finnie and Qiu, students at colleges are at a higher risk of dropping out before they complete their program in contrast to students enrolled at universities. Our study was carried out at a community college in a Canadian Prairie province where students are presumably at higher risk of dropping out than their peers in universities. As a result, it is important for colleges to identify factors that would help to enhance student persistence and support their retention. In addition, Madgett and Bélanger (2008) argued that student retention is another method used in other countries to ensure that there are no skills shortages in the workforce: the implication here is that student retention alleviates deficiencies in workplaces when students successfully complete post-secondary education and join the labour force.

Statistics Canada (2017) indicated that the population of seniors is on the rise. As a result, there is an increase in the numbers of seniors that require nursing care. At the same time, the Conference Board of Canada (2017) estimated that the demand of nurses grows annually by 3.4 percent as a result of high demand for health care for seniors. Increasing enrolment as well as engaging and retaining practical nursing students will help to minimize the shortages of nurses in Canada as the need goes up. Apart from assisting in meeting the demand of nurses in health care, educational institutes also lose tuition revenue when students drop out. The possibility of future nursing shortages in the Canadian context points to the importance of exploring and understanding factors that influence student retention and engagement in a practical nursing program in order to find ways of retaining students. We wanted to gain some insights on why some students withdrew from the program before completion. This study focuses on factors that influence experiences, retention, and engagement of practical nursing students in a two-year diploma program in practical nursing. Stefani (2008) defined *student engagement* as the commitment to relevant activities that enhance student learning, which leads to the successful completion of their program. As a result, engaged students are less likely to drop out.

Tinto (2007) pointed out that there is a lot of research on issues related to student retention, and the focus on retention has resulted in books and journals dedicated to the topic. However, the challenges of student attrition in higher education remains unabated. It is also important to note that as researchers and post-secondary administrators continue to learn from the research, the learning environments and student populations continue to transform. Changes in student demographics also create challenges in coming up with support measures to mitigate issues related to student retention and engagement. Nonetheless, the purpose of higher education continues to be focused on ensuring that students acquire relevant knowledge and skills prior to graduation.

Research shows potential gaps between the knowledge and skills nursing graduates acquire in school and the competences they are expected to have in practice (e.g. Ajani & Moez, 2011). The primary expectation of academic institutions is to act as a conduit for students to develop the requisite skills required for the labor market. In particular, the mandate of a Practical Nurse (PN) program is to prepare competent nurses so that they can improve quality of life in their patients and restore people to their highest level of function. When students are not fully engaged in the learning process, it can affect their success, the acquisition of requisite skills in the learning environment, and implementation of knowledge in practice. In other words,

student engagement in a nursing education program has implications to nursing praxis. *Nursing praxis* has been used to denote the relationship between theory and practice as it refers to how knowledge is developed and used in practice (Chinn & Kramer, 2004; Fowler & McGarry, 2011; McCormack, Manley, & Garbett, 2004; Rolfe, 1992).

When students enroll into a program, educators hope that students develop and acquire relevant intellectual and academic competence that will enable them to join the workforce (Crissman Ishler & Upcraft, 2005). Crissman Ishler and Upcraft define *intellectual* and *academic competence* in three ways: (a) successful fulfilment of course requirements, (b) continued successful progression in the program, and (c) development of critical thinking skills and thoughtful decisions. We argue that a nursing program has to go beyond the intellectual and academic competence described by Crissman Ishler and Upcraft in order to produce competent nurses. In this case, we define *successful completion* in the Practical Nursing program to include intellectual, academic, and professional licensing success, as well as competence in practical nursing skills.

This study identified factors that influence practical nursing students' experiences with regards to engagement and retention in the program. This study was guided by two research questions:

- What are some of the factors that influence students' experiences and engagement in the practical nursing program?
- What are some of the factors that influence students' attrition in the program?

### **Literature Review**

Much research has been done around issues related to student attrition, persistence, resilience, and retention. Tinto (2007) pointed out that research on student retention has been carried out since the 1970s, and yet the problem persists. The research in this area has evolved from simply looking at numbers using quantitative methods to mixed methods that might enable researchers to explain the patterns (Tinto, 2007). In addition, most of the research has focused on student-related factors without taking a holistic approach that would include factors such as curriculum, home, and school environment (e.g. Astin, 1993; Tinto, 2007). Issues of student retention have proved to be complex and there is no single answer to the problem. Hamblet (2015) highlighted factors such as living off campus, being a first-generation college student, and being an older student contributing to the likelihood of dropout. The same author indicated that students who persisted were connected with peers academically and socially, engaged with their instructors/professors, had financial aid, and had intrinsic motivation to earn post-secondary education qualifications.

Sembiring (2014) completed a quantitative study on retention of distance students and found out that student satisfaction was a main determining factor for retention. With regard to student social and academic inclusion, Hamblet (2015) argued that simple efforts like students chatting with their professor outside of class time had positive retention outcomes, which suggests that small efforts of social and academic support do yield positive retention outcomes. The quality of college professors/instructors and how they interact with students in and outside the classroom was found to be a predictor of student persistence (Longwell-Grice & Longwell-Grice, 2007). Longwell-Grice and Longwell-Grice discussed that student-faculty interactions enhance integration into academia. In the same study, Longwell-Grice and Longwell-Grice

(2007) also pointed out the first-generation and working-class students face challenges when navigating post-secondary education because they get less assistance from their families when preparing for college.

Albert (2010) argued that issues related to student retention and attrition have become performance indicators for universities around the world including Canada. Post-secondary student retention and persistence have implications to the supply of graduates in the workforce. Albert also pointed out that the recruitment strategies by post-secondary institutes at the beginning of the educational pipeline (i.e. enrolment) are equally as important as retention strategies further down the pipeline (as students progress in the program). The argument implies that successful recruitment strategies should be complemented by retention strategies to support students from the time they are enrolled until they successfully complete their program. Hanover Research (2014) presented a report on post-secondary student retention in Canada and the United States of America, of which there are four notable findings:

- Though institutes are concerned about retention, most of them do not allocate resources to initiate retention programs. Few institutions have fulltime coordinators for retention initiatives.
- Classroom learning environments, student support and academic advising improve student engagement and focused on graduating.
- Student orientation, coaching, and mentoring improves student retention.
- Partnership with Aboriginal Elders and communities has a positive impact on Aboriginal learners.

The Hanover Research findings identified areas that institutes should consider when focusing on retention issues. The same study, based on data from eleven Ontario universities, claimed that about one in five students had not completed their degrees seven years after withdrawing from higher education. Such findings suggest that 20% of university students are less likely to complete their post-secondary education, though as mentioned previously the likelihood of dropout is even higher for colleges (e.g. Finnie & Qiu, 2009). Hanover Research (2014) presented an argument that it would be more cost effective for Canadian post-secondary institutions to retain their students rather than to enroll new students who will eventually dropout. In other words, retention programs would be more cost effective than investing more in recruitment initiatives. This overview of the literature suggests that there are many factors that influence student experiences, retention, and attrition in post-secondary education, and include individual attributes as well as social, cognitive, and institutional factors. The factors that influence students' engagement and retention are not mutually exclusive—they overlap and interact in many ways.

### **Individual Attributes**

Research highlights some individual attributes that contribute to students' engagement, success, and retention in higher education. Individual attributes include demographic characteristics, academic preparation, and financial support (e.g. Demetriou & Schmitz-Sciborski (2011). Student demographic variables such as gender, ethnicity, and first-generation student status have been found to impact student engagement and retention. Crissman and Upcraft (2005) argued that with the exception of students of Asian ethnicity, racial minority students in

predominantly white colleges are less likely to persist. According to Swail (2004), which is cited in Demetriou and Schmitz-Sciborski (2011), ethnicity influenced students' retention; however, this occurred mainly in institutions where there is not much diversity in the student body, faculty, or leadership in the college. Swail's argument suggested that racial minority students are more likely to be less engaged and withdraw from their program if they are underrepresented in various levels of the institution. In other words, racial minority students might feel deprived of belongingness, resulting in low self-esteem, decreased happiness, and some increased levels of stress (Levett-Jones & Lathlean, 2009). As a result, a lack of sense of belonging does influence student engagement, academic success, and retention. An absence of belonging could be a result of cultural barriers that might inhibit interactions and connectedness amongst peers.

Another student variable that has been found to influence student engagement and retention is whether the students are the first generation in their family to attend post-secondary education. First generation students are more likely to be from low-income families and their parents might not be familiar with higher education processes—and thus may lack support in navigating the post-secondary terrain—which means they are at a higher risk of dropping out before completion (Choy, 2001). In addition, being from low-income families would have implications in funding and that impacts students as they try to source financial support. Demetriou and Schmitz-Sciborski (2011) argued that in the United States, students from low incomes are more likely to go to underfunded K-12 schools—a factor that might influence their readiness for post-secondary education. Interaction between demographic variables such as racial minority status, coming from low income families, and being a first-generation student exacerbates the situation and result in these students being more likely to withdraw from the program.

Gender is another factor that impacts student retention in post-secondary education. In a study carried out at a community college where close to 50 per cent of students were born outside Canada, Christensen (1991) pointed out that females are more likely to persist in their studies compared to male students. Even among the females who carry on in their program, the same author found that females with dependent children are less likely to persevere as their family demands increase. Most practical nursing students are female without depended children, and yet these programs still experiences student attrition. It is evident that issues of gender and retention are complex as they also include other family responsibilities. Hence the importance of trying to understand factors that influence students experiences in the program.

## **Social Factors**

Students who do not take part in campus activities are more likely to withdraw from their programs because they often fail to make friends and also do not connect with faculty members (Demetriou & Schmitz-Sciborski, 2011). Educational legacy, attitude towards learning, maturity, social coping skills, communication skills, cultural values, goal commitment, family influence, peer influence, and social lifestyle are examples of social factors that influence student engagement.

Family plays an important role in supporting students throughout their studies (e.g., Nora, 2001; Zhao & Kuh, 2004). These authors argue that students who feel supported—in any form, such as morally or financially—by their families are more likely to complete their studies. There are a number of factors that prevent families from providing relevant support to their children: the families of first generation students might not be familiar with navigating the higher

education system, while low income families might not have enough financial resources. Different students require different kinds of support depending on their background. Jensen (2011) pointed out that support from family, college staff, and connections to culture contribute to the persistence of Aboriginal learners. This author argued that support is related to issues associated with loneliness such that there is a positive relationship between social integration and student retention in higher education.

### **Cognitive Factors**

Cognitive factors also influence student retention and the issue of attrition. Swail (2004) explained that cognitive factors relate students' intelligence and the abilities they bring to the learning environment: cognitive factors influence the student's ability to comprehend the content and therefore impacts their persistence as well as their academic achievement. Some relevant cognitive factors include academic rigor, quality of learning/teaching, aptitude, critical thinking ability, technological ability, study/learning skills, and time management skills (e.g., Astin 1993; Hurtado & Carter, 1997; O'Keeffe 2013; Tinto, 1993; Sembering, 2014; Shugart & Romano, 2006; 2008). Aptitude influences student retention as it relates to a student's intelligence, capabilities, knowledge, and skills. Cognitive factors are important as they are related to a student's ability to comprehend and complete the college curricula.

Hanover Research (2011) reported that students' first year grades are a strong predictor of retention—those who do not do well are most likely to drop out. Though Astin (1997) highlighted that students' high school scores account for about 12% of retention variance, Tross, Harper, Orsher, and Kneidinger (2000) reported 29% contribution toward retention variance. The argument suggests that high school grades could be used as a predictor of retention. At the same time, Hanover Research (2011) pointed out that the Student Readiness Inventory (SRI) is a predictor for both student GPA and retention. Students with good high school grades and a suitable first year college GPA are more likely to have a higher retention rate. However, as argued above, cognitive factors can also be influenced by college readiness that in turn could be influenced by academic preparation in high school. At the same time, Demetriou and Schmitz-Sciborski (2011) pointed out students from underfunded high schools might not have had the same opportunities as their counterparts from well-funded schools.

### **Institutional Factors**

Many factors influence student retention, and all are related and interact with one another. Instructional factors that influence student retention include financial aid, student services, academic services, recruitment practices, admission options, as well as how curricula are delivered and instructed (Astin 1993; Hurtado & Carter, 1997; O'Keeffe 2013; Tinto, 1993; Sembering, 2014; Shugart & Romano, 2006; 2008). Zhao and Kuh (2004) highlighted the importance of learning communities (LC) as they influence student engagement, learning outcomes, and student success. These authors argued for the importance of the institution to support four types of learning communities in order to enhance student engagement and success: (a) curriculum LC, which is comprised of students taking similar courses; (b) classroom LC, which is formed within a learning environment to enhance collaborative learning; (c) residential LC, which encompassed students living in close proximity; and (d) student-type LC, which is for specific groups of underrepresented students. This fourth type of learning

community in particular would help students from certain groups to share experiences and coping strategies. The research on learning communities indicates forming and sustaining LCs can be a way of engaging and retaining students. Post-secondary institutes that are selective in recruiting, as Hanover Research (2014) outlined, have a higher retention rate compared to institutes with non-competitive entry. This implies that institutes that recruit and enroll students who meet their entry qualifications on a first-come-first-served basis are more likely to experience more student attrition compared to those with competitive entry.

In summary, it is important to identify the factors that influence student engagement in the school environment as well as retention factors so that relevant initiatives are put in place to support students. The findings in this study outline there are individual attributes, social factors, cognitive factors, and institutional factors that influence retention in higher education in general and nursing schools in particular.

## **Methods**

This paper reports on data collected as part of a larger study that was designed to explore whether there is a correlation between student characteristics, their performance in the program, their decisions to dropout, and success in their professional licensing examinations. This paper focuses mainly on the qualitative part of the study to identify factors that could be barriers to learning and persistence in the practical nursing program. The descriptive statistics data included in this paper provided the context of the student demographics.

### **Study Context and Participants**

The study was carried out at a community college in the Prairie Region in Alberta. The program offers a two-year diploma in practical nursing. The program is delivered through face-to-face, online, and hybrid methods between the main and regional campuses. There are two intakes per year; once in the fall and once in the winter. There are about 300 face-to-face students enrolled at the main campus each academic year. The two regional campuses each enroll about 25 students per year. Online delivery has an open entry and open exit, with self-paced courses. About 100 online students graduate in a single year. Practical nursing students enrolled at different college campuses in the Winter 2015 term were invited to participate in the study. A total of 263 students consented to complete the survey on belongingness described by Yorke (2014). However, of those 263 students, 220 signed informed consent forms and completed a Likert-scale belongingness and engagement survey designed by Yorke (2014). The survey we used was validated by Yorke (2014) and has since been used by other post-secondary institutes.

### **Data Sources and Analysis**

**Student survey.** Yorke's (2014) Likert scale survey of student belongingness, engagement, and self-confidence was modified and used to collect data in this study. The survey was designed to collect student demographic data, levels of engagement, and their sense belongingness in the program. Participants completed the survey at the beginning of their second year in the program.

**Focus group discussions.** Three focus group discussions (FGDs) were conducted with students at beginning of their second year in the program. Each FGD had between eight and ten

students. FGDs gathered information on student engagement; sense of belongingness; learning experiences; learning environment (e.g., resources, instruction, pedagogy); leadership (e.g., perceived support from dean, chair, associate chairs); and engagement with instructors (e.g., availability, empathy, approachability, advocacy, helpfulness, class attendance, resources). A senior researcher in the college's research office facilitated the FGDs. The senior researcher has a non-teaching role with limited student contact. The arrangement was meant to ensure that students share their perspectives with a staff member who does not have an influence on their academic success.

**Exit interview.** Exit interviews were conducted by student-navigators—staff members at the college who work in the office of registrar to help students plan their program and navigate their academic journey at the college—who have non-teaching roles. The exit interviews identify “points” of student departure and reasons for dropping out. Exit interviews were conducted to solicit information and reasons why students leave the program. Leaving students were contacted by student navigators within 24 hours from the time they inform the department of their intention to withdraw from the program. 21 students consented to be interviewed and share their reasons for departure; these students were enrolled in the program and attended class for at least a week before dropping out.

**Data analysis.** We carried out a thematic analysis on the answers to the survey questions, focus group discussions, and exit interview data. The descriptive statistics we calculated show the frequencies obtained from survey data. We used deductive thematic analysis (Braun & Clarke, 2006) to explore the patterns evident in the data as we explored students' responses during exit interviews as well focus group discussion transcripts. Based on student retention literature, we identified themes under the primary categories of social, institutional, and cognitive factors that impact students' experiences in the practical nursing program. Student responses were categorized into the categories identified in literature as factors that impact students' experiences, engagement and retention.

## Results and Discussion

### Survey Data

Analysis of the quantitative part of the study to explore the correlation between student variables and their success in the program and professional licensing examination is reported elsewhere. However, certain descriptive statistics are highlighted in order to provide the readers with some content on demographics of the students in the practical nursing program. In this section, we highlight some notable responses from students on the survey. The students in the program are diverse. 93% of the participants were female and 7% were male. 41% of the students who participated in the survey identified as international students while 59% were born in Canada. 10% of the participants identified as Aboriginal, where 9% of the total number of participants identified as Métis and 1% identified as First Nation. 31.1% identified as visible minorities, while 68.9% did not identify as a racial minority. 30% of the participants indicated that English was their second language. The demographics have implications in providing instructional and social supports for students whose first language is not English. The supports that international students and English as a second language learners might need include feedback on their papers, how to take multiple choice examinations, student mentorship such as pairing an international student in their first term with a peer in their third term. Another



significant factor to consider in the future is the possibility of allocating more time for exams to students who might not be very proficient in English.

Although the entry qualification for the practical nursing program is a high school diploma, a significant number of the participants had higher education qualifications. 23% had college diplomas, 12% had university degrees, and 3% had post-graduate (Masters or PhD) degrees. Having students who have university education enrolled in the program could imply the demand for the practical nursing program. International students who had post-secondary education from their countries of origin could not get employment related to their international qualifications and found practical nursing as a way of getting Canadian qualifications with better job prospects. Conversely, there were some students with postsecondary education from local colleges and universities who were enrolled in the program. It is important for the college to recognize prior education and offer alternative pathways for students who already have university degrees. Students who come to the program after they have completed a university degree have already developed analytic skills and should be able to receive recognition for their prior knowledge. There are universities (e.g. University of Alberta's after degree nursing program) that offer an after-degree nursing program for students who have degrees in other areas. However, in Canada, there are no colleges that offer an option for people with prior degrees to take a similar pathway and obtain their practical nursing diploma. Individuals with prior degrees could benefit from an alternative fast-track option. This might also provide the college with an opportunity to provide a unique service to college graduates who want to change their careers to nursing.

On barriers to learning, 19% indicated mental health issues, 17% had limited language proficiency, 10 % had physical health conditions, and 7% had chronic illness that impacted their learning and overall experience in the program; this showed that there are a large number of students that have health issues obstructing their learning. The college has counseling services and all students indicated that they were aware of the services. However, the survey did not ask if students were making use of such services. During focus group discussions, the students who use such facilities revealed that were satisfied with the services they received. Given the numbers of students who indicated health issues impeding their learning, it is important for the department to help the students who might need health supports to be aware of the services on campus.

### **Factors that Influence Student Experiences**

The main themes related to students' experiences in the program include cognitive, social, and institutional factors. The factors are interdependent, and the institution plays a major role in ensuring that the learning environment fosters social inclusion and enables cognitive processes. Figure 1 shows the interdependence of the major categories of factors that influence learning. We argue that the institution provides a broader environment through which social interactions occur and that enhances cognitive processes as students acquire the knowledge and skills expected of them upon graduation.

**Institutional factors.** Institutional factors include student services, academic services, and curriculum and instruction (Astin 1993; Hurtado & Carter, 1997; O'Keeffe 2013; Tinto, 1993; Sembering, 2014; Shugart & Romano, 2006; 2008). In this study, students in the focus group discussions pointed out that though their instructors had content knowledge, some of them lacked pedagogical knowledge. For example, one student said, "our instructors are nurses

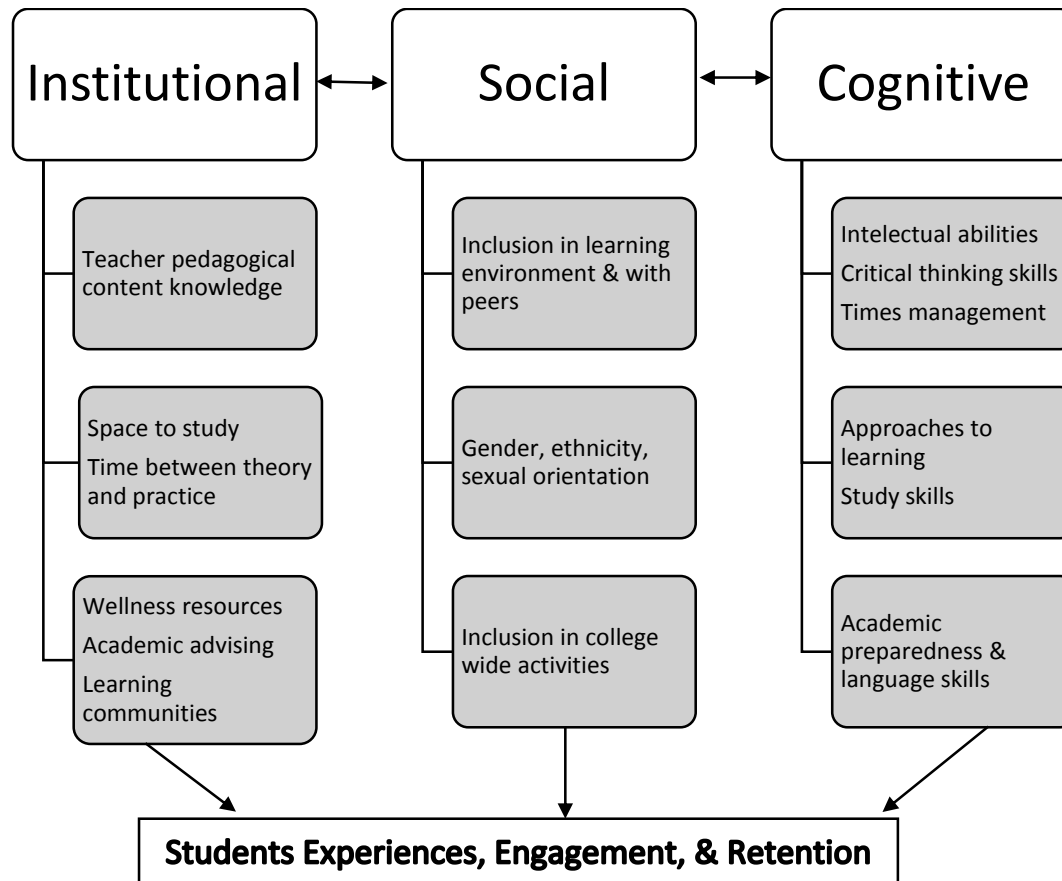


Figure 1. Factors that influence students' experiences in learning environments.

and they are not teachers, they know the content and might not know how to teach it well.” Students also indicated that some instructors used technology that helped to engage them in learning environment whereas others did not use much technology. Based on students' account on their experiences in different courses in the program, it was also evident that technological knowledge does vary between instructors.

Mishra and Koehler (2006) proposed a framework for teacher knowledge pointing out the importance of teachers having technological pedagogical content knowledge (TPACK) as a prerequisite to teaching. Students' responses show how a teacher's TPACK level impacts their experiences, engagement, and learning. This is echoed by Hanover Research (2014) who highlighted that effective teaching influences student engagement and success, which in turn has an impact on student persistence. When students are academically successful, they are more likely to persist and successfully complete their program. Tinto (2012) recommended ways of improving classroom professional practice that included having realistic classroom expectations, informative feedback, and relevant support in the learning environment.

In focus group discussions, students mentioned a concern with what they perceived as subjectivity in assessing their practical skills in the laboratory and when they go for clinical rotations. Table 1 provides examples of institutional factors from the participants that impact

student learning. The majority of students indicated that the clinical integration assessment (CIA) they complete as part of their preparation for clinical rotations was very stressful. CIA is an assessment where students are given a scenario and then they develop a care plan and demonstrate practical nursing skills in front of an assessor. As novices being watched by expert nurses, they become nervous, which tends to increase their stress levels and in turn makes them become anxious (see Table 1). Students suggested that continuous assessment of skills would be better than a pass/fail CIA because the latter takes place under stressful environment. In addition, students were also concerned about the subjectivity of the assessment procedure for the CIA. During focus group discussion, participants raised the question of the objectives of the CIA: they wanted to know whether they were being assessed on their capacity to manage stress or their ability to perform certain skills. Nursing environments are typically fast-paced, and nurses are often under the watchful eyes of colleagues, patients, and family members in health facilities; therefore, managing fast-paced environments is an important skill in nursing that students need to develop over time. This implies that students must be reminded of their working conditions earlier on in their programs.

**Social factors.** Tinto (2012) argued that social integration at the post-secondary level has an impact on a student's decision to drop out or persist and complete their program. Roberts and Styron (2010) pointed out that when students form social connections on campus, they bond with their peers and set common academic goals. Students who are not socially integrated or connected are at a higher risk of dropping out. It was evident from the focus group discussions that some students felt socially excluded within the institute as well as their learning environments. In this study, students who felt socially excluded were those who self-identified as a minority in the program. Those who identified as marginalized within the sample included males; lesbian, gay, bisexual, transgender, queer, intersex, asexual (LGBTQIA) individuals; Indigenous peoples; and visible minorities. The findings of this study are consistent with earlier studies (e.g., Nora, 2001; Zhao & Kuh, 2004), which indicated the need to have community groups for students who might feel socially secluded. Crissman and Upcraft (2005) argued that students who feel isolated are less likely to be engaged and are at a risk of dropping out of college.

During one of the focus group discussions, a student shared that they were socially transitioning their gender. The student indicated that they felt that peers and instructors were not supportive of what they were going through. This was at a time when the student was in the process of legally changing their name, and they felt that they were being treated insensitively by their colleagues in the program and faculty at the college. The student was distressed and indicated that their grades had dropped, attributing that to the lack of sensitivity they received from their peers and instructors. The FGD facilitator noted that the student was emotional and deeply affected by what they were going through and referred the student for counseling. This example also indicated that instructors might not be aware of the stressors students are going through and the kinds of support they might need. It was evident from the data that students feel distressed and not supported if they perceive their peers and instructors as not being sensitive, caring, or accepting. Racial minority students that participated in the study indicated that they felt socially isolated, which shows the importance of awareness on how to support minoritized students in college learning environments. Hanover Research (2014) recommended that despite budgetary cuts, institutes should consider activities for social integration and academic advisory services. Table 1 provides more examples from student responses.

Table 1  
Student Experiences

Theme	Examples from focus group discussion	Comment
Cognitive factors	<ul style="list-style-type: none"> <li>• Time between skills lab learning and practice in clinical is too much. "The Critical Integration Assessment (CIA) is so stressful. You are being tested more on your ability to deal with stress than on skills, and what you have to do is by chance. The CIA mark would be better split to include lab marks and CIA. Past CIA was so stressful—perhaps use integration labs as some of the mark. The CIA is not reflective of skills because it is so stressful."</li> <li>• Interrater reliability with CIA grading.</li> <li>• More open studies would help students to be less overloaded when they enter the program.</li> </ul>	<p>It was evident from the focus group discussions (FGDs) that students find the CIA stressful. This is an assessment done before students go for their clinical rotation. Students who fail to make it to the pass mark of 80% will miss their chance to go to clinical practice. The issues raised by students have to do with subjectivity of the assessment exam as well as issues of inter-rater reliability. Based on students' concerns on stress levels that the CIA causes, there is need to re-evaluate the process and objectives of CIA. If stress management is part of the goals of the CIA, then students need to be aware of such objectives.</p>
Social factors	<ul style="list-style-type: none"> <li>• Being a minority (gender, race, sexual orientation), no friends and frustrating, social isolation.</li> <li>• Practical nursing program is very separate, we miss everything that is going on in the main building (in the college).</li> <li>• "When we do hear about events, they are often not at times we can attend."</li> <li>• "I am a mature student and find that I am the mother hen for the group and it is a good bond. I did not belong for 2-3 months and find it is better to bond with older students."</li> </ul>	<p>Some students feel socially isolated. For example, male students who are about 7% of the population in the program felt isolated. They indicated that it was better for them to socialize with more mature and married female students than younger female students who might interpret the relationship differently. In general, minority (by any definition) students felt isolated and did not feel like they belonged to their cohort. Based on the findings, it is important for the program and college to have awareness on what exclusion and isolation looks like and how students might help peers who feel isolated.</p>
Institutional factors	<ul style="list-style-type: none"> <li>• Disability and counseling services are good</li> <li>• Computer access is good.</li> <li>• Some instructors are very helpful, they come early and stay after class for questions.</li> <li>• Students to teacher ratio too high in open labs, tend to be crowded.</li> <li>• Some lab instructors only see student perform a skill once—has to be more than that.</li> <li>• Instructors are nurses and not teachers (have content knowledge and not pedagogical knowledge).</li> <li>• Tutorial/writing center at the college seem to expect upgrading students and do not know what to do with nursing students</li> <li>• Library loud and crowded.</li> <li>• No place to work as a group yet we have lots of group work.</li> <li>• Too many staff changes, some are sympathetic.</li> <li>• Too many hidden costs—better to include in tuition.</li> </ul>	<p>Some institutional/program factors highlighted by students include staff turnover, instructional skills, student-teacher ratios and places to study. On teachers; instructional and technological knowledge, the college just like any other post-secondary has support systems for instructors to develop their teaching skills. However, the efforts could be undermined by high staff turnover. In addition, there are no instructional skills workshops that focus on facilitating learning in clinical settings. 84% of the participants indicated that they study at home because the college does not have enough space for quiet studying. The college was in the process of expanding infrastructure during the time of data collection and students' library now has a bigger capacity.</p>

Table 1 (continued)

Exit interview (exit stage varied from few weeks to more than a year in the program)

Reasons for exit	<ul style="list-style-type: none"><li>• Was not first choice, leaving because offered place at a university.</li><li>• Realized it's not suitable/right career, will pursue other options, other career path.</li><li>• Line of work not what the student expected, realized nursing is not for them.</li><li>• Personal and family reasons (e.g. taking care of your kids or aging parents).</li><li>• Involuntary—academic reasons, was not doing well, would have preferred more guidance and information upfront.</li><li>• Health, financial issues.</li><li>• Bored and not interested in spending 2 years in school, looking for a shorter course, Depressed after losing a parent</li><li>• Immigration reasons because the study permit was invalid.</li><li>• Would continue in health care but in different capacity like administration or medical assistant or unit clerk.</li><li>• Full time program too heavy, would prefer less load on part time basis, Workload too much and stressful.</li><li>• Did not know that immunization was mandatory and did not want to be immunized.</li></ul>	It was surprising that some students enrolled into the program as they awaited their application responses to other university programs in town. That meant that practical nursing was not their first choice. Survey results also showed that 63.9% of the participants considered enrolling to other post-secondary institutes. The findings have implications to students' engagement if such a large number did not have practical nursing as their first choice. Some students later 'discovered' that nursing was not for them. That reason implies that such students were not aware of what practical nursing entails and the expectations in health care environments.
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**Cognitive factors.** Cognitive factors have more to do with how students approach their learning despite the fact that learning environments do influence their approach to learning. In this study, participants pointed out some of the factors they perceive as barriers to their learning. Students mentioned mental health, chronic health issues, balance of studies, family/work, and language proficiency in the survey responses. During the focus group discussions, students revealed that study skills, time management, resources, and how knowledge and skills are assessed as some of the factors that affect their personal approaches to learning. Cognitive factors have to do with students' intellectual abilities; as such if students find the program to be too challenging, they are more likely to dropout. Since practical nursing is a professional program, only students enrolled in the program can take the courses: if a student discovers that nursing is not for them after enrolling, they must drop out. This suggests the importance of having the program structured in a way that enables students to “reroute” into other programs upon discovering that practical nursing is not a viable career choice. A solution could be something like what is available at Florida State University, where their Center for Exploratory Students caters to undecided or re-deciding students: these students take open studies courses that enable them to enroll to a preferred program after they gather enough information and make informed choices (Hanover Research, 2014)

### **Reasons for Dropping Out**

The stage at which students left the practical nursing program varied from a couple of weeks to more than a year. Exit interview data showed that there are many reasons why students drop out

before they complete their studies. Students indicated the realization that nursing was not for them, practical nursing was not their first-choice nursing program<sup>1</sup>, financial problems, health issues, invalid study permits, and stress due to the heavy practical nursing curriculum as their main reasons for dropping out. Table 1 highlights some of the reasons for students leaving their programs before completion and the related implications for the organization. It was evident that many of the students who agreed to have an exit interview dropped out because they realized practical nursing was not for them: they were going to pursue other careers. Student reasons for dropping out also raises a question on whether sessions to provide prospective candidates with information should include more information on what they should expect when they enroll for the program.

### **Conclusions and Recommendations**

The findings from this study point to the importance of the institution in providing an environment in which there are relevant supports, fosters social interactions, and encourages student cognitive processes. Though the majority of the student respondents felt a sense of belonging, it was evident that students who identified themselves as minorities by sexual orientation, race, or gender felt segregated from their peers. Student services could provide support in developing communities of minority students where they can socialize. Given that some students felt isolated, it is important for the college to support the establishment of student-type learning communities where targeted groups (e.g. LGBTQIA communities) where students can interact, share experiences, and have some sense of belonging. Students would also benefit from the establishment and sustenance of the four types of learning communities (LC): curriculum LC for students enrolled in same cohort, classroom LC to enhance collaboration in the classroom for specific subject areas, residential LC to support interactions outside class, and student-type LC for groups of students who share certain diversity variables. Based on the findings in this study, we recommend the need for exclusion awareness activities to orient students and faculty on the importance and value of inclusiveness.

Students pointed out how the clinical integration assessment (CIA) is a source of major stress for them, in particular due to the issues related to subjectivity of the assessment and interrater reliability. It is important to re-evaluate the objectives of CIA, its evaluation techniques, and relevance to the program given the anxiety and stress inflicted upon the students. With respect to interrater reliability, we recommend investing in professional development for instructors in order to develop common knowledge and skills related to assessment and evaluation techniques. This is especially important because nurses are subject matter experts with little-to-no formal teaching qualifications and often a lack of formal teaching experience.

Though the college has a tutorial center to support students who need the services, practical nursing students indicated that they were not getting the services they needed. Students indicated that the tutors in the tutorial center were not very knowledgeable of nursing courses. We recommend the need to have some tutors who are skilled in nursing foundation courses. The college could establish a peer tutoring program where practical nursing students in their final year/semester could help tutor their peers in earlier semesters.

With regards to students' retention, a readiness survey might help students realize if nursing is appropriate for them before they enroll in the program. Some students left the program after discovering the realities of the nursing and they determined the profession was not the right fit

for them. Enrolling students into open studies courses before they start nursing courses might provide students with an opportunity to determine if nursing is appropriate for them and it allows them to explore other career options.

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### **Note**

<sup>1</sup> These students dropped out of the program upon hearing they were admitted into their first-choice nursing program at a different post-secondary institute.

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