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Understanding Belonging in Practice Placements – A Scoping Review of Studies Examining Health Professional Student Belonging

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Abstract

Background

Practice placements are an opportunity for health professional students to apply knowledge and skills in real-world environments. A growing body of evidence links students' sense of belonging to enhanced learning and motivation in higher education. Given that placements bridge the academic and workplace environments, students' experiences of belonging during these periods may significantly influence their professional development. This scoping review aims to identify and synthesise the literature that examines health professional students' belonging during practice placements.

Methods

This scoping review used the Arksey and O'Malley (2005) methodological framework incorporating a consultation phase as proposed by Levac et al. (2010). PubMed, EmBase, ERIC, PsycINFO, CINAHL and Scopus databases were searched in May 2024, March 2025 and March 2026. Data analysis occurred via descriptive summaries.

Results

Four themes were identified; belonging as a lived experience, belonging as an ongoing process, the broader impacts of belonging, and interpersonal relationships as a key influence on belonging. Most of the identified studies examined nursing students as the primary population.

Conclusion

Health professional students experience both belonging and non-belonging during practice placements, shaping their behaviours, interpersonal relationships, and engagement with learning. These experiences have implications not only for individual student outcomes but also for broader educational and health system performance.

I INTRODUCTION

Practice placements provide a critical opportunity for health professional students to apply university-acquired knowledge and skills in authentic clinical settings (Nyoni et al., 2021). Health professional students are assessed in clinical settings, and their progression to graduation depends on practice placement success. Although admission to many health professions programs is based on academic achievement, evidence shows that academic performance during formal learning alone does not predict placement outcomes (Kirchner et al., 2001). Supporting this, a recent scoping review identified correlations between learner characteristics such as interpersonal skills and placement success for occupational therapy and physiotherapy students (Horwitz et al., 2023). Interpersonal skills that support effective relationship building, such as active listening, verbal, and non-verbal communication skills were associated with higher placement evaluation scores (Horwitz et al., 2023). Practice placements are core components of health professional programs, requiring academic proficiency alongside the interpersonal skills that underpin clinical and learning relationships.

Baumeister and Leary (1995) describe belonging, or the desire for interpersonal attachments, as a fundamental human need and one of the most integrative constructs available to understand human nature. Although no universal definition exists, an example from mental health literature outlines belonging as, “the experience of personal involvement in a system or environment so that persons feel themselves to be an integral part of that system or environment” (Hagerty et al., 1992, p. 173). Belonging has been linked to cognitive, emotional and behavioural processes, as well as health and wellbeing (Baumeister & Leary, 1995), all of which can shape students’ performance during practice placements. Practice placements expose students to complex situations that require them to manage cognitive, emotional, and behavioural responses while applying academic knowledge to deliver patient care and contribute to the team. Students’ sense of belonging shapes how they navigate the complex demands of practice placements. Consequently, belongingness has been proposed as a lens to understand the challenges some students experience during practice placements (Levett-Jones et al., 2007).

A growing body of literature has examined belongingness within health professions education. Levett-Jones and Lathlean (2008) demonstrated that nursing students’ motivation and capacity for learning on placement were significantly influenced by their sense of belonging. In a scoping review, Singer et al. (2022) found that belongingness in the clinical learning environment contributes to positive learning experiences and increased satisfaction, and that environmental, relational and experiential factors can be optimised to promote it. Vivekananda-Schmidt and Sanders (2018) explored the relationship between belongingness, academic performance, and mental wellbeing in higher education and health professions education, finding that belongingness influenced both academic performance and mental wellbeing of learners in both contexts. They also noted that students’ sense of belonging was shaped by socio-cultural environments, such as practice placements, rather than being a fixed individual trait, highlighting that future research should consider both learners and the learning environments. Belonging warrants further investigation because it influences students’ learning, wellbeing, and professional identity formation, with downstream implications for workforce engagement and retention.

Currently, no literature has been identified that unites studies investigating health professional students’ experience of belonging in the context of practice placements. To address this gap, a scoping review methodology was selected to explore what findings have been reported in studies that examine health professional students’ belonging during practice placements and to examine this literature across all health professions. The research team adopted an inclusive approach to the range of health professions to avoid arbitrary disciplinary exclusions, identify profession-specific gaps, and enable comparison of patterns and discrepancies across professional groups. This exploration sought to identify how belonging has been defined in this context, highlight professional groups represented in the literature, and synthesise themes related to health professional students’ belonging within practice placements.

II METHOD

This scoping review followed the Arksey and O'Malley (2005) methodological framework for conducting scoping reviews incorporating updates proposed by Levac et al. (2010). Levac et al. (2010) proposed that a consultation phase adds methodological rigour to a scoping review. For this study, the consultation phase informed the selection of search terminology prior to the formal search. Therefore, six stages are reported which is inclusive of the first stage being split: (1) identify the research question, (1a) engage in a consultation phase (2) identify relevant studies, (3) study selection, (4) chart the data, (5) report the results (Arksey & O'Malley, 2005). Reporting was guided by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-Scr) (Tricco et al., 2018).

A Stage 1 – Identify the research question.

The research question was, what findings have been reported in studies that examine health professional students' belonging during practice placements?

B Stage 1a: – Consultation phase (Stage 6 in Levac et al., 2010)

Initial search terms were developed by the research team using a concept, context, and population formula. Search terms were refined in consultation with a university librarian and informed by search strategies, keyword lists, and definitions drawn from relevant literature. After drafting the refined search terms, six university practice placement coordinators were consulted via email between stages 1 and 2 of the review process to provide feedback on the terminology. This consultation, reflecting a knowledge transfer mechanism (Levac et al., 2010), was an opportunity for stakeholder groups to reflect more broadly on the study aim and to align stakeholders with the focus of the study. The consultation exercise resulted in one additional context related search term, work-integrated-learning, to be included.

C Stage 2 – Identifying relevant studies

With support from a university librarian a systematic search of MEDLINE, Embase, ERIC, PsycInfo, CINAHL and Scopus, was conducted in May 2024. The search used the keywords (clinical placement* OR practice placement OR fieldwork OR clinical learning OR work integrated learning) AND (belonging OR belongingness OR connection OR security OR acceptance OR experience OR views OR perception) ADJ4 (student* OR health profession student) NOT (systematic review OR review OR clinical trial protocol OR clinical conference OR case reports) and incorporated a validated filter to optimise retrieval of qualitative studies, particularly where methodological labelling is inconsistent (DeJean et al., 2016). Date range limitations were not applied to the initial search which yielded 6,385 studies. The search procedure was repeated in March 2025 and March 2026 with date limits applied to capture new publications.

D Stage 3 – Study selection

Before formal screening, the research team piloted the inclusion and exclusion criteria using an approximate 10% sample, consisting of 33 randomly selected studies. The final inclusion and exclusion criteria are presented in Table 1. Covidence software was used to support record screening, with all authors serving as independent reviewers for both title and abstract, and full text screening. The first author (KB) screened all studies, with Covidence software enabling independent second reviews by one of the other authors (FP, RF, AP). Discrepancies were resolved through team discussion and confirmed by a third author (FP, RF, or AP), this process was applied consistently across both screening stages. The reference lists of the 28 eligible full text studies were screened by the first author, identifying seven additional studies for consideration. The seven additional studies underwent the same screening process as the initial set and were all subsequently included in the review. Repeated searches in March 2025 and

March 2026 using identical search procedures, yielded six additional studies. In total, 41 studies met the eligibility criteria and underwent data extraction. The PRISMA (Moher et al., 2009) flowchart is included as Figure 1.

Table 1

Inclusion and exclusion criteria

Inclusion criteria:

The aim of the study was to examine belonging, belongingness or sense of belonging and/or a concept aligned with belonging such as connection or acceptance.

The study occurred in the context of placement/s or retrospectively examined placement experiences.

Study participants were adults aged 18+ enrolled in a health profession program at a university.

Primary study published in peer reviewed journal.

Exclusion criteria:

Studies that used simulated patients in simulated environments.

Participants were under 18 and/or enrolled in a school setting.

Participants were enrolled in a health program at a vocational institution.

Participants were already registered health professionals.

Study not available in English language.

Review papers, thesis or opinion pieces.

Figure 1.

PRISMA flowchart outlining screening process (Moher et al., 2009)

Identification

6,385 records identified through database searching:
Medline – 1,775, Embase – 270, ERIC – 526, PsycINFO – 502, CINAHL – 1,550,
Scopus – 1,762

Duplicates removed – 3,068

Screening

Records screened by title and abstract – 3,317

Records excluded – 3,265
Duplicate – 1

Eligibility

Full-text studies identified for eligibility assessment – 51

Full text studies excluded due to not meeting inclusion criteria – 23

Studies remaining after full text eligibility assessment – 28

Studies identified through reference list screening that met inclusion criteria – 7

Included

Search update 2025; additional studies meeting the inclusion criteria – 3
Search update 2026; additional studies meeting the inclusion criteria – 3

Studies included in scoping review – 41

E Stage 4 - Charting the data

The research team piloted the data extraction template using six randomly selected studies. Team discussion determined the following data extraction categories; a) citation details of title, journal, author/s, year of publication and country of origin, b) methodology including the name of any assessment or measure of belongingness used in the study, c) population characteristics including health profession and year of program d) placement context of setting, model and length of placement, e) concept characteristics including; definitions of belonging, quantitative results, qualitative themes or summaries. The first author completed data extraction for all included studies, while the remaining authors independently extracted data from subsets of the studies as second reviewers. The first author compared the two data-extraction sets for each study, and discrepancies were resolved through discussion at a team meeting involving at least three researchers.

III RESULTS

A total of 41 studies were included in the final review. A summary of each study's population group, methodology, study aim, and key finding related to health professional students' belonging during practice placement is presented as an Appendix.

Synthesis of results

The first two aims were addressed using quantitative analysis of categorical data (i.e., frequencies), which identified the most common definitions of belonging and the professional groups represented within the literature. The third aim was addressed through a four-step qualitative synthesis: (a) familiarisation with the extracted data; (b) identification of key findings related to the concept of belonging for health professional students on placement; (c) generation of codes; and (d) grouping of codes into overarching themes. The research team met regularly to review and refine codes and themes until consensus was reached.

Description of included studies

Studies were undertaken within nine different countries with seven (17%) multinational studies. Of these, there were six from Australia and the United Kingdom, and one from Australia and Canada. The remaining 34 studies were from Canada (n=9), the United States of America (n=8), the United Kingdom (n=5), Iran (n=5), Australia (n=3), Turkey (n=1), Sweden (n=1), Saudi Arabia (n=1), and Japan (n=1). The date range was from 2002 – 2026, 29 studies (76%) were published between 2014 – 2025, including notable peaks in 2016, 2019, and 2024. Date range limits were not applied to our initial search; it is unlikely that earlier eligible studies have been published. The study design of each paper is specified in the Appendix. Of the 41 studies, 17 (42%) reported on quantitative methodologies, 19 (46%) reported on qualitative methodologies and five (12%) reported on mixed methods approaches. There was one interventional study which was a pre-test, post-test, control group design.

Representation of health professions in the literature

The population or profession/s of each study was identified and then grouped into the following categories, nursing and/or midwifery, nursing and allied health, medical professions, allied health professions, and unspecified health professions. Of the 41 included studies, 34 (83%) focused on nursing and/or midwifery. There were four studies (10%) from the medical professions, and one from each category of nursing and allied health, allied health professions (physiotherapy), and unspecified health professions. The Appendix outlines the professional group or groups represented within each study.

F Definition of belonging

The most frequently referenced definition of belonging, appearing in 15 of the 41 included studies was,

“Belongingness is a deeply personal and contextually mediated experience that evolves in response to the degree to which an individual feels (a) secure, accepted, included, valued and respected by a defined group, (b) connected with or integral to the group, and (c) that their professional and/or personal values are in harmony with those of the group. The experience of belongingness may evolve passively in response to the actions of the group to which one aspires to belong and/or actively through the actions initiated by the individual.” (Levett-Jones & Lathlean, 2008, p. 104)

This definition emerged through participant data from Levett-Jones and colleagues’ mixed-method, multi-site study reported across multiple papers (Levett-Jones & Lathlean, 2009a; Levett-Jones et al., 2008, 2009b). Levett-Jones and Lathlean (2007) acknowledge the work of Baumeister and Leary (1995) and Somers (1999) in the development of their definition. Several papers referred to Baumeister and Leary (1995) and/or Baumeister and Leary (1995); Somers (1999) when describing belonging; however, each of these papers incorporated the work of additional researchers to define belonging for their studies (Borrott et al., 2016; Drysdale et al., 2021; Jutsum et al., 2025; Levett-Jones & Lathlean, 2007; Lindenfeld, 2025; Poole et al., 2023; Sedgwick & Kellett, 2015). Table 2 presents the key definitions of belonging identified within this review.

Table 2

Key definitions of belonging identified within this review

Author	Definition	Referenced in
Levett-Jones & Lathlean, 2008	Belongingness is a deeply personal and contextually mediated experience that evolves in response to the degree to which an individual feels (a) secure, accepted, included, valued and respected by a defined group, (b) connected with or integral to the group, and (c) that their professional and/or personal values are in harmony with those of the group. The experience of belongingness may evolve passively in response to the actions of the group to which one aspires to belong and/or actively through the actions initiated by the individual.	Ashktorab et al., 2017; Ashktorab et al., 2015; Carithers et al., 2025; Daniels et al., 2020; Honda et al., 2016; Levett-Jones et al., 2008, 2009b; Levett-Jones & Lathlean, 2008, 2009a, 2009b; McAvoy & Waite, 2019; McKenna et al., 2013; Poole et al., 2023; Sedgwick & Yonge, 2008; Singer et al., 2024
Baumeister & Leary, 1995	Belongingness is a universal, fundamental human need. Need or drive to form and maintain interpersonal relationships. Exerts a powerful influence on cognitive processes, emotional patterns, behavioural responses, and health and wellbeing.	Borrott et al., 2016; Jutsum et al., 2025 Lindenfeld, 2025 Drysdale et al., 2021; Sedgwick & Kellert, 2015
Somers, 1999	Belongingness is 'the need to be and perception of being involved with others at differing interpersonal levels.... which contributes to one's sense of connectedness (being part of, feeling accepted, and fitting in) and esteem (being cared about, valued and respected by others.	Levett-Jones & Lathlean, 2007;

Identifying tools used to measure belonging was not an explicit aim of this review. However, because 22 studies (54%) used such tools, we have reported them. Table 3 outlines the belonging-measurement tools identified in the review and the studies in which they were applied. The most frequently cited was the Belongingness Scale: Clinical Placement Experience (BES-

CPE) (Levett-Jones et al., 2009a). Nineteen studies included the BES-CPE tool as at least one measure. Several papers incorporated assessment tools that measured concepts other than belonging in addition to the BES-CPE (Borrott et al., 2016; Grobecker, 2016; Nease et al., 2026; Pourteimour, Jamshidi, et al., 2021; Pourteimour, Nobahar, et al., 2021). Two studies reported on specific author designed tools (Daniels et al., 2020; Singer et al., 2024).

Table 3

Belonging assessment tools

Assessment tool & reference	Cited in
Belongingness Scale – Clinical Placement Experience (BES – CPE) (Levett-Jones et al., 2009a)	Ashktorab et al., 2015; Borrott et al., 2016; Carithers et al., 2025; Grobecker, 2016; Honda et al., 2016; Levett-Jones & Lathlean, 2009a; Levett-Jones et al., 2008; Lindenfeld, 2024; Lindenfeld, 2025; McKenna et al., 2013; Nease et al., 2026; Poole et al., 2023; Pourteimour, Jamshidi, et al., 2021; Pourteimour, Nobahar, et al., 2021; Saadabakht et al., 2019; Sedgwick, 2013; Sedgwick et al., 2014; Sedgwick & Kellert, 2015; Singer et al., 2024
Need to belong scale (NTBS) (Leary et al., 2013)	Borrott et al., 2016
Sense of Belonging Scale (Hurtado & Ponjuan, 2005)	Drysdale et al., 2021 (Authors used a modified version of this scale.)

G Themes

Four key themes were generated from reviewed studies: (1) belonging as a lived experience, (2) belonging as an ongoing process, (3) the broader impacts of belonging, and (4) interpersonal relationships as a key influence on belonging. The appendix provides a summary of key findings from the included studies that examine health professional students' belonging during practice placements.

1 Theme 1 – Belonging as a lived experience

Qualitative findings indicate that students' sense of belonging is an evolving experience influenced by the placement context and interpersonal dynamics. Students used their early impressions of placement as a barometer for belonging (Levett-Jones et al., 2009b) with a perceived degree of friendliness from placement staff identified as a marker for belonging (Carithers et al., 2025; Sedgwick et al., 2014). The experience of belonging was multifaceted with students describing feeling accepted (Albloushi et al., 2019; Ashktorab et al., 2015; Bullock et al., 2024; Honda et al., 2016; Levett-Jones & Lathlean, 2008, 2009a; Levett-Jones et al., 2009b; McKenna et al., 2013; van der Riet et al., 2018) and feeling valued (Honda et al., 2016; Levett-Jones & Lathlean, 2009a; Levett-Jones et al., 2009b; McAvoy & Waite, 2019) as integral to a sense of belonging. For example, when students were welcomed to placement and felt included within daily routines by staff, interpersonal relationships could begin to develop and this fostered students' experience of belonging (Carithers et al., 2025; Honda et al., 2016; Levett-Jones & Lathlean, 2009a; Levett-Jones et al., 2009b). Feeling worthy (Ashktorab et al., 2017) and safe (Albloushi et al., 2019; Ashktorab et al., 2017; Bullock et al., 2024) were also highlighted as important components of the experience of belonging. Students sense of belonging was nurtured when they felt like they mattered to staff (Rae et al., 2024) and when the placement environment was one of dignity and respect (Ashktorab et al., 2017). Nursing students conceptualised belongingness as gaining entry into the nursing atmosphere; a privileged space of learning and socialisation opportunities unique to each setting (Kern et al., 2013).

The desire for belonging was consistent across cultures (Albloushi et al., 2019; Ashktorab et al., 2017; Ashktorab et al., 2015; Honda et al., 2016) however the experience of belonging was noted to be culturally mediated (Honda et al., 2016; Sedgwick et al., 2014). Mean BES-CPE

belonging scores differed between different cultural groups of the same profession (Ashktorab et al., 2015; Honda et al., 2016) with unique customs, for example Japan's strong social hierarchy influential on this result (Honda et al., 2016). Sedgwick et al. (2014) reported nursing students who identified as First Nations or Aboriginal, Asian or 'other' race felt discriminated against during placement examinations and perceived they were disliked compared to their Caucasian peers. In rural contexts, belonging was crucial for health professional students undertaking placements with limited options outside of the placement for students to have their belonging needs met (Sedgwick & Yonge, 2008). Teamwork and being able to become part of the team were identified as essential for belongingness in rural contexts (Sedgwick & Yonge, 2008).

Students from minority groups reported a weaker sense of belonging than their cohort peers. Using the BES-CPE, Sedgwick and Kellett (2015) found no overall gender differences in belonging among nursing students on placement, but item-level analyses indicated that male students experiences marginalisation and discrimination as the non-dominant gender. . Singer et al. (2024) observed lower belongingness scores among non-binary or gender-non-conforming students relative to male or female peers, though the difference was not statistically significant. Students' who identify as a sexual minority reported significantly lower belonging during work-integrated learning than their heterosexual peers (Drysdale et al., 2021). The phenomenon extended to the experience of students who were completing nursing as their second degree. Sedgwick (2013) reported that students in an accelerated second-degree program (n=47) experienced lower belonging than their peers in a traditional undergraduate format (n=408). Students of minority groups may experience challenge compared to their majority peers in achieving a sense of belonging in placement contexts.

The experience of belonging appears to include profession-specific nuances that differ across professional groups (McKenna et al., 2013; Poole et al., 2023). In a validation study of the BES-CPE, physiotherapy students ranked the same five items highest as nursing students, but differed in the items they viewed least important to the experience of belonging (Poole et al., 2023). McKenna et al. (2013) also implemented the BES-CPE finding midwifery students experienced a sense of belonging during practice placements, however, rated different items as more important compared to their nursing counterparts.

Several student factors were identified that influenced students' belonging experience during practice placements including academic factors (Albloushi et al., 2019), having to repeat a course (Singer et al., 2024), preparation for the complexity of clinical practice (Levett-Jones & Lathlean, 2008), clinical competence and interpersonal skills (Kern et al., 2013) and students expectations of themselves, others, and the clinical environment (Sedgwick & Rougeau, 2010). Identity concordance or finding people with similar characteristics in the placement context supported belongingness (Bullock et al., 2024). Staff factors also influenced students experience of belonging including the attitudes of staff (Albloushi et al., 2019; Singer et al., 2024) and actions of staff, such as using their influence to shape relationships and student learning opportunities (Carithers et al., 2025; Manokore et al., 2019; Sedgwick & Yonge, 2008).

The studies also highlighted that students lived experience of placement included moments of non-belonging. Levett-Jones and Lathlean (2009b) described students' experiences on a continuum that spanned from belongingness to alienation. Student related factors such as a misalignment in perceived abilities between the students and practice setting (Ashktorab et al., 2017) or having inadequate skills for the setting resulted in experiences of non-belonging which were described as feeling unsupported, unappreciated and rejected (Albloushi et al., 2019). External factors such as witnessing or experiencing horizontal violence or incivility, for example being ignored or humiliated, were associated with decreased belonging (Jutsum et al., 2025; Sukut & Ayhan, 2022). Students experienced dissatisfaction, alienation, disempowerment, and distress during placements when they were overtly rejected or excluded by staff or when their values clash with those of the workplace (Levett-Jones & Lathlean, 2007). Achieving belonging was prioritised over learning for students undertaking placements (Levett-Jones & Lathlean, 2009a; McAvoy & Waite, 2019). Together, these findings highlight a need for continued inquiry

into the processes influencing students' experiences of belonging and non-belonging during placements.

2 Theme 2 – *Belonging as an ongoing process*

The experience of belonging was revealed to be an evolving process rather than a fixed state. Students described belonging in clinical learning environments as an evolving process of positioning for belonging, persevering for belonging and entering into belonging; a privileged space unique to each placement where students access rich learning opportunities unavailable to outsiders (Kern et al., 2013). When students were self-directed and prepared for placements in advance this positioned them for belonging during placement (Kern et al., 2013). Teaching key capabilities associated with belonging, such as communication skills, before placement can support students' preparation for belonging during placement (Saadatbakht et al., 2019; Sedgwick & Rougeau, 2010; Singer et al., 2024). Implemented throughout an orientation and onboarding phase, strategies such as pre-arrival information, provision of orientation, and induction processes supported student belonging (Manokore et al., 2019; Rowland & Trueman, 2024; Singer et al., 2024) and student safety and security (Levett-Jones & Lathlean, 2009a).

Placements have a settling-in phase at the beginning where students focus on forming critical relationships (Levett-Jones et al., 2008), and orientating to the routines of the facility (Levett-Jones & Lathlean, 2009a). Levett-Jones and Lathlean (2009a) observed a settling-in phase of between two and four weeks. Establishment of key interpersonal relationships allowed students to progress from outsider to team member during the settling-in phase however, was accompanied by feelings of anxiety and uncertainty (Levett-Jones et al., 2008). A warm welcome was highly motivating for students (Levett-Jones et al., 2009b) and it emerged as important that all staff were prepared to welcome students and be mindful of their interpersonal interactions (Carithers et al., 2025; Sedgwick & Rougeau, 2010). Once students felt settled in a placement an integration phase followed where learning became the focus and students' sense of belonging was strengthened (Levett-Jones et al., 2008). Developing and refining clinical competencies characterised students perseverance for belongingness in the placement setting (Kern et al., 2013). Rae et al. (2024) investigated co-creation, an inherently relational education approach that promotes belongingness in higher education, as a tool in the clinical learning environment. The researchers found when medical students became co-creators of a learning bulletin alongside clinicians, the students experienced identity maturation and perspective shifts that allowed them to belong as themselves in the clinical learning environment (Rae et al., 2024). Students' progression through settling-in and integration phases of placement appeared to benefit from extended timeframes, suggesting placement duration plays an important role in shaping students experience of belonging.

While placement duration appeared to shape students' ability to develop a sense of belonging, the data across studies were conflicting. Two studies (Roxburgh, 2014; van der Riet et al., 2018) explored student experiences of extended placement models that allowed students more time in the clinical learning area to familiarise themselves with the location, staff and clinical practices. Students' experiences in both studies aligned with increased sense of belongingness (Roxburgh, 2014; van der Riet et al., 2018) with Roxburgh (2014) noting traits of resilience and self-confidence in learning and van der Riet et al. (2018) reporting the potential for reduced stress. Shorter-duration placement models appeared to negatively affect students' ability to navigate the settling-in phase which in turn impacted their belongingness (Levett-Jones & Lathlean, 2009a; Levett-Jones et al., 2008). Longer duration placement models allowed students time to develop an increased sense of belonging (Levett-Jones et al., 2008; Roxburgh, 2014) and to consolidate interpersonal relationships (Levett-Jones & Lathlean, 2009a). However, when nursing students were exposed to a greater number of preceptors, as placement hours increased (beyond 200 hours), belongingness scores were significantly lower (Nease et al., 2026). Additionally, students perception that their placement lasted long enough was linked to higher belongingness scores (Singer et al., 2024). These mixed findings suggest that the influence of placement duration on belonging reflects an ongoing, dynamic process that warrants further investigation.

3 Theme 3 – The broader impacts of belonging or non-belonging

Across the reviewed studies, belonging and learning were consistently linked. Students perceived belongingness had a positive impact on their learning, and non-belonging had a negative impact on their learning (McAvoy & Waite, 2019). Increased belongingness was associated with increased motivation to learn (Albloushi et al., 2019; Levett-Jones & Lathlean, 2007, 2008, 2009a) with Levett-Jones and Lathlean (2007) noting the degree of belongingness largely determined students' learning and participation during placement. Daniels et al. (2020) developed a tool to measure belongingness, positioning belonging as a proxy for participation and learning, and indicated the tool may assist in evaluating teaching and learning in clinical settings. Thus, belonging may enhance learning for students in clinical learning environments, with effects that extend to students' wellbeing.

Achieving a sense of belonging supported students' mental health whilst undertaking practice placements, with students from minority groups among the most likely to benefit from additional supports (Drysdale et al., 2021). Non-belonging was associated with deleterious emotional and psychological impacts in multiple studies (Albloushi et al., 2019; Levett-Jones & Lathlean, 2007, 2008; Levett-Jones et al., 2009b; Sedgwick & Yonge, 2008). Experiences of isolation, exclusion or rejection resulted in students feeling distressed and anxious (Albloushi et al., 2019). When staff were perceived as unfriendly or unwilling to work with them students reported feelings of alienation such as unease and distress (Levett-Jones & Lathlean, 2007). Grobecker (2016) found a statistically significant inverse relationship between students' sense of belonging and their perceived stress, with higher belonging associated with lower stress. In male nursing students, belongingness showed a weak positive relationship with persistence, with efficacy focused interventions proposed to strengthen persistence (Lindenfeld, 2024, 2025). Strategies intended to enhance students' sense of belonging such as, longer placement models (Levett-Jones et al., 2008; Roxburgh, 2014; van der Riet et al., 2018), orientation and induction (Manokore et al., 2019; Rowland & Trueman, 2024; Singer et al., 2024), and a warm welcome (Levett-Jones et al., 2009b) are likely to also support students' mental health during placements.

A sense of belonging developed during practice placements may shape students' professional development and future career decisions. Students' sense of belonging during placements can directly or indirectly influence their career and employment decision making (Borrott et al., 2016; Jutsum et al., 2025; Levett-Jones & Lathlean, 2008; Sedgwick & Yonge, 2008; van der Riet et al., 2018). Borrott et al. (2016) reported a strong correlation between student's sense of belonging and workplace satisfaction, a key determinant of career decision making. Witnessing or experiencing horizontal violence or incivility was associated with lower sense of belonging and thoughts of leaving the profession (Jutsum et al., 2025; Sukut & Ayhan, 2022). These findings draw attention to the influence of belongingness for students as they navigate career decisions and pursue alignment between personal, profession-based and workplace values.

A sense of belonging was shown to influence students' professional behaviours. Higher perceived belongingness was associated with positive professional behaviours (Pourtéimour, Nobahar, et al., 2021) and may be associated with improved patient care (Grobecker, 2016). Concerningly, fear of alienation led students to remain silent when witnessing poor practice (Honda et al., 2016) and overlook unsafe or questionable behaviours to fit in, prioritising belonging over learning (Levett-Jones & Lathlean, 2008). When students felt insecure, ostracised or isolated they were more willing to conform to poor practices (Levett-Jones & Lathlean, 2009b). Pressure to conform to practice, was seen to negatively affect students learning and belonging (McAvoy & Waite, 2019). Despite complying with questionable behaviours, students did not necessarily adopt the values and norms of those behaviours, remaining cognisant of the breeched boundaries (Levett-Jones & Lathlean, 2009b), and in some cases choosing to exclude themselves (Jutsum et al., 2025; Levett-Jones & Lathlean, 2007). These findings underscore that belonging influences students' professional behaviours in ways that affect not only their learning but also patient safety and care.

4 Theme 4 – interpersonal relationships as a key influence on belonging.

Interpersonal relationships, especially between students and educators, were consistently identified as central to fostering belonging during practice placements (Ashktorab et al., 2017; Levett-Jones et al., 2009b; Manokore et al., 2019; Rowland & Trueman, 2024; Sedgwick, 2013; Sedgwick & Rougeau, 2010; Sedgwick & Yonge, 2008; Singer et al., 2024). One-on-one relationships between students and staff were statistically significant in impacting students' belongingness scores, and students' perception of staff having a positive attitude were reported as clinically significant for belonging (Singer et al., 2024). Opportunities to build relationships with staff supported belonging for students (Kern et al., 2013; van der Riet et al., 2018) and achieving belonging provided access to privileged professional relationships (Kern et al., 2013) that enabled learning experiences. Pathways to belonging through interpersonal relationships emerged as a dynamic and reciprocal process influenced by many factors, including those related to students, educators and broader staff in a placement context (Sedgwick & Rougeau, 2010; Sedgwick & Yonge, 2008). Among these factors, students have an important role, in contributing to the interpersonal relationships formed with their educators.

Successful student-educator relationships were characterised by students' active engagement in the relationship to build a connection. Connected student-educator relationships were egalitarian rather than hierarchical and co-participative, with students' beliefs and expectations influencing the relationship (Gillespie, 2002). Interpersonal relationships were consolidated when students sought acceptance, were able to reconcile their values with those of the placement and worked with the receptiveness of staff and educators (Levett-Jones & Lathlean, 2009a). The ability to navigate interpersonal relationships during practice placements allowed students to shift their focus towards learning (Levett-Jones et al., 2008). Appreciation of the student factors within student-educator relationships provides a foundation for examining the educator factors that influence this relationship.

Educators played a key role in guiding the interpersonal relationship with students, fostering connections and a sense of belonging, and supporting learning. When educators were able to navigate relational dynamics to achieve a good fit with students, this positively influenced students' motivation and focus for learning (Gillespie, 2002). Driven by educators, a successful blend of challenge with support increased students' belongingness and learning (Levett-Jones et al., 2009b). Students perceived positive educator attributes as the ability to build mutual respect and acknowledge teaching as a core responsibility (Roxburgh, 2014). Providing feedback in a way that supported learning whilst maintaining the relationship was an important skill for educators to possess (Gillespie, 2002; Kern et al., 2013). The reviewed literature identifies these relational and teaching skills as crucial for educators and highlights the need for research into how best to support their development during placements.

Educators' collegial relationships were found to impact students' belonging and acceptance within the wider team (Sedgwick & Yonge, 2008). When educators had strong relationships with colleagues, students reported a sense of belonging; however strained collegial relationships this negatively affected students' interactions with the broader team (Sedgwick & Yonge, 2008) making belonging more difficult to achieve. Across multiple studies, exclusion from workplace activities or indifference from staff further diminished students' sense of belonging (Carithers et al., 2025; Honda et al., 2016; Kern et al., 2013; Levett-Jones & Lathlean, 2007; Levett-Jones et al., 2009b; McAvoy & Waite, 2019). Practice placement contexts are therefore characterised by complex, interrelated interpersonal relationships that collectively shape students' sense of belonging.

IV DISCUSSION

This scoping review aimed to summarise and synthesise what is known about health professional students' experience of belonging during practice placements. The results identified

41 papers that either measured or sought to understand health professional students' experiences of belonging during practice placements. Most papers collected data retrospectively by asking participants to reflect on placement experiences or via cross-sectional survey after practice placements had concluded. One paper used student journal analysis as a data collection strategy (Sedgwick & Yonge, 2008). There is opportunity to compliment the current literature with methodologies that incorporate data collected from participants during their placement experience, as this may enrich subsequent reflections captured through traditional interview processes. Baumeister and Leary, draw attention to this opportunity alongside further recommendations such as attention to conceptual clarity and precise definition of constructs (Allen et al., 2022).

Most studies offered a definition or conceptualisation of belonging that enhanced conceptual clarity within the context of the study. The most frequently presented definition, appearing in 15 or the 41 studies was Levett-Jones and Lathlean (2008). Several papers provided a definition or conceptualisation of belonging tailored to the specific study context (Borrott et al., 2016; Drysdale et al., 2021; Kern et al., 2013; Pourteimour, Nobahar, et al., 2021; Rae et al., 2024; Sukut & Ayhan, 2022). Commonly cited conceptualisations of belonging, originating from contexts outside those included in this review, focus on individual and pair-bond relationships (Baumeister & Leary, 1995), or personal involvement in a group or system (Hagerty et al., 1992; Hagerty & Patusky, 1995). Since its publication, Levett-Jones and Lathlean (2008) definition has become highly influential within the literature in the niche of health professional students undertaking practice placement. While Levett-Jones and Lathlean (2008) definition remains focused on individuals' experience of belonging (Daniels et al., 2020) it notably introduced context to the conceptualisation. Using the term 'context' rather than a specifying a particular setting (e.g., a school) enhances the transferability of the definition, which is especially valuable in health professions research spanning diverse professional groups and environments. One study focused on the concept of connection (Gillespie, 2002) and was included in this review because the authors conceptualisation of connection was judged to align with the definitions of belonging used in other included studies. Continued attention to conceptual clarity and use of a precise definition will enhance the transferability of future research findings to the placement contexts. While this need is acknowledged across the literature, it has been most extensively explored within nursing.

The nursing profession has made a substantial contribution to the literature and a significant research gap remains in other health professions. The majority of included studies were undertaken within the nursing profession and the results therefore are most applicable to this population. Results suggested there are inter-professional nuances in how belonging is experienced (McKenna et al., 2013; Poole et al., 2023). Levett-Jones and Lathlean (2008) definition identifies personal and professional values as components of belonging, suggesting the potential for interprofessional variation in the experience of belonging. Broadening the literature to include other health professions and additional population and contextual considerations will help address current gaps in how belonging is understood across diverse learner groups.

Subtle patterns across the reviewed studies indicate that students' age may influence their experience of belonging, though this has not been explicitly examined in context of practice placements. Three quantitative studies reported students' year of program rather than their age (Daniels et al., 2020; Poole et al., 2023; Sedgwick & Kellett, 2015) illustrating inconsistency in how this variable is considered. Age was included as a demographic variable in several quantitative analyses, sometimes showing significant associations with constructs such as stress (Grobeck, 2016), practice readiness (Nease et al., 2026), or clinical self-efficacy (Pourteimour, Jamshidi, et al., 2021), its relationship with belonging appears unclear; Singer et al. (2024) finding no significant association. Sedgwick (2013) compared first-degree and second-degree nursing students, whose average ages were 21 and 30 respectively. Although age was not a focus of the study, second degree students reported lower belonging scores, with program factors, low confidence, and fear of negative evaluation proposed as contributing influences (Sedgwick, 2013). Age and developmental considerations remain unexplored factors in this context despite

a wide age range in student and educator populations. Younger adults may be more concerned with belonging, as this is a period where social exclusion is often perceived as traumatic compared to adulthood where acceptance may be less important unless the relationship is significant (Allen et al., 2022). Australian research suggests belonging and accomplishment show an important relationship with mental health outcomes, with belonging particularly relevant for those aged 16 to 24 (Fisher et al., 2024). Considering age and life-stage offer a developmental lens through which to understand how students seek and experience belonging during practice placements, and raises the possibility that alignment between student and educator life stages may also shape these relational experiences.

Although belonging is a fundamental human need (Baumeister & Leary, 1995), individuals differ in the strength of their motivation to seek acceptance and belonging (Leary et al., 2013). The need to belong is distinct from personality constructs and attachment styles, and most people report at least a moderate need to belong (Leary et al., 2013). Multiple studies using the BES-CPE reported high mean scores (≥ 4) for the item 'it is important to feel accepted by my colleagues' (Ashktorab et al., 2015; Borrott et al., 2016; Grobecker, 2016; Honda et al., 2016; Lindenfeld, 2024; McKenna et al., 2013; Poole et al., 2023), indicating the importance of acceptance for health professional students during placement. Borrott et al. (2016) sought to measure belonging motivation, finding no correlation between students' need to belong and their sense of belonging in the workplace during placement. A low need to belong may indicate students were not expecting belongingness in that context despite BES-CPE findings of the importance of acceptance (Borrott et al., 2016). This finding is interesting considering the identified relationship between belonging and learning in practice placements (Levett-Jones & Lathlean, 2009a; McAvoy & Waite, 2019) and higher education (Vivekananda-Schmidt & Sanders, 2018). Students may be unaware of, or underestimate, the influence of their sense of belonging on their learning and other placement outcomes. Alternatively, they may engage in cognitive, emotional, or behavioural adjustments to manage their need for belonging and to maintain a sense of acceptance within the placement context. Students may not seek belonging in placement contexts where they perceive they must compromise their own values (Liljedahl et al., 2016). From the extant literature we know belonging motivation is common to all individuals (Leary et al., 2013), and a sense of belonging (or lack thereof) is associated with various cognitive, emotional, and behavioural outcomes (Baumeister & Leary, 1995). Further exploration of health professional students belonging motivation, alongside their placement expectations, experiences, and outcomes, may offer new insights into how to best support individual students to experience belonging in ways that align with their needs and promote learning and development.

Differences in belonging motivation may also affect how students read and respond to relational dynamics during placements, including their perceptions of acceptance, value, or discrimination. Individuals' experience of discrimination may be influenced by their need to belong (Carvallo & Pelham, 2006). Several included studies reported on students' experience of discrimination (Ashktorab et al., 2015; Jutsum et al., 2025; Poole et al., 2023; Sedgwick & Kellett, 2015). Research suggests individuals' need to belong plays an important role in their judgements of personal and group discrimination (Carvallo & Pelham, 2006). Generally, the need to belong shapes how individuals perceive discrimination, with a strong drive for acceptance, influencing interpersonal judgements in ways that minimise the risk of rejection (Carvallo & Pelham, 2006). Applied to practice placements, this suggests that, students' experiences of discrimination may be under-reported or reframed in ways that preserve their sense of group belonging. This raises the questions of whether students prioritise belonging over learning when they encounter conflict, witness unprofessional behaviours, or receive challenging feedback, a pattern supported by several studies in this review (Honda et al., 2016; Jutsum et al., 2025; Levett-Jones & Lathlean, 2009b). Jutsum et al. (2025) introduced 'belonging games' as a framework for understanding the interactive and strategic aspects of belonging for both students and health professionals. They suggest that health professionals may also use interactions with students to reinforce their own sense of belonging (Jutsum et al., 2025), adding further relational complexity to placement environments. This highlights the need to explore how students and educators navigate

interpersonal value within their relationships, and how these dynamics may influence broader outcomes such as placement learning, clinical care, wellbeing, and career decision making.

V LIMITATIONS

This scoping review excluded papers not available in English, thesis papers and work not published in peer reviewed journals, subsequently it is possible that some relevant studies have been excluded from the final analysis. An assessment of the quality of included studies is not a methodological requirement of a scoping review (Arksey & O'Malley, 2005) therefore the results represent the breadth of literature identified rather than the strength of any findings. Belonging is a broad construct spanning quantitative and qualitative domains. In an effort to be inclusive across health professions, we narrowed the conceptual scope to belonging and included only studies that explicitly assessed this construct in line with the inclusion criteria. Related terms such as team, attachment, or partnership were not included in the search strategy, and it is therefore possible that some relevant studies have been missed. Studies that reported belonging only as an incidental finding did not meet our inclusion criteria.

VI CONCLUSION

This scoping review identified 41 studies to answer the question “what findings have been reported in studies that examine health professional students’ belonging during practice placements?”. There is a paucity of literature from allied health and medical professions, compared to nursing in this context. During practice placements, health professional students experience both belonging and non-belonging, which shape their individual behaviours and decisions, impact interpersonal relationships and ultimately influence broader systemic outcomes such as patient care. Further exploration into how students and educators engage with relational value within their student-educator relationship and how this relationship influences broader outcomes will provide valuable insights that may guide university curriculum related to student placement preparation and workplace clinical education priorities.

VII DECLARATIONS

Ethics Approval and Consent to Participate

Not applicable.

Conflict of Interest Statement

The authors have no conflicts of interest to declare.

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APPENDIX

Key finding related to health professional students experience of belonging during practice placements

Reference	Population & program year	Research approach	Study aims or question	Key finding
Albloushi, et al., 2019	Nursing Year 4	Qualitative – interpretive description	To investigate the meaning of a sense of belonging among female nursing students in clinical placements in Saudi Arabia.	Participants associated belongingness in clinical settings with acceptance, feeling safe and being part of the team. It was influenced by staff attitudes, academic preparedness, and communication barriers, and linked to increased confidence, motivation to learn, and feeling valued.
Ashktorab, et al., 2017	Nursing All years	Mixed method – qualitative reported - conventional content analysis	To explore and explain the experiences of belongingness for nursing students in the clinical setting.	Participants associated belongingness with dignity and respect. Belongingness had a significant role in developing professional identity, integrity, and inner satisfaction for participants. Mistreatment was an obstacle to belongingness. For participants in this study, ethical conduct associated with gender-based care was related to belongingness with patient-staff gender compatibility law in Iran.
Ashktorab, et al., 2015	Nursing Years 3 and 4	Quantitative – descriptive correlational design	To translate the BES-CPE into Persian, evaluate its psychometric properties and measure the belongingness experiences of Iranian nursing students.	The Persian version of the BES-CPE demonstrated strong psychometric properties. Mean BES-CPE scores were lower than those reported in other cultural groups. Acceptance consistently emerged as a key component of belonging, with higher mean scores across multiple cultural versions, suggesting it may represent a universal construct.
Borrott, et al., 2016	Nursing Final semester	Mixed method - quantitative reported - cross national, longitudinal, multiphase explanatory sequential design	To explore the relationship between, and factors that may influence final semester nursing students need to belong, sense of belonging and workplace satisfaction while on clinical placements.	The need to belong was common across two countries (Australia and Canada), and male and female genders. Key elements for participants were knowing there were people to turn to when needed feeling accepted by others. A strong positive correlation was found between sense of belonging and workplace satisfaction. Acceptance as part of the team influenced participants satisfaction with their role development. Lack of acceptance was associated with increased anxiety and thoughts of leaving the profession.
Bullock, et al., 2024	Medicine Year 3 or 4	Qualitative – constructivist grounded theory	To draw upon identity-salient experiences of medical students to develop & describe a theory of identity safety in the clinical learning environment.	Belonging in the clinical learning environment emerged as a component of identity safety. Belonging occurred for participants when they felt accepted and connected to peers with shared or concordant identities.
Carithers, et al., 2025	Nursing Final year nursing (ABSN)	Mixed methods – survey and content analysis	Aim 1: Describe the belongingness experience using the BES-CPE and selected demographics. Aim 2: Extend understanding of	BES-CPE scores revealed variability in scores over time. Inclusive behaviours (e.g., friendly welcome, included in conversations) and supportive staff interactions fostered belongingness. Exclusionary behaviours (e.g., being ignored or spoken to condescendingly) and

			students' perceptions of factors that promote or hinder belongingness	unsupportive interactions with staff undermined students' sense of belonging.
Daniels, et al., 2020	Medicine Years 1 - 5	Quantitative – author designed survey	To explore and measure belongingness as a proxy for participation during clinical placements.	Belongingness was found to be quantifiable and variable between participants and teaching environments. Belongingness was proposed as a useful marker for measuring the effectiveness of clinical learning.
Drysdale, et al., 2020	Multiple professions including health sciences (non-specified)	Quantitative – descriptive correlational design	To explore the effect of sexual minority status on sense of belonging and the differences in perceived belongingness between sexual minority and heterosexual students during work-integrated-learning.	Sexual minority subgroups of WIL programs demonstrated a significantly lower sense of belonging than their exclusively heterosexual peers when participating in WIL and thus may require additional support.
Gillespie, 2002	Nursing At least one clinical experience	Qualitative – interpretive description	To explore and describe undergraduate nursing students' experiences of connection within student-teacher relationship and the effects on learning experiences.	Student-teacher connection emerged as a strongly positive influence on clinical learning experiences. Teachers with knowledge of themselves and their student/s are able to adjust the 'fit' in the student-teacher relationship to foster students' personal and professional growth.
Grobecker, 2016	Nursing At least one clinical placement	Quantitative – descriptive correlational design	To measure the relationship between sense of belonging and perceived stress among baccalaureate nursing students in their clinical placements.	A statistically significant low inverse relationship was observed between participants sense of belonging and their perceived stress during clinical placements. Improving sense of belonging may reduce stress, improve learning and may also lead to improved patient care.
Honda, et al., 2016	Nursing Years 3 and 4, completed a variety of clinical placements	Sequential mixed method – survey then interviews	To measure the extent Japanese nursing students, experience a sense of belonging in clinical placements, and explore the factors that impact on and are consequences of that experience.	Japanese participants reported lower mean belonging scores on the BES-CPE compared to studies from Korea, Australia, Iran and the United Kingdom. Japanese cultural values shaped participants clinical placement experiences, influencing language use and respect for social hierarchy. Fear of alienation resulted in silence when participants witnessed poor practice.
Jutsum, et al., 2025	Medicine Final year	Qualitative – reflexive thematic analysis	To investigate how encounters with incivility during clinical placements influence medical students; sense of belonging, engagement in belonging work and their professional identity.	'Belonging games' offers a framework for understanding the interactive and strategic nature of belonging work. Such work, can be growth-enhancing but demands significant emotional labour and is shaped by complex dynamics that include both affiliative and disaffiliative strategies.
Kern, et al., 2013	Nursing Years 3 and 4,	Qualitative – constructivist grounded theory	To describe nursing students' perception of how their belongingness evolves in	Belongingness was described as a process involving positioning for belonging, persevering to attain it, and ultimately entering into a state of belonging.

			clinical learning environments through partnerships with their clinical educator and unit-based nurses.	Acceptance facilitated access to close interpersonal relationships, while the absence of belonging was associated with feelings of exclusion and isolation.
Levett-Jones, et al., 2007	Nursing Year 3	Mixed method – qualitative reported - interviews	To measure the extent to which nursing students experience belongingness and explore students' perceptions of the factors that impact upon and are consequences of belongingness within clinical placements.	A sense of belonging to the nursing team was found to be crucial to a positive and productive learning experience. Experiencing alienation caused immediate deleterious emotional and psychological impacts and shaped participants decision making about future workplaces. Some participants chose alienation when their personal values clashed with those of the workplace.
Levett-Jones & Lathlean, 2008	Nursing Year 3	Mixed method - qualitative reported - interviews	To explore the factors that impact on, and the consequences of nursing students experience of belongingness.	Belongingness was associated with increased motivation to learn, a willingness to ask questions and commitment to their profession through employment decisions. Experiences of alienation hindered motivation and learning as participants prioritised fitting in and would overlook poor practice to feel included.
Levett-Jones, et al., 2008	Nursing Year 3	Mixed method – survey and interviews	To present students experiences of belongingness and how this experience is influenced by the duration of their clinical placements.	The experience of belonging is measurable. Participants described a 'settling in phase' typically 2 – 4 weeks duration where they focused on forming relationships that would help them belong. Once settled, learning could become the focus. Placements of shorter duration may impact the settling in phase.
Levett-Jones & Lathlean, 2009 (a)	Nursing Year 3	Mixed method – qualitative reported - cross-national, multi-site case study	To locate the professional and practical implications of research exploring nursing students experience of belongingness when undertaking clinical placements within a conceptual framework.	The Ascent to Competence Framework is a 5-stage hierarchy incorporating (bottom to top); safety & security, belongingness, self-concept, learning, competence. Participants needs for safety and security, belongingness, self-concept and learning must be met before competence is attained thus belongingness is a crucial pre-cursor to learning.
Levett-Jones & Lathlean, 2009 (b)	Nursing Year 3	Qualitative – cross-national case study	To explore the factors that impact upon students' experience of belongingness while undertaking clinical placements and the consequences of that experience.	Participants experiences sat on a continuum from belongingness to alienation. Interpersonal relationships were the most important influence on participants' sense of belongingness. Participants who felt insecure, ostracised, or isolated, were more likely to conform to poor practices.
Levett-Jones, et al., 2009 (b)	Nursing Year 3	Qualitative - interviews	To explore the factors that affect students experience of belongingness and the consequences. Paper reports findings related to the theme of staff-student relationships.	Staff-student relationships were the most important influence on participants sense of belonging and learning. When participants received support from staff they could focus on learning over concerns about interpersonal relationships.

Liljedahl, et al., 2016	Nursing Program year not specified.	Qualitative – ethnography inspired study, field observations and interviews	To explore the interdependence between affordances and engagement in clinical learning environments of nursing students.	Participants navigated their belongingness within the clinical learning environment by aligning with workplace expectations in an aspirational way shaped by strong norms and values. Participants remained hesitant to compromise their own values in response to the realities of health care.
Lindenfeld, 2024	Nursing One or more years of clinical experience.	Quantitative – correlational design	To evaluate the efficacy of nursing students who identify as men and its correlation with intent to complete their nursing program.	The efficacy subscale of the BES-CPE showed the strongest correlation with persistence, measured as intention to complete program for participants identifying as male. Increasing self-efficacy may positively influence persistence. Efficacy may be a more important predictor of persistence than belongingness for those identifying as male.
Lindenfeld, 2025	Nursing One or more years of clinical experience.	Quantitative – nonexperimental correlational design	To explore the belongingness of nursing students who identify as men and its correlation with intent to complete their nursing program.	A weak positive correlation was found between male participants belongingness scores on the BES-CPE and their intent to complete their nursing program.
Manokore, et al., 2019	Nursing Students in term 4 with 12 weeks of clinical placement experiences	Qualitative – phenomenology, interviews	To examine whether students feel a sense of belongingness when they are out in clinical. The Ascent to Competence Framework was used as a lens to analyse interview data.	The Ascent to Competence conceptual framework did not fully explain participants experiences of belongingness with two additional themes identified that extend the framework, clinical educators as gatekeepers to the belongingness space and students' cross borders towards acceptance through legitimate participation. Access to a belongingness space required multifactorial alignment of circumstances related to the physical and cultural climate of the clinical site. The role of the clinical educator was highlighted as a key influence on students' entry to a belongingness space.
McAvoy & Waite, 2019	Nursing Year 2, operating department practitioners	Qualitative – interviews	To explore and describe operating department practitioners' experiences of belongingness in clinical placements.	All participants described both experiences of belongingness and instances of non-belonging during placements. Belongingness fostered learning had a positive personal impact on participants whereas non-belonging had a negative personal impact and did not foster learning. Lack of belongingness was associated with feelings of being unwanted, excluded and unsupported which impacted students' confidence and learning.
McKenna, et al., 2013	Nursing & Midwifery Midwifery students with at least one midwifery placement	Quantitative – survey	To examine undergraduate midwifery students' sense of belongingness in their clinical practice.	Participants perceived belonging as important in the clinical setting. Acceptance was important for participants sense of belonging. A 'home hospital' model where participants attended a consistent clinical agency for placements may allow time to develop relationships and thus influence belonging.
Nease, et al., 2026	Nursing Final year	Quantitative - survey	Aim 1: To investigate how program type and clinical factors shape students' belonging, self-efficacy,	An increase in clinical hours alongside more preceptors was associated with significantly lower belongingness scores.

			learning support, and readiness for practice. Aim 2: Describe the relationship of these concepts to readiness for practice.	Belongingness, self-efficacy, and learning support were interrelated contributors to practice readiness, with self-efficacy and learning support showing the most significant effects.
Poole, et al., 2023	Allied health Physiotherapy students in final year	Quantitative - survey	To adapt and validate the BES-CPE for Doctor of Physical Therapy students in the United States.	Belongingness was important for enhancing clinical education experiences for participants. The BES-CPE was a reliable tool to measure belongingness retaining the original three components of esteem, connectedness and efficacy. Discrepancies between participants' individual item mean scores and those of different participant groups in earlier studies highlighted the need for validated instruments tailored to specific professional groups.
Pourteimour, Jamshidi, et al., 2021	Nursing Years 3 and 4	Quantitative – cross-sectional descriptive correlational	To assess clinical self-efficacy and clinical belongingness and their relationship among nursing students.	Participants in this study had high clinical belongingness and moderate clinical self-efficacy. Participants clinical belongingness was a positive predictor of clinical self-efficacy.
Pourteimour, Nobahar, et al., 2021	Nursing Students in 4 th , 5 th , 6 th , 7 th & 8 th semesters of education – Years 3 and 4	Quantitative – cross-sectional descriptive correlational	What is the relationship between the sense of clinical belongingness experienced by nursing students and moral intelligence, and clinical belongingness experienced by nursing students and professional behaviours?	The BES-CPE was used as a measure of clinical belongingness. A strong positive association was detected between BES-CPE and moral intelligence. A strong positive association was detected between BES-CPE and professional behaviours. Promoting a sense of belonging may encourage and reinforce professional behaviours during placements.
Rae, et al., 2024	Medicine Year 5	Qualitative – interpretive phenomenological analysis	To explore medical students experience of co-creation of learning resources within the clinical environment.	Co-creation is a learning relationship between students and teachers that actively involves students in the teaching and learning process. Co-creation facilitated identity maturation, which is associated with self-authorship or the ability to define a coherent internal belief system. This process empowered participants to establish a sense of belonging as their authentic selves. Co-creation may influence experiences of belonging during placements and contribute to meaningful learning experiences.
Rowland & Truman, 2024	Nursing, paramedicine and various allied health Program year not specified	Mixed methods – literature review, interviews and survey	To increase reported rates of student satisfaction to 100% for each item of the student experience survey.	The student experience survey included the item 'Placement area was welcoming and I felt a sense of belonging and acceptance within the team'. Participant satisfaction improved following introduction of monthly inductions as a strategy to encourage belongingness.
Roxburgh, 2014	Nursing Year 2	Qualitative – focus groups	To explore undergraduate nurses' perceptions of two experienced practice learning models: hub and spoke model, and the classical rotational model.	The elongated hub and spoke placement model allowed for time to develop familiarity with geographic locations, mentors and clinical pathways and supported increased belonging compared with the traditional rotational model. Mentors are a crucial link in achieving a sense of belongingness.

Saadatbakht, et al., 2019	Midwifery Program year not specified	Quantitative – interventional study, pre-test & post-test control group design	To investigate the effect of group counselling with emphasis on communication skills on midwifery students’ sense of belonging in clinical settings.	Workshops or sessions designed to emphasise communication skills may contribute to an enhanced sense of belonging during placements.
Sedgwick & Yonge, 2008	Nursing Year 4	Qualitative – focused ethnography - focus group and individual interviews, and student journal analysis	To describe the cultural theme of a sense of belonging that nursing students develop during a rural hospital preceptorship.	Participants ability to integrate into the team was essential for acceptance and a sense of belonging. Belongingness was influenced by individual characteristics, interpersonal relationships, and unit climate. A higher number of safe interpersonal connections correlated with an increased sense of belonging. For some participants, preceptors facilitated their acceptance within the team through their own interpersonal relationships. The absence of belonging led to feelings of anger, confusion and being ostracised.
Sedgwick & Rougeau, 2010	Nursing Year 4	Qualitative – clinical incident technique - interviews	To describe events that influence undergraduate nursing students’ sense of belonging during a rural hospital preceptorship, and to explore their meaning.	Points of tension developed when participants expectations of their preceptor, team members, or the organisation did not align with the realities of the clinical environment. Minimising discrepancies between expectations led to a stronger sense of belonging to the team for the participant. Each interpersonal encounter had the potential to either reinforce or diminish participants’ sense of belonging to the team.
Sedgwick, 2013	Nursing All years	Quantitative – survey	To compare second degree nursing students’ sense of belonging with traditional undergraduate nursing students’ sense of belonging during clinical experiences.	Participants in the traditional 4-year undergraduate nursing program reported higher levels of belonging on all BES-CPE subscales (esteem, connectedness and efficacy) than participants enrolled in a 2-year second degree course.
Sedgwick, et al., 2014	Nursing All years of undergraduate program	Mixed method – survey and interviews	To identify factors that influence minority nursing students’ sense of belonging during clinical experiences.	Three factors influenced participants sense of belonging: the educator they worked with, the clinical instructor and their peer group. For visible and self- declared minority participants, the experience of belonging varied depending on the day, the people present, and the clinical unit. Interpersonal relationships had the most influence on participants sense of belonging, as every interaction had the potential to shape their experience. Participants evaluated the friendliness of educator they worked with as a marker for belonging.
Sedgwick & Kellett, 2015	Nursing All years of undergraduate program	Quantitative – cross-sectional survey	To determine whether there were any differences in feelings of belongingness between male and female nursing students during clinical practice experiences.	There were no statistically significant differences in overall belongingness scores on the BES-CPE between male and female participants, nor within the esteem or connectedness subscales. However, male participants reported significantly lower scores on the efficacy subscale compared to female participants of the same cohort.
Singer, et al., 2024	Nursing Undergraduate students who had completed at least	Quantitative – cross-sectional survey	To asses demographic characteristics, program/clinical structure factors, and modifiable clinical	No demographic variables significantly influenced belongingness scores. However, several clinical program and site factors were associated with variations in scores. Participants who had repeated a course reported significantly lower belongingness, indicating an impact of academic

	one clinical placement		setting factors (MCSF) that may impact feelings of belongingness in undergraduate nursing students in the clinical learning environment.	challenges. Those who strongly disagreed with the adequacy of rotation duration also had lower scores. While one-on-one relationships with staff/instructors were significantly associated with overall BES-CPE scores, no individual relational factor independently predicted belongingness. Staff attitudes emerged as a potentially clinically significant contributor. Additionally, participants who perceived pre-arrival information and orientation as valuable reported higher belongingness scores.
Sukut & Ayhan, 2022	Nursing Undergraduate students predominantly in Year 4	Quantitative – descriptive cross-sectional survey	To explore the frequency, types, perpetrators, effects and responses of horizontal violence experienced by nursing students and the relationship between occupational belonging and horizontal violence.	All participants reported experiencing at least one statement from the Horizontal Violence Workplace Index. Greater exposure to horizontal violence was associated with a lower sense of occupational belonging. Nurses were the most reported perpetrators of horizontal violence. When participants perceived their environment as unsafe, they avoided clinical placements. Some participants considered leaving the profession as a result of experiencing horizontal violence and reduced occupational belonging.
van der Riet, et al., 2018	Nursing Year 3	Qualitative – descriptive research design - focus groups	To explore third year nursing students' perceptions of being involved in a collaborative model of clinical placements during their three years of undergraduate study.	A Collaborative Clinical Placement Model provided time for relationship-building, fostering participants' acceptance within the team and would often lead to a sense of belonging. Familiarity with peers and staff from other disciplines further enhanced participants sense of belonging. Participant's relationships with staff played a crucial role in both their belongingness and learning experiences.

Note. ABSN = Accelerated Bachelor of Science Nursing BES-CPE = Belongingness Scale – Clinical Placement Experience. WIL = Work Integrated Learning.