

Student Peer Mentorship in Prelicensure Nursing Programs: A Scoping Review

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Student Peer Mentorship in Prelicensure Nursing Programs: A Scoping Review

Cover Page Footnote

This study was funded by the Consortium national de formation en santé, volet Université de Saint-Boniface and Subventions internes de la recherche, Université de Saint-Boniface. All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards. The study was approved by the Université de Saint-Boniface Research Ethics Board (ETH 2021 18 mars.). All participants provided informed consent at recruitment of the study. Participants consented to have non-identifying information published. | Cette étude a été financée par le Consortium national de formation en santé, volet Université de Saint-Boniface et Subventions internes de la recherche, Université de Saint-Boniface. Toutes les activités réalisées dans les études impliquant des participants humains étaient conformes aux normes éthiques du comité de recherche institutionnel ou national et à la Déclaration d'Helsinki de 1964 ainsi qu'à ses amendements ultérieurs ou à des normes éthiques comparables. L'étude a été approuvée par le comité d'éthique de la recherche de l'Université de Saint-Boniface (ETH, 18 mars 2021). Tous les participants ont donné leur consentement éclairé lors du recrutement de l'étude, et ont consenti à ce que des renseignements ne permettant pas de les identifier soient publiés.

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Nursing education provided in post-secondary institutions is considered demanding (Onan et al., 2019). Stringent academic curricula and the pressure of learning in clinical environments, compounded by financial strain and students' personal needs, affect academic performance and educational satisfaction within nursing programs (Bartlett et al., 2016; Beanlands et al., 2019; Yüksel & Bahadır-Yilmaz, 2019). Potentially complex psychosocial relationships between nursing staff, instructors, and patients, as well as events such as death and the impact of illness on patients, are additional stressors (Al-Zayyat & Al-Gamal, 2014). Nursing students exhibit higher levels of psychological symptoms compared to students in other disciplines in health care, including moderate to severe depression, suicidal ideation, sleep disturbances, and eating disorders (Bunjo et al., 2019; Karaca et al., 2019; Tung et al., 2018; Vijayalakshmi et al., 2018). To improve student success and retention, nursing programs have adapted their pedagogical approach, thus reducing the negative impacts of this rigorous learning environment (Glew et al., 2019; Labrague et al., 2018; Zambas et al., 2020). For example, integrating effective coping mechanisms during the program's clinical components better prepares students for their future careers (Barnhardt, 2017).

Background

For students learning in a second language, such as those from diverse ethnic and cultural backgrounds, communication and academic performance are largely dependent on language skills; mental health and help-seeking behaviours may also be impacted (de Moissac et al., 2022; Hillis, 2017; Onovo, 2019; Shadowen et al., 2019). Young people from official language minority communities (OLMC; francophones outside Quebec, for example) are often unaware of the professional services available to them in their official language and will not use them (Levesque & de Moissac, 2018). These youth usually prefer confiding in their loved ones or not speaking to anyone at all (Penner et al., 2021). In a linguistic minority context, minorization, characterized by limited access to mental health services in the minority language, adds to the many obstacles youth face (Cardinal et al., 2018). Hence, innovative strategies are needed to inform OLMC youth about and encourage them to benefit from the support available during their academic years, as these may have long-term impacts on their professional career and health.

A recent study among OLMC nursing students demonstrated that less than 15% of participants reported using counselling services for mental health issues (de Moissac et al., 2022), despite considerable promotion of mental health needs and the importance of accessible resources on campuses across Canada (Canadian Association of College and University Student Services, 2023; Centre for Innovation in Campus Mental Health, 2022; Mental Health Commission of Canada, 2016). An increasing number of nursing educational programs provide social support such as mentoring programs to students to enhance protective factors that promote positive mental health. Several mentorship models exist, such as one on one (mentor to mentee), group mentoring (mentor to mentees), and near-peer mentoring, which has a teaching component. Mentors can be experts in the field, part of a younger generation (reverse mentoring), or student mentors in the same nursing program (peer mentoring). Although several models exist, student peer mentorship in nursing programs has been shown to have a positive impact on relationship building between students and on coping with the high demands of nursing programs (Jacobs, 2017; Yildirim et al., 2017). Mentorship programs have yet to be put in place in all institutions. Thus, a scoping review was undertaken to inform the development of a peer-mentorship program in an undergraduate nursing program in a francophone official language minority post-secondary institution in Canada.

Methods

Arksey and O'Malley's (2005) scoping review method was used to systematically examine and chart existing peer-reviewed and grey literature about peer-mentorship programs in undergraduate nursing education. Scoping involves five stages: (a) identifying the research question; (b) identifying relevant studies; (c) selecting appropriate studies; (d) charting data; and (e) collating, summarizing, and reporting on the results.

The research team met with a research librarian and the following review question was developed: What peer-mentorship programs exist in undergraduate nursing education? This research question was created to guide us in search of what peer-mentorship programs exist, how they are evaluated, the benefits of peer-mentorship programs, and how peer-mentorship programs have evolved since the last reviews were conducted (see Jacobs, 2017; Irvine et al., 2018; Wong et al., 2016).

Searches were conducted in the following databases: CINAHL (Cumulated Index to Nursing and Allied Health Literature), Cochrane, PubMed, and MEDLINE (see Table 1). The searches were for articles published between 2010 and 2023; searches remained active between June 2022 and June 2023 to receive notifications of any new articles published. Articles were included based on population, concept, and context (Joanna Briggs Institute, 2015), with the population being nursing students; the concept being undergraduate nursing peer mentorship; and the context being academic institutions, written in English or French, and conducted in North America, the United Kingdom, or Australia. These countries were chosen because of the mobility that nurses have between them. Articles were excluded if they were published before 2010, took place in a clinical setting only, or had mentors who were not peers (i.e., other undergraduate nursing students). A total of 879 records were identified. Two researchers screened the titles, and 476 papers were retained and filtered by abstract. Two researchers assessed 210 full-text articles for eligibility. A total of 20 articles were included in this scoping review (see Table 2). Once charted, the data were also analyzed using thematic analysis as outlined by Braun and Clarke (2006).

Table 1
Search Strategies

Database	Search strategies
CINAHL	[(nurs* OR "student nurse" OR "nursing student") AND ("social support" OR "support group" OR "peer mentor*" OR "mentorship program" OR mentor* OR mentee OR "peer teach*") AND "nurs* education" AND (bachelor* OR undergrad*)]
Cochrane	nurs* OR "student nurse" OR "nursing student" in All Text AND "social support" OR "support group" OR peer NEXT mentor* OR "mentorship program" OR mentor* OR mentee OR peer NEXT teach* in All Text AND nurs* NEXT education in All Text AND bachelor* OR undergrad* in All Text - (Word variations have been searched)]
PubMed	(1 Nurses/ 43907; 2 Students, Nursing/ or Education, Nursing/ 57867; 3 Mentors/ or Mentoring/ or Peer Group/ 37454; 4 Education, Nursing, Baccalaureate/ or Faculty, Nursing/ 28103; 5 1 and 2 and 3 and 4 17 for final search)

Medline	(nurs* OR “student nurse” OR “nursing student”) AND (“social support” OR “support group” OR “peer mentor*” OR “mentorship program” OR mentor* OR mentee OR “peer teach*”) AND “nurs* education” AND (bachelor* OR undergrad*)].
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Parallel to these stages, a consultation exercise with mentorship coordinators from seven undergraduate nursing programs across Canada was conducted (see Table 3). These programs were selected to reflect OLMC, geographic and smaller campus contexts like the OLMC of the future mentorship program. Participants were recruited by email, and interviews were conducted by phone between March 2022 and March 2023 after ethics approval was obtained (ETH 2021 March 18). A semi-structured interview guide containing questions regarding general program setup (training, administration, evaluation) was used. Verbal informed consent was obtained from participants before the interview. Interviews were between 30 and 60 minutes and recorded for future transcription. Braun and Clarke’s (2006) thematic analysis was used to analyze the interviews, and the results were then triangulated to see how they converged or diverged from the data collated during the scoping review.

Results

Twenty articles were included in this scoping review (see Table 2). Most (10/19) peer-mentorship programs documented in the literature were implemented in the United States, with five in Canada, three in the United Kingdom, and three in Australia. Two articles described mentorship programs from several countries, among them those mentioned above. No articles written in French were found. Three previous reviews were included: (a) an integrative review (Irvine et al., 2018) that examined the effects of peer mentoring on stress and anxiety levels among undergraduate nursing students; (b) a scoping review (Jacobs, 2017) and thematic analysis from articles published between 2000 and 2014; and (c) and another integrative review (Wong et al., 2016) that sought to appraise and synthesize the evidence for the design, implementation, and evaluation of peer mentorship programs.

Table 2*Mentorship Programs Charted Data*

Author(s), year	Article type	Study location	Study population and ratio (if mentioned) of mentor to mentee	Type of student peer mentor initiative (i.e., clinical or classrooms)	Purpose of the study	Type of data collection methods used/ program evaluation	Results of study, findings, conclusions (outcomes)	Recommendations
Bright (2019)	Qualitative research	USA	3 advanced students and 2 recent alumni were mentors. Up to 56 nursing undergraduate students were mentees. Meetings were with individuals and small groups.	Mentoring support outside clinical and classroom settings	“explores the experience of advanced nursing students who provided mentoring and tutoring to beginning nursing students” (p. 1)	Hermeneutic phenomeno- logical method	Positive benefits found in categories such as “communication and collaborative skills, perceptions of group dynamics, problem solving and decision- making, self- knowledge, and moral commitment” (p. 4)	More research and interviews to be done to discover more themes and benefits.
Dennison (2010)	Survey- based research	Canada	Five peer mentors assisting other nursing students, typically of lower years.	Clinical learning centre	To describe the benefits of a successful peer- mentor program	Surveys completed by peer mentors	Mentors were able to review knowledge and stay current with skills. Mentees became less intimidated and more comfortable in the program.	More studies need to be done on benefits of peer mentoring.

Author(s), year	Article type	Study location	Study population and ratio (if mentioned) of mentor to mentee	Type of student peer mentor initiative (i.e., clinical or classrooms)	Purpose of the study	Type of data collection methods used/ program evaluation	Results of study, findings, conclusions (outcomes)	Recommendations
Flott et al. (2022)	Descrip- tive, retrospec- tive study	USA	Large numbers of students at various levels of the nursing curriculum Mentors were senior students (<i>n</i> = 105) and mentees were novice students.	Classroom (skills lab, simulations)	To evaluate senior nursing students’ performance during leadership activities.	Descriptive statistics, qualitative and quantitative methods	“Near-peer learning activities assisted senior students in development of leadership and communication skills, preparing them for nursing practice” (p. 750).	“reviewing the rubric with senior students before the experience to clarify expectations, defining clear objectives and delivering specific instructions regarding the senior’s role, and maximizing the use of time during the learning activity” (p. 754)
Green (2018)	Action research	UK	First-year undergraduate nursing students (<i>n</i> = 26)	Classroom/on- campus mentorship	Retention of and increase in professional identity	Quantitative data, qualitative discussion, and a review of the literature	Peer support helps to develop professional identity and increase a sense of confidence and knowledge, and feelings of being supported were also mentioned	Did not mention

Author(s), year	Article type	Study location	Study population and ratio (if mentioned) of mentor to mentee	Type of student peer mentor initiative (i.e., clinical or classrooms)	Purpose of the study	Type of data collection methods used/ program evaluation	Results of study, findings, conclusions (outcomes)	Recommendations
Henderson et al. (2020)	Qualitative research	Australia	First-year student paired with a third-year student	Clinical	“Explore clinical facilitator experiences of the near-peer learning model” (p. 1)	Semi- structured interviews and focus groups	“Successful implementation requires careful selection of student dyads, appropriate clinical environment and support for clinical facilitators” (p. 1).	Did not mention
Irvine et al. (2018)	Integrative review	USA, Australia, England (UK) Norway, Hong Kong, Scotland	Undergraduate nursing students	Peer teaching	“To ascertain outcomes of near-peer teaching in undergraduate nurse education” (p. 60)	Two independent reviewers analyzed the data and used narrative synthesis to report results.	Faculty need to incorporate near-peer teaching into the curriculum for student satisfaction.	Did not mention

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Jacobs (2017)	Scoping review	Australia, Iran, USA, New Zealand, Hong Kong, and UK	Undergraduate nursing students. Group ratios varied.	Clinical, classroom, and laboratory	“To document the steps and processes of a scoping review on the topic of nursing student peer mentorship, and report on the results of the scoping review” (p. 212)	Not applicable	“This scoping review revealed that a nursing student peer mentorship initiative has tangible benefits for nursing students” (p. 221).	To use more databases to find relevant research and to use a wider span of publication years
Johnson et al. (2020)	Research	USA	56 nursing students enrolled in a mentoring course in a baccalaureate program	Outside classroom and clinical	For mentors to mitigate some of the challenges for those with difficulties, and to enhance student success	Content analysis from courageous dialogue	Positive benefits on personal, academic, and professional growth	Increase diversity, and find allies to increase support.
Kachaturoff et al. (2020)	Integrative review	USA	Undergraduate nursing students Ratio from 1:1 to 1:11	Not specific to location	To examine the effect of peer mentoring on stress and anxiety levels among undergraduate nursing students	Not applicable	Decreases stress and situation or short-term levels of anxiety	Did not mention

Author(s), year	Article type	Study location	Study population and ratio (if mentioned) of mentor to mentee	Type of student peer mentor initiative (i.e., clinical or classrooms)	Purpose of the study	Type of data collection methods used/ program evaluation	Results of study, findings, conclusions (outcomes)	Recommendations
Kostovich & Thurn (2013)	Qualitative research	USA	22 undergraduate junior nursing students enrolled in a mentoring course (1:10–12 ratio)	Classroom	“explore the lived experience of undergraduate nursing students participating in a group mentoring course” (p. 414)	Qualitative open-ended questions	“provided a means for students to begin to assimilate into the professional nurse role” (p. 416)	Opportunities for e- mentoring for online courses
Lee & Chiang (2021)	Thematic synthesis of qualitative studies	Australia, Canada, Ireland, UK, Finlan, Jordan, Sweden, & Scotland	69 nurses and 140 undergraduate student nurses	Clinical setting	To explore the mentorship experiences of student nurses and their mentors (nurses) in the clinical setting	Not applicable	Hands-on practice is needed to develop confidence. Feedback and a positive relationship are important for learning.	More research is needed on the relationship and collaboration between higher educational institutions and the clinical setting.

Author(s), year	Article type	Study location	Study population and ratio (if mentioned) of mentor to mentee	Type of student peer mentor initiative (i.e., clinical or classrooms)	Purpose of the study	Type of data collection methods used/ program evaluation	Results of study, findings, conclusions (outcomes)	Recommendations
Lewis (2021)	Program implemen- tation and evaluation using the logic model	USA	Culturally and linguistically diverse nursing students entering the nursing program. Mentors were near completion of their studies. 22 mentees and 25 mentors (to date in the program) Ratio (2:1 at first, then 1: more than 1)	Not specified	Faculty sought to support culturally and linguistically diverse students as they were overrepresented among those who repeated a course, took leaves of absence, or required additional academic support.	Focus group discussions and peer- mentoring evaluation survey tool	Mentors and mentees expressed satisfaction with and derived benefits from the mentoring program.	A more thorough evaluation and changes in implementation to address the challenge of mentors and mentees finding time for meetings.
Lombardo et al. (2017)	Qualitative descriptive study	Canada	Undergraduate nurses from all years of the program (<i>n</i> = 11 mentees) 1: 1 ratio	Focused on the transitions to university	Explore the perceptions of mentees who participated in the first year of the Nurse Peer Mentorship Program	Semi- structured interviews analyzed using inductive approach	Mentees described how the mentorship program aided in their personal growth and how they saw several health benefits as a result.	Future research needs to be conducted to determine outcome differences between students who participate in the mentorship program and those who do not.

Author(s), year	Article type	Study location	Study population and ratio (if mentioned) of mentor to mentee	Type of student peer mentor initiative (i.e., clinical or classrooms)	Purpose of the study	Type of data collection methods used/ program evaluation	Results of study, findings, conclusions (outcomes)	Recommendations
Mumba et al. (2023)	Quality improve- ment study	USA	Undergraduate nurses (n = 20) mentoring dyads (ratio 1:1)	To help first- year students navigate nursing school	To provide more support to students and to improve student outcomes	Rapid cycle quality improve- ment model	Mentors felt they gained leadership skills and built and maintained positive relationships; mentees felt supported.	“still unknown is the quantitative effect of this peer mentoring model on students’ stress and anxiety levels as well as academic achievement” (p. 8)
Napierkowski & Migliore (2022)	Interven- tional study based on holistic comfort theory	USA	Undergraduate nurses in their first year (n = 20) were the mentees, and senior students were the mentors (n = 17).	To provide support to the students outside clinical and classroom	To determine the socialization of mentees into the discipline of nursing and to see whether financial reimbursement of the mentors was an incentive	Pre and post surveys	“Mentees felt more comfortable and socialized into the profession of nursing. Mentor evaluations revealed that the financial incentive was beneficial” (p. E57).	Need to cultivate mentoring programs to promote success and the development of skills for both mentors and mentees. Need to support the mentors financially.
N. Nelson et al. (2018)	Cross- sectional descriptive survey design study	USA	Nursing honours students were the mentors, and undergraduate nursing students were the mentees.	Focused on academic setting	To assess and describe undergraduate nursing students’ and faculty’s perceptions and beliefs of mentorship	Cross- sectional, descriptive design Open-ended survey questions	Students reported that this program aided in their success through nursing school.	Further examination with larger and varied faculty and student samples is needed.

Author(s), year	Article type	Study location	Study population and ratio (if mentioned) of mentor to mentee	Type of student peer mentor initiative (i.e., clinical or classrooms)	Purpose of the study	Type of data collection methods used/ program evaluation	Results of study, findings, conclusions (outcomes)	Recommendations
Rosenau et al. (2015)	Phenome- nological study	Canada	Mentors were senior (fourth year) undergraduate students, mentees were first-year students. 17 students who enrolled in the course participated in the study.	On-campus mentorship	To understand how peer mentorship fosters the development of nursing education leadership in senior undergraduate students	Critical reflections and online discussions	Senior students developed skills that could help in the future: communication, listening, patience, collaboration, and leadership. Supportive peer relationships were established.	To utilize greater sample size with a more diverse population for a longer period of time
Scheller et al. (2021)	Descrip- tive article	USA	Student led: third- and fourth-year students with first- and second-year students 8 mentors for 40 mentees in small group session.	Workshops on guidance, exploration, and reflection in a safe environment	To address attrition and the needs of first- and second-year nursing students	Anonymous qualitative surveys	An increase in self-confidence, improved readiness for nursing courses, a stronger sense of belonging to the community, and a decrease in self-reported anxiety	Did not mention

Author(s), year	Article type	Study location	Study population and ratio (if mentioned) of mentor to mentee	Type of student peer mentor initiative (i.e., clinical or classrooms)	Purpose of the study	Type of data collection methods used/ program evaluation	Results of study, findings, conclusions (outcomes)	Recommendations
Thomson et al. (2021).	Phenome- nological study	Canada	Second-year psychiatric nursing students are the mentees, and third-year students are the mentors. Ratios 1:1	On-campus mentorship	To establish a peer support network for students in the psychiatric nursing program and to reduce psychological stressors related to academia	Interviews	Helped students develop skills valued by the profession of psychiatric nursing	Mentorship programs should be offered to undergraduate psychiatric nursing students.
Wong et al. (2016)	Integrative review	Canada	Ratios varied from 1:1 to 1:8	On campus	To assist with transition to university life, reduce attrition, and enhance academic success Provide support for first-year undergraduate students Give experience to senior students in role- modelling, leading, and advising	Focus groups, question- naires, and scales	Benefits included improved academic scores, enhanced critical thinking, increased self- confidence, decreased feelings of anxiety and stress, and improved time management and leadership skills.	Future research should be conducted to discover more potential benefits, most effective types of mentorship programs, and long- term effects on those who participated.

Table 3*Summary of Mentorship Programs in Canadian Nursing Programs*

Educational institution (province)	Individual(s) in charge of the program	Mentors	Mentees	Training provided to mentors	Activities used to engage participants	Program setup
Institution 1	Faculty member	Second- and third-year students	First- and second-year students	No official training. Information on Moodle platform (rights and responsibilities, etc.).	Meals such as potlucks	Demographic information forms are filled out by participants for pairing.
Institution 2	Students	Second-, third- and fourth-year students	First-year students	No official training.	Emails to encourage pairs to meet, and questionnaires to help facilitate getting to know one another	Questionnaires are filled out by participants for pairing.
Institution 3	One faculty member	Mentors must have completed the year of studies that they are mentoring or be graduates of that program.	Students in any year	No official training	Meet and greets, appreciation dinner, organized workshops (needs based)	Questionnaires are filled out by participants for pairing.
Institution 4	Two faculty members	Mentors must have completed the year of studies that they are mentoring.	Mentees need to be one year behind their mentors.	A session on services available at the university	One organized activity per month, pizza parties	Selection process to select mentors

Educational institution (province)	Individual(s) in charge of the program			Training provided to mentors	Activities used to engage participants	
		Mentors	Mentees			Program setup
Institution 5	2 faculty members	Alumni	Second-, third-, and fourth-year students	Resources on an online platform (Mentor Link)	Events throughout the year, and discussion platform	Mentor Link, an online platform, matches mentors and mentees.
Institution 6	Students	Students at least in second term	Students in first term	A PowerPoint presentation describing how to talk to mentees and the role of the mentor	Two organized in-person meetings	Peer mentor oversees pairing of mentors and mentees.
Institution 7	Students	Any student	Students not yet admitted to nursing program	No formal training. Tips and tricks sheet handed out.	None	Forms are filled out and student representatives are responsible for pairing mentors and mentees.

Themes

Three overarching themes were identified in the present scoping review and semi-structured interviews with mentorship program coordinators. The first theme touched on the need for mentorship programs, the second on benefits of mentorship programs, and the final on recommendations emanating from either the literature or the lived experience of mentorship program coordinators.

Need for Mentorship Programs

Looking more closely at the scoping review and the reasons some nursing programs introduced mentorship programs, the need for mentorship was identified by either faculty or nursing students themselves. Some post-secondary institutions noted that students needed more assistance during their transition to university life (Dennison, 2010; Henderson et al., 2020; Lombardo et al., 2017; Mumba et al., 2023; Napierkowski & Migliore, 2022; Wong et al., 2016), while others focused more on developing nursing skills or academic success and retaining and developing a professional nursing identity (Green, 2018; Scheller et al., 2021; Wong et al., 2016). One nursing program recognized the need to develop a mentorship program for culturally and linguistically diverse students, given their greater attrition rates (Johnson et al., 2020; Lewis, 2021), and another focused on the need to develop leadership (Wong et al., 2016). For the most part, mentorship programs were established to enhance overall student success (Johnson et al., 2020) and decrease the stress and anxiety experienced by students (Kachaturoff et al., 2020).

Three institutions interviewed mentioned that their mentorship program was introduced based on a recognized need by faculty. Some saw their students struggling and feeling overwhelmed, whereas others were inspired by departments or universities that had already successfully established mentorship programs in their institutions. All programs involved a multi-step process for implementation and evaluation (see Table 2).

Benefits of Mentorship Programs

Many of the articles focused on the benefits of mentorship programs. These benefits can be divided according to the mentee and mentor perspectives.

Mentee Perspective. The present scoping review revealed that participating in a mentorship program generally decreased stress and anxiety for the mentees, whether it was related to their studies, their clinical rotation, or the program itself (Kim et al., 2013; Scheller et al., 2021; Wong et al., 2016). This was corroborated by the interview with the coordinator from Institution 6, who indicated that the mentees often felt overwhelmed in their studies. The mentorship program helped decrease their stress levels: “I think overall that it’s successful, and it kind of reduces their stress going into it because I know some people find it very overwhelming.”

These mentorship programs also helped increase overall mentee confidence, knowledge, and growth (Green, 2018; Henderson et al., 2020; Lombardo et al., 2017; Y. Nelson et al., 2018; Scheller et al., 2021).

Another benefit was that the mentees felt guided and supported and had a sense of wellbeing when around their mentors (Glass & Walter, 2000; Green, 2018; Lombardo et al., 2017; N. Nelson et al., 2018; Scheller et al., 2021; Scott, 2005; Sword et al., 2002; Wong et al., 2016), which translated into an increase in self-esteem (Glass & Walter, 2000; Green, 2018; Kostovich & Thurn, 2006; N. Nelson et al., 2018; Scott, 2005; Sword et al., 2002; Wong et al., 2016).

Some authors also found that mentees felt they had improved academic performances (Kim et al., 2013; Lombardo et al., 2017; Scheller et al., 2021; Sword et al., 2002; Wong et al., 2016) whereas others noted individual, personal, and professional growth (Green, 2018).

Mentor Perspective. Several authors found that mentors participating in the mentorship program increased and developed leadership skills (Bright, 2019; Flott et al., 2022; Henderson et al., 2020; Rosenau et al., 2015; Scott, 2005; Thomson et al., 2021; Wong et al., 2016) and communication skills (Bright, 2019; Rosenau et al., 2015; Thomson et al., 2021). Others noted an increase in confidence (Bright, 2019; Flott et al., 2022; Jacobsen et al., 2022; Secomb, 2008; Sibson & Machen, 2003; Wong et al., 2016) and emotional well-being (M. Hughes et al., 2020), while others found that mentors had a sense of increased self-worth, satisfaction, and a general feeling of pride by taking on this role (Dennison, 2010; Scott, 2005; Sword et al., 2002). Other studies found that bonds formed with other mentors was a positive outcome of the mentorship program (Bright, 2019; Rosenau et al., 2015). This was also emphasized by the interview with the Institution 6 mentorship coordinator, who indicated that friendships were made between mentors, quoting one of the mentors that participated in their program: “I have gained friendships from just being a mentor. We have a mentor group chat, so if we have questions for each other, it is helpful, and we help each other out and support each other.”

Many mentors felt their role motivated them to help others and to give back to other students (Flott et al., 2022; Mumba et al., 2023; Wong et al., 2016) and felt their role was nurturing (Henderson et al., 2020). Furthermore, mentors participating in the mentorship program were interested in learning more about the profession and had a desire for professional growth (Bowen et al., 2019; Dennison, 2010; Flott et al., 2022; Jacobsen et al., 2022; Y. Nelson et al., 2021; Rosenau et al., 2015; Secomb, 2008; Sword et al., 2002; Wong et al., 2016). The mentorship program also allowed the mentors to network with other mentors, faculty, and students, as well as gain respect from their peers and faculty members (Dennison, 2010).

Mutual Benefits. Lee and Chiang (2021) described the symbiotic relationship that exists between participants of a mentorship program in which the mentor provides guidance based on experience, and the mentee contributes to the mentor’s feelings of self-belonging. Mentees felt they were in a positive learning environment when the mentors enabled and facilitated their learning journey. This positive environment was fundamental to learning and personal as well as professional development. Rosenau et al. (2015) added that the mentors felt like positive role models and showed increased maturity. Lombardo et al. (2017) added to this by saying that the mentors helped increase the mentees’ sense of maturity thanks to their support.

Furthermore, the continuity of the positive mentor-mentee relationship throughout the program was deemed fundamental to the learning and development of both mentor and mentee (Bright, 2019; Mumba et al., 2023; Thomson et al., 2021). Communication was also an essential component of the mentoring program, and several authors found that the mentors and mentees developed more effective communication skills because of their participation in such a program (Kostovich & Thurn, 2013; Lewis, 2021; Thomson et al., 2021).

Recommendations

Many recommendations were provided in the literature and in speaking with mentorship program coordinators. These pertain to factors to consider in developing a mentorship program, adequate orientation, selection process and pairing, and communication, as described next.

There are *several factors to consider in developing a mentorship program*. McInnes et al. (2015) found that a sense of belonging was central to students gaining maximum benefit from the placement; other authors also found that feelings of inclusion and a sense of closeness during the program were important (Kostovich & Thurn, 2013; Scheller et al., 2021). Some authors also noted friendship was an integral part of the program's success as it enabled students to have a sense of belonging and grow and succeed in a secure environment (Glass & Walter, 2000). Another factor considered to contribute a successful program was having mentors who were flexible (Bright, 2019) but could manage their time wisely (Jacobsen et al., 2022; Wong et al., 2016). Otherwise, they would feel overwhelmed.

Several authors suggested that an *adequate orientation* for the mentors and mentees is vital to a program's success. Expectations, objectives, and roles must be identified and clarified (Botma et al., 2013; Flott et al., 2022; Henderson et al., 2020). However, other authors stressed the importance of having a certain amount of flexibility in how mentors and mentees connect and how the orientation workshops are provided (Lombardo et al., 2017). The information gathered from the interviews revealed that only some institutions provided an orientation, which included a range of activities, from giving out minimal information at some universities to providing PowerPoint presentations explaining roles and expectations.

The *selection process and pairing* of mentors and mentees are fundamental (Botma et al., 2013); dyads need to be compatible for the success of the program (Henderson et al., 2020; Lombardo et al., 2017). Glass and Walter (2000) indicated that the pairs should know each other. Our interviews revealed that all participating institutions had a pairing process in which both mentee and mentor filled out questionnaires to match common interests.

For the continued success of a mentorship program, Botma et al. (2013) stressed the importance of open *communication* between all parties involved and a feedback system to allow for improvement. Another recommendation is to survey students before, during, and after their participation in the mentorship program to receive feedback and evaluate and implement needed changes (Mumba et al., 2023). Scott (2005) suggested having one faculty or graduate student as the program coordinator.

Discussion

This scoping review focused on peer-mentorship programs within undergraduate nursing programs. It was a preliminary step to inform the development of a similar program in a francophone official language minority post-secondary institution in Western Canada. Through the review of extant literature and interviews with mentorship program coordinators across Canada, findings about the benefits and winning strategies for a successful program are well documented and put into practice. Similar to reviews by Wong et al. (2016) and Jacobs (2017), our scoping study found that mentorship programs were designed based on a perceived need expressed by faculty and students. Our scoping review revealed that student nurses—mentors and mentees—benefited from participating in the peer mentorship program, strengthening their learning capabilities and personal growth. Mentees had lower stress and anxiety levels and better academic performance and felt supported by their mentors. Together, these factors contributed to mentees feeling like part of a team and having an increased sense of cohesion and bond (Kostovich & Thurn, 2013). Participating in a mentorship program and reaping the rewards of having a positive experience has instilled the desire in some students to give back and become mentors themselves as they advance in the program (Wong et al., 2016). Another factor that influenced the

success of mentorship programs is the timing of implementation. Lo (2002) indicated that a mentorship program should be implemented before the students (mentees) reach their third year. The mentees in most of the studies we looked at were in their first year of their undergraduate program.

The mentoring role requires that mentors be current on best practices in nursing knowledge and mentoring skills. Mentors learned that mentoring could be a complex and demanding task and could strengthen their role-related self-confidence. Being a mentor made them more prepared and motivated to mentor others, and they wanted to give back. It allowed them to understand the nursing role and become an active participant in their own learning and professional development (Jacobsen et al., 2022). Several studies, including Rosenau et al. (2015), found that mentors developed leadership skills, along with other skills such as communicating, listening, patience, networking, and collaborating, all of which are integral to entry-level competencies. One of the entry-level competencies, as cited in the *Entry-Level Competencies (ELCs) for the Practice of Registered Nurses (2019)* document (College of Registered Nurses of Manitoba, 2019), is the principle of leadership. Competencies 6.2, 6.3, and 6.4 refer to how nurses integrate quality improvement elements into practice, how they are active participants in creative client-centred care, and how they help to create healthy and psychologically safe work environments, respectively. Acting as student mentors demonstrates these principles and paves the way for these students to become positive role models who effect positive change within their work environments. It is evident through our scoping review that mentorship programs have many benefits, not only for mentees but for mentors as well.

Adequate training and support for mentors appears to be an essential factor to consider for the success of a mentorship program. Our scoping review revealed that there are numerous ways in which mentors are trained and prepared for their roles. Some programs offer more guidance on the role of a mentor and how often there should be contact with mentees. However, no consistent method has been proposed for training mentors. Although most programs demonstrated some success, it is difficult to ascertain whether the type and mode of mentor training had an impact. Further studies are warranted to investigate the impact of the type of training on the success of such programs. A better understanding of the mandatory training required by mentors, to assist them in how to best navigate the mentor-mentee relationship—including having difficult conversations—would be helpful. Furthermore, as little has been done about evaluating such programs, evaluation tools and processes should be better documented.

Finally, the adaptation of mentorship programs to better serve equity-deserving mentors and mentees should be prioritized. Mentorship programs should embed cultural safety and allyship training for the mentors and coordinators so that mentors and mentees can have open dialogues on racism and discrimination in the nursing profession.

Another considerable difference between mentorship programs observed in this scoping review was the different mentors to mentees ratios. As noted in Table 3, ratios and pairing of mentors with mentees were done differently in most programs, with no stated rationale. This reflects the differing views of some others such as Y. Nelson et al. (2021) who wrote that one could posit that the ratio is not as crucial as the appropriate pairing of mentors to mentees, given the diversity of students in nursing programs today. Lo (2002) suggested, however, that it would be beneficial to have a formalized pairing process, and Ketola (2009) proposed that students be involved in the pairing process. Given the literature gap and differing views, this warrants further studies.

Based on our findings, nursing students do not participate in campus-wide mentorship programs with other faculties involved. Nursing students have unique needs with different demands and benefit from a mentorship program that is tailored and adapted to these elements. A separate mentorship program for nursing students is essential, as opposed to a mentorship program offered to the general student population at some universities. Therefore, one could posit that nursing students require mentorship programs adapted to their unique context and challenges. However, further studies are warranted, given the lack of evidence for undergraduate peer-mentorship design, implementation, and evaluation. Despite the shortcomings in the literature, the benefits of peer mentorship programs in undergraduate nursing programs are evident.

Conclusion

This scoping review permitted us to identify gaps in the research and provide future directions and recommendations regarding peer-mentorship programs in undergraduate nursing programs within post-secondary educational institutions. This review provided information that can be used to inform the design and implementation of future peer-mentorship programs. Studies need to be more robust in the details related to implementation to see and compare how different mentorship programs succeed in various settings. Schools of nursing that want to integrate a mentorship program must be conscious of specific needs and student populations, as there does not appear to be a one-size-fits-all approach to mentorship programs.

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