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Belonging in Higher Education: A Twenty-Year Systematic Review

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Abstract

Belonging is more than just a buzzword; it is a critical factor that affects students' academic engagement, motivation, persistence, and overall achievement, especially considering the diversity of students in educational settings. The goal of this paper is to dissect the complexities of belonging, examining its various determinants, the diverse impacts it has on student university populations, and the range of strategies that effectively nurture this sense of belonging. We conducted literature search in August 2023 using the Web of Science database, focusing exclusively on publications from the Journal of University Teaching and Learning Practice. We used a combination of keywords like 'belonging', 'university belonging', 'social belonging', and other related terms, ensuring a comprehensive collection of relevant studies. A total of 133 articles were identified, with 77 selected for detailed full-text review. The final selection process resulted in 33 articles for the systematic review. Key results from our review indicate that belonging in higher education involves four main themes: connectedness to peers, staff, and the institution; feeling safe and part of the community; being valued and accepted; and embracing diversity and inclusion. These themes reflect a holistic understanding of belonging as a multi-dimensional concept, significantly influenced by institution-wide approaches, inclusive environments, educator practices, and quality relationships. The variation of belonging experiences identifies key challenges such as exclusion of diverse groups, lack of connection opportunities, and insufficient support relationships. Effective strategies for fostering belonging include targeting multiple system levels, building relationships, employing diverse educator practices, leveraging technology and creating inclusive environments.

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Introduction

Significant strides have been made within higher education to address social and cultural disparities (Kromydas, 2017; Meehan & Howells, 2018), which have resulted in a more diverse student body accessing university education (Strayhorn, 2021). This shift not only challenges traditional notions of privilege in higher education, but also underscores the need for continuous efforts to address persistent disparities. Amid these shifts, the critical aspect of students' sense of belonging in higher education has often been overlooked in higher education policy and practice despite decades of international research and discourse (Gravett & Ajjawi, 2022). This oversight is due, in part, to the emphasis on economic demands, community engagement, and maintaining high standards in teaching and research (Rubens et al., 2017). However, belonging is more than an institutional priority or vision in academic spaces; it involves the emotional and psychological connection students have with their educational environment (Pedler et al., 2022), which directly influences their academic outcomes, mental health, and overall wellbeing (Allen & Kern, 2017). Of concern, many students report feelings of alienation within their university communities (Crawford et al., 2023), a situation exacerbated by recent disruptions such as the COVID-19 pandemic (National Survey of Student Experience [NSSE], 2021; Tice et al., 2021).

The disconnect between understanding the importance of student belonging and the high rates of students who feel they do not belong prompts the question: How does the concept of belonging manifest and evolve in the context of higher education, and what are its impacts on students? The *Journal of University Teaching and Learning Practice* has been instrumental in advancing pedagogical research on student belonging, particularly in the domain of university teaching and learning contexts. Previous studies in this journal have laid the groundwork for exploring the multifaceted nature of student belonging in higher education (e.g., Cohen & Viola, 2022; Graham & Moir, 2022), examining its various definitions, determinants, and implications. These studies, among others in the journal, highlight the critical role of teaching practices and institutional culture in fostering a sense of inclusion and connection for students within the university environment. Therefore, building on this rich foundation, this systematic review makes significant contributions by synthesising two decades of research. We offer a comprehensive understanding of how belonging has been conceptualised within the academic literature, the factors influencing it, and its far-reaching implications on student experiences in university settings. This paper aims to first present a synthesis of the definitions and conceptual frameworks of belonging in higher education. Next, we examine the determinants of belonging, explore how various factors such as institutional policies, teaching practices, and student demographics influence students' sense of belonging. Finally, we discuss the implications of belonging on academic outcomes and student wellbeing, concluding with recommendations for future research and practice in higher education.

Defining a Sense of Belonging in Higher Education

Belonging in higher education is a rich concept with a tapestry of meanings and interpretations (Tachine et al., 2017). The application of the concept can vary within the university setting, largely because higher education itself is a transdisciplinary melting pot of subjects, fields, and specialties. Many professionals working in university contexts are committed to fostering a sense of belonging among students, by learning their names, accepting all students without judgment, and recognising individuals' unique aptitudes and abilities (Crawford et al., 2022; Crews & Allinson, 2022). This commitment naturally aligns with researchers' focus on

students, thus necessitating a multifaceted understanding of belonging that resonates across different academic fields.

Belonging, at its core, is rooted in the human need for deep, stable social connections (Allen, Gray et al., 2022; Baumeister & Leary, 1995). In the university context, this evolves into a multifaceted phenomenon including, but not limited to, students' connections and relationships with peers and faculty, underpinned by a sense of support and acceptance (Alkan, 2016; Slaten et al., 2018). Existing research that has explored belonging in the context of higher education has highlighted the integral role of a student having meaningful connections with peers and educators, and feeling like a respected member of the institution and an associate to other students and staff (Freeman et al., 2007; Pittman & Richmond, 2008; Slaten et al., 2014; Slaten et al., 2018). Echoing Goodenow and Grady's (1993) definition, belonging in higher education is not just about being physically present; it is about feeling "accepted, respected, included, and supported by others" (p. 80). Walton and Brady (2017) further expand this understanding, emphasising that the quality of these interactions matters more than their quantity.

Yet, belonging transcends mere social relationships. It is dynamic, sculpted by diverse experiences, opportunities, and personal growth, and deeply influenced by students' motivations, competencies, and perceptions (Allen et al., 2021; Goodenow, 1993; Murphy & Zirkel, 2015; Tachine et al., 2016; Walton & Brady, 2017). This sense of belonging includes alignment with the institution (Slaten et al., 2018) and is often expressed through terms like connectedness and engagement (Furlong, 2013).

The construct of belonging within a university is complex and multidimensional, shaped by cultural and contextual factors. For example, students from various backgrounds, including ethnic, racial, and other minority groups, may perceive belonging differently, largely due to their unique challenges or perspectives (Hurtado & Carter, 1997; Museus & Quaye, 2009). Over time, as students progress through their academic journeys, their sense of belonging may evolve, influenced by changing environments and personal development (Tinto, 1993). In the context of higher education, Bourdieu's sociological perspective (Bourdieu & Wacquant, 1992) provides a nuanced understanding of belonging. As such, belonging can be conceptualised as a product of complex social interactions and structures, extending beyond mere economic or social capital to include a network of institutionalised relationships and mutual recognition (Bourdieu & Wacquant, 1992). Belonging in higher education is dynamically shaped by the interplay of individual experiences within the university's intricate social fabric (Carwford et al., 2023), and thus emerges as a multifaceted phenomenon rooted in the social and cultural capital of the academic institution.

Belonging in Higher Education: Benefits and Complexities

Research has shown that the sense of belonging in higher education is an important determinant of both psychological wellbeing and academic success. It influences key psychological constructs such as self-esteem, resilience, and the intrinsic enjoyment of learning. Studies (e.g., Pedler et al., 2022; Allen et al., 2018; Ulmanen et al., 2016) have shown how these psychological benefits translate into tangible academic outcomes, such as increased student retention, enhanced self-efficacy, and active engagement in academic activities (e.g., Hausmann et al., 2007; Hoffman et al., 2002). However, this area of research is still emerging, with inconsistencies and gaps in findings across various disciplines. Allen et al. (2008), Slaten, Ferguson et al. (2016), and Slaten et al. (2018) underscore the need for

more cohesive and comprehensive studies to fully understand the breadth and depth of belonging impact in higher education settings.

Belonging in higher education is not an isolated phenomenon but is influenced by a variety of determinants. An institution-wide approach that embeds values and community at its core is crucial (see Baumeister & Leary, 1995). Inclusive university environments (Strayhorn, 2021; Taff & Clifton, 2022) also play a significant role in fostering a sense of belonging among students. Educator practices that encourage connection, inclusion, and respect for diversity (Taff & Clifton, 2022) are also important. Quality relationships between students and educators, a key factor identified in several studies (*see* Hagenauer & Volet, 2014 for review) are essential in building a sense of community and belonging within the university setting, yet under researched. However, such experience of belonging significantly varies among different student demographics. This variation is particularly evident among minority students (e.g., international students, LGBTQ+ students, and those from traditionally marginalised groups). Current research efforts suggest that while compared to students belonging at the school-age level, belongingness in higher education is more racially (Murphy & Zirkel, 2015), culturally (Guiffrida, 2006; Slaten, Elison et al., 2016), and socially (Ostrove, 2003) relevant. These studies encourage inclusive definitions of belonging that value diversity and prioritise inclusion, suggesting the need for interventions and practices that support belonging in students from diverse backgrounds. This may include, but is not limited to, transition courses and strategies that encourage diverse voices and perspectives in the learning environment.

Furthermore, researchers have pointed to issues on how sense of belonging is sometimes interpreted in higher education research, specifically in terms of ‘assimilation’ versus ‘inclusion.’ For instance, Tachine et al. (2017) point out that some studies frame university belonging in terms of ‘assimilation’, which can inadvertently diminish the unique contributions of individuals to the university community. This approach overlooks the varied environmental and social factors within the university ecosystem that play a crucial role in facilitating individual adaptation and engagement. In such cases, assessments of belonging tend to focus on students’ ability to ‘fit in’ or find similar peers, rather than embracing diversity. On the contrary, other studies (e.g., O’Keeffe, 2013), approach belonging from an ‘inclusion’ standpoint. This perspective emphasises the importance of recognising and valuing the university educational and cultural backgrounds of students as important contributions to the campus community. Universities, according to Strayhorn (2021), should therefore create culturally affirming and cohesive environments that foster a sense of connection, importance, and pride among their students. This approach not only respects but also celebrates the diversity of student experiences and identities within the higher education setting that address school belonging as ‘inclusion’ prioritise the value contribution of students’ uniqueness (i.e., educational, cultural backgrounds) to the campus community (O’Keeffe, 2013). In addition, they propose that a university needs to provide a culturally affirming and cohesive campus environment to engender connectedness and a sense of mattering and pride (Strayhorn, 2021).

Rationale and Current Study

The notion of belonging in higher education is crucial for student success and wellbeing. Studies have shown that it is associated with significant outcomes such as academic engagement, motivation, persistence, and achievement across diverse racial and ethnic groups (Murphy & Zirkel, 2015; Patrick et al., 2007). Research has traditionally focused on how belonging correlates with educational performance and psychological outcomes (Glass

& Westmont, 2014; Gopalan & Brady, 2020; Gummadam et al., 2016), but there is a need to have an in-depth understanding of how belonging shapes diverse constructs across university contexts. We propose a systematic review that concentrates exclusively on articles from the *Journal of University Teaching and Learning Practice* over the past 20 years, with the aim to unpack the multifaceted construct of belonging in higher education. While previous reviews (e.g., Taff & Clifton, 2022) have identified strategies to promote belonging in higher education, such as orientation programs, faculty empathy, and peer mentoring, there remains a need to further explore and understand these strategies in depth. Our review aims to expand upon Taff and Clifton's review, focusing on how belonging strategies and nuances are conceptualised and implemented within the academic setting, particularly in relation to empirical effectiveness and adaptability across diverse student populations and educational contexts. We examine the scope and context in which these strategies are applied, while also aiming to understand their role and impact in fostering a sense of belonging among students.

Our study synthesises results from the last two decades to provide a nuanced understanding of student belonging in the university setting. We intend to address the following research questions in order to better understand and promote belonging within the higher education sector, especially considering its cultural relevance (see Guiffrida, 2006; Tierney, 1992) and the practical strategies identified above (see Taff & Clifton, 2022).

1. ***Definition.*** How is 'belonging' defined and understood in higher education as presented in the *Journal of University Teaching and Learning Practice*?
2. ***Determinants.*** What factors are identified as influencing a student's sense of belonging in higher education?
3. ***Impact.*** In what ways does belonging affect student outcomes in higher education, such as academic success, mental health, and overall wellbeing?
4. ***Diversity.*** How does the experience of belonging differ across various student populations, including international, LGBTQ+, and first-generation students?
5. ***Challenges***. What challenges or barriers hinder students' pursuit of belonging in higher education settings?
6. ***Promotion.*** What strategies or interventions have been suggested in the literature to foster belonging among students in higher education?

Methodology

In order to ensure replicability of the review, the protocol and procedures adhered to systematic review guidelines by Page, Moher et al. (2021) and Page, McKenzie et al. (2021) on the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework. To analyse the data, we employed a thematic synthesis approach, aligning with Thomas and Harden's (2008) guidelines for conducting systematic reviews.

Search Terms

To systematically identify relevant articles examining belonging in the context of higher education, a search was conducted in August 2023 using the Web of Science database. The search was limited specifically to publications from the "Journal of University Teaching and Learning Practice." A combination of keywords and Boolean operators were used to refine the search, including terms such as "belonging," "sense of belonging," "university belonging,"

"social belonging," and other related terms to ensure a comprehensive capture of pertinent articles (Table 1). To ensure the relevance of the sources, the search was limited to articles published in the last 20 years.

Table 1

Search Terms Used in the Systematic Review

No.	Search term combinations
#1	(belonging OR "sense of belonging" OR "university belonging" OR belongingness OR "social belonging" OR community OR affiliation OR attachment OR bonding OR identification OR "social capital" OR membership OR involvement OR acceptance) AND ("higher education" OR university OR campus)
#2	(connectedness OR "student connectedness" OR "campus connectedness") AND ("higher education" OR university OR campus)
#3	(relatedness OR "student relatedness" OR "academic relatedness" OR "social relatedness") AND ("higher education" OR university OR campus)
#4	(engagement OR "student engagement" OR "academic engagement" OR "social engagement") AND ("higher education" OR university OR campus)

Source: Journal of University Teaching and Learning Practice

Filter: Publication year 2004 to 2023

Note: While a range of terms related to 'belonging' were considered in this review, only uses of these terms that aligned with our operational definition of 'belonging' were included. For example, terms like 'engagement' can have multiple definitions in the literature; however, for the purposes of this review, we only used ‘engagement’ in instances where engagement (and other like terms) reflected affective connection or association that is congruent with our defined understanding of 'belonging.'

In addition to the database searches, a targeted search was conducted directly using the Journal of University Teaching and Learning Practice’s website and keyword search terms related to belonging (e.g., engagement, relatedness, belonging) to ensure comprehensive coverage. To further validate the thoroughness of the search, the journal's editor was consulted to screen the final list of articles included in the review. No additional articles were identified through the supplemental search or through editorial consultation, confirming the articles identified in the review have intended to capture the full scope of literature on student belonging in higher education as presented in the target journal.

Upon completion of the search, a total of 133 articles were identified. Two PhD qualified reviewers independently screened these articles based on their titles and abstracts. Following this initial assessment, 77 articles were excluded, with the remaining 56 selected for a more detailed full-text review. The appropriateness of these articles for inclusion in the systematic review was determined through this full-text assessment.

Inclusion and Exclusion Criteria

In the systematic review process, specific inclusion and exclusion criteria were applied. The inclusion criteria targeted articles that focus on the concept of 'belonging' within higher

education. This included articles discussing factors influencing students' sense of belonging, those linking belonging to outcomes such as academic performance, mental health, and wellbeing, and studies exploring 'belonging' across student demographics including international students, LGBTQ+ students, students from traditionally or historically marginalised backgrounds, and first-generation students. Also included were articles addressing challenges students face in achieving belonging and those assessing strategies designed to promote belonging in higher education. Only articles from the past 20 years were considered.

The exclusion criteria omitted articles discussing 'belonging' outside of higher education or those that mention it without substantial focus. Studies focused solely on related concepts like 'engagement' or 'participation' without reference to 'belonging' were excluded unless they were used in a way that related to how belonging is commonly defined and could be used as term that was interchangeable with belonging (e.g., engagement as an affective state). Review articles, without a specific focus on 'belonging' were also excluded, as were opinion pieces, editorials, and other non-empirical articles if they did not contribute unique insights. Articles not published in the Journal of University Teaching and Learning Practice, and those focusing on staff, teachers, or professional development, were not considered. Each article identified in the search was evaluated using these criteria. A full list of inclusion and exclusion criteria can be found in Table 2.

Table 2

Inclusion and Exclusion Criteria

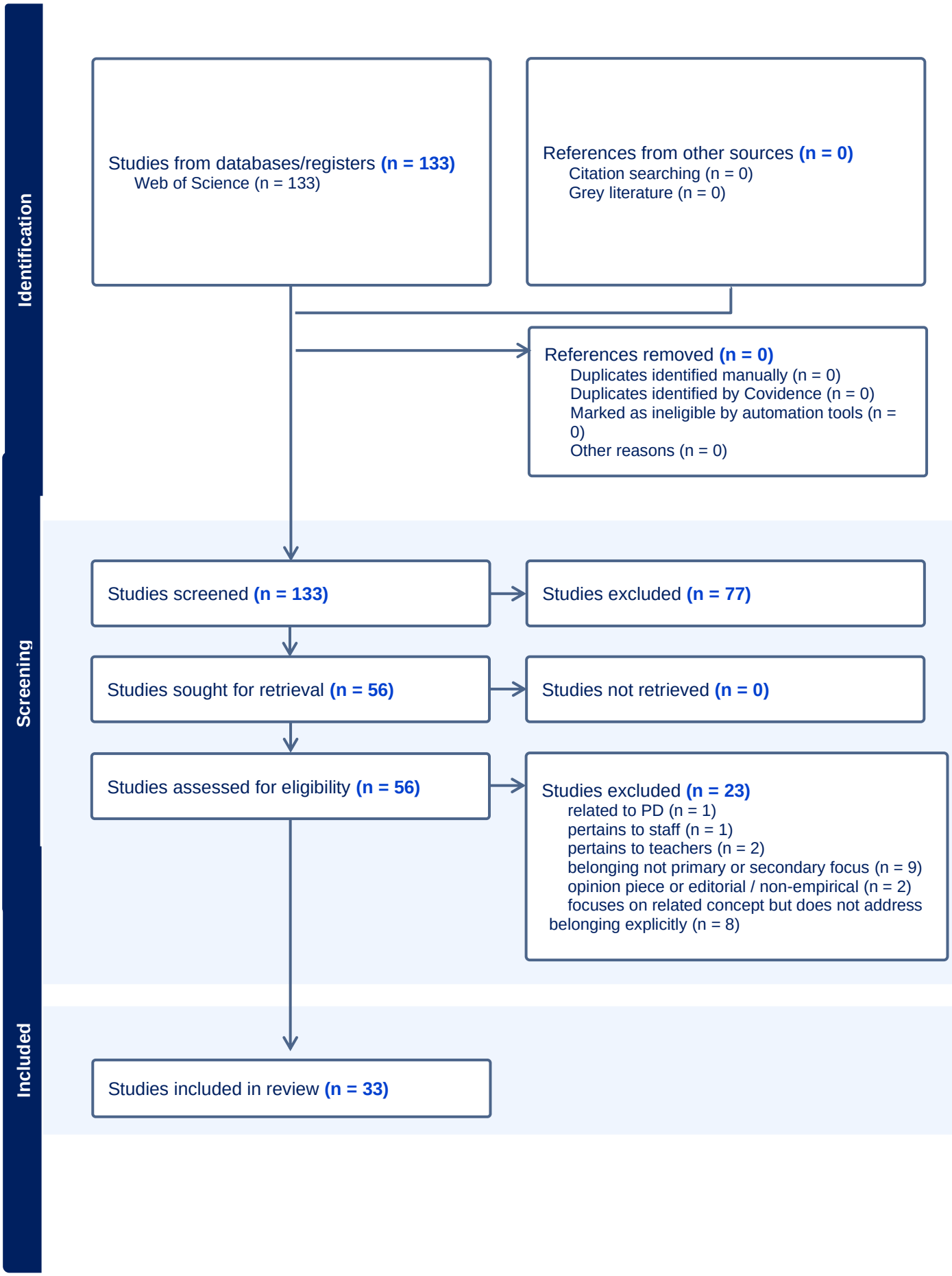
Inclusion criteria	Exclusion criteria
Articles that focus on or significantly discuss the concept of 'belonging' in the context of higher education.	Articles where 'belonging' is discussed, but not in the context of higher education (e.g., belonging in a workplace or community setting).
Articles that discuss factors or determinants influencing a student's sense of belonging.	Articles that mention 'belonging' but where belonging is not a primary or secondary focus.
Articles that link the sense of belonging to student outcomes, including academic performance, mental health, and overall well-being.	Studies focusing solely on related concepts like 'engagement' or 'participation' without addressing 'belonging' explicitly or where the construct is not being defined or operationalised in way that is interchangeable with a sense of belonging.
Studies that explore the concept of 'belonging' across diverse student populations, including but not limited to international students, students of colour, LGBTQ+ students, and first-generation students.	Unless they provided unique insights into 'belonging', general review articles, opinion pieces, editorials, or other non-empirical articles were excluded as well as articles that covered a broad range of topics in higher education without a specific focus on 'belonging'.
Articles that discuss or assess strategies, programs, or interventions designed to foster a sense of belonging in higher education.	Articles on staff or educator belonging or professional development for teaching staff were excluded.

Articles that address the challenges or barriers students face in their pursuit of belonging.	Articles not published in the Journal of University Teaching and Learning Practice
Articles from the last 20 years.	

Subsequently, the full texts of the remaining 56 articles were examined by the same two PhD-qualified researchers to further determine the articles' relevance to the review's objectives. Reliability between the researchers was ensured by comparing their independent screening results. In cases where there was disagreement regarding article inclusion, a consensus was reached through discussion. Following the full text screening, 23 articles were excluded, leaving a final total of 33 articles for inclusion in the systematic review. The step-by-step process of article identification, screening, and selection is illustrated in the PRISMA flow diagram (see Figure 1).

Figure 1

PRISMA Flow Diagram



Note: This diagram illustrates the systematic process of article identification, screening, and final selection for the review.

Data extraction and analysis

Articles were analysed using a data extraction table designed for the current review based on the research questions. A pilot test was conducted where both researchers independently extracted data from a sample of 7 articles chosen at random. The inter-rater reliability from this pilot was established at 0.69. In instances where discrepancies arose, discussions were held to reach a consensus, leading to further refinement and clarity of the extraction process. Data extracted included: author(s), year of publication, title, definitions of 'belonging', key determinants influencing belonging, the impact of belonging on various student outcomes, specific student population findings, barriers to belonging, strategies or interventions for fostering belonging, the research methodology adopted, and a summary of the main findings.

The authors used a coding process to code the articles for major themes (Thomas & Harden, 2008). The coding framework was iteratively developed, starting with a priori themes derived from the literature on belonging and adjusted as new themes emerged from the data. The findings from this thematic synthesis were then mapped back to our research questions.

Results

Descriptions and Features of Studies

Table 3 provides a summary of the characteristics of the studies included in the qualitative synthesis. Studies were conducted across several countries, including Australia, the United Kingdom (UK), China, South Africa, Malaysia, the United States of America (USA), Iraq, Hong Kong, Canada, Norway, New Zealand, and Scotland. A range of study methodologies were used including qualitative, mixed methods, autoethnography studies, text and opinion pieces, non-randomised experimental studies, case reports, action research, and cross-sectional studies. Participants included students and or staff in higher education institutions. The synthesised findings across studies included in the review are presented in the following section.

Table 3a

Characteristics of Identified Qualitative Studies

First author (Year) Country	Study aims	Study methodology	Sample characteristics
Andrew et al. (2021) Australia	To identify ways to better support student engagement in the synchronous virtual environment through peer observation of activities and interactions of colleagues and students.	Qualitative	Three participants who were university teaching and research scholars.
Bowskill et al. (2022) UK and China	To understand emotional outcomes relative to the use of technology of educators whilst working from home during the pandemic.	Qualitative	One participant who taught in a state secondary school in the UK, and one participant who taught in a private language school in China.
Graham (2022) UK	To discuss the situated struggle that students experience in comprehending the often tacit rules that govern academic practices in order to engage fully with their academic studies and develop a sense of belonging.	Qualitative	18 Masters students representing three broad disciplinary areas of education, social sciences and health and social care in three Scottish universities.
Hews et al. (2022) Australia	To investigate how the shift to online education during COVID-19 affected students' perceptions of learning and engagement.	Qualitative	Students undertaking a Bachelor of Laws (Honours) in Semester 1 2020
James et al. (2022) Australia	To investigate the tools and approaches used by enabling educators to support non-traditional students develop a sense of belonging during emergency remote teaching during the COVID-19 pandemic.	Qualitative	25 lecturing staff, teaching in Term 1 2020.

Joubert et al. (2023) South Africa and Australia	To explore student engagement with online learning including digital challenges and marginalisation issues at the start of the COVID-19 pandemic in 2020, drawing on two studies (one conducted in South Africa and the other in Australia).	Qualitative	Australia: 198 students in their first year of study at either undergraduate or postgraduate levels at a small regional university. South Africa: 4381 students at a South African university who completed an English Academic Literacy module and 4800 students who completed the Survey on Students' Access to and Use of Learning Materials (SAULM).
Keevers et al. (2019) Australia and Malaysia	To investigate how boundary relations in Transnational Education may be reconfigured using participatory action learning to support and enhance relationships, improve the outcomes of collaboration and dialogue, and enable the co-development of context-sensitive curricula and quality measures.	Qualitative	88 Deputy Vice Chancellors, faculty deans, subject coordinators, tutors, heads of schools, teaching team members from faculties of Law, Humanities and Arts, Business and Engineering and Information Sciences across both institutions.
Kinash (2021) Australia	To explore ten key themes/principles which matter most in higher education, with the goal of enhancing the educational experience of students.	Autoethnographic study	N/A
Mandalawi et al. (2022) Iraq	To provide a critical reflection on the place of belonging in the context of doctoral study by distance.	Case report	One doctoral researcher and three supervisors.
Mann (2022) Australia	To provide a critically reflective autoethnographic study of the author's 12 years of experience in developing and refining the Ally Program, a university-wide, extra-curricular online training program aimed at creating connection for LGBTIQ+ students and staff.	Autoethnographic study	N/A
Morley & Aston (2023) UK	To investigate the extent to which changes in writing development through the pandemic refocused how students are engaged in community-focused digital writing practices.	Case report	Students from all faculties and all levels across the University of Manchester.

Muir et al. (2020) Australia	To investigate the effectiveness of facilitation strategies used by instructors to enhance online engagement using two case studies.	Case report	Students who participated in tertiary online learning course (case study one: 20 students; case study two: did not specify n)
Perrin (2014) USA	To investigate how students, faculty, administrators, and community partners can work together to create engaging learning experiences and how students can feel empowered through experiential learning programs in three collegiate programs.	Qualitative	16 instructors, students, and community partners in three collegiate programs in the USA.
Russell & Slater (2011) New Zealand	To explore how institutional and non-institutional learning environments influence student engagement with learning in a higher education, university setting.	Case report	First time enrolled students at a tertiary institution (173 questionnaire respondents and 10 interviewees).
Seary et al. (2023) Australia and Scotland	To consider the essential elements that preparatory courses should include to successfully transition underrepresented groups of students to study at the award level. The study included a comparison of the STEPS course in the Australian context and the LEAPS in the Scottish context to propose a five-tenet framework to support the transition of diverse student groups to university study.	Collaborative action research	Students from groups typically underrepresented in tertiary education settings who participated in either the STEPS (Australia) or LEAPS (Scotland) transition and preparation support courses.
Singh (2022) Norway	To examine how students' collaborative epistemic actions evolve in online collaborative learning meetings and how digital technology promotes such activities, enhancing students' agency in learning in the Pedagogical Information and Communication Technology Massive Open Online Course (ICTPED MOOC).	Qualitative research	18 pre-service and in-service teachers participating in the ICTPED MOOC course to develop their professional digital competence.

Note. The studies employing a qualitative approach had the capacity to capture students' perspectives across a range of subgroups (e.g., undergraduate, postgraduate, cross-discipline, first time students and those from less represented groups) as well as the views of educators and higher education leaders. Several papers focused on the COVID-19 pandemic, while some examined issues such as learning experiences and the impact of the learning environment.

Table 3b

Characteristics of Identified Quantitative and Mixed Methods Studies

First author (Year) Country	Study aims	Study methodology	Sample characteristics
Cohen & Viola (2022) UK	To explore to what extent and in what ways students understand their learning experiences to be relevant factors in contributing to their sense of belonging.	Mixed methods	486 students from a research-intensive university in the UK completed the survey. 32 students participated in an interview, 11 of which also participated in a follow-up interview.
Crawford et al. (2022) Australia	To explore proactive ways of supporting the mental well-being of mature-aged students in and from regional and remote Australia.	Mixed methods	1879 mature-aged students in, and from, regional and remote Australia.
Keyser et al. (2022) USA	To investigate students' sense of belonging in classroom using two pedagogical practices, real talks, and alternative lessons.	Mixed methods	462 survey responses from students attending a university with a population comprised of students who are typically underrepresented in higher education; qualitative feedback from 20 faculty members
Larcombe et al. (2007) Australia	To critically evaluate the pilot of a Thesis Writers' Circles program with a particular focus on the needs of students that were felt to be well-met by this model of support, including international NESB students.	Mixed methods	11 participants in the pilot Thesis Writing Circles (TWC) program
Larsen et al. (2021) Australia	To evaluate the impact of the Get Ready transition programs on student success and retention across three large-enrolment first-year STEM subjects, in particular with respect to low-ATAR, low-SES and first-in-family students.	Non-randomised experimental study	Students in three large-enrolment first-year STEM subjects.
Midford et al. (2023) Australia	To investigate how students' motivation and engagement in the learning process interacted with the kinds of decisions and aspirations that had led them to	Cross-sectional study	441 students commencing a Bachelor of Arts degree at a Melbourne

	the university and where they hoped their studies might lead them.		University and who were enrolled in a compulsory first year BA core subject.
Muldoon & Macdonald (2009) Australia	To encourage the growth of learning communities in colleges through training and subsequent support of senior students charged with helping first-year students negotiate the transition to successful university study.	Within groups, repeated measures design	75 students who attended Tues2Study.
Rockinson-Szapkiw et al. (2014) United States of America (USA)	To examine the influence of online doctoral students' interactions via peer initiated and university-initiated technology on their sense of connectedness with peers and faculty members.	Causal comparative design	132 candidates enrolled in an online Doctor of Education program.

Note. Most of the studies that utilised quantitative and mixed methods studies used surveys, and similarly to the qualitative approaches in Table 3a, participants spanned education levels. All the studies in Table 3b were from western, first-world countries and, in contrast to the studies with qualitative methodologies, none of the studies in Table 3b centred around experiences or outcomes during, or following, the global pandemic.

Table 3c

Characteristics of Other Identified Studies

First author (Year) Country	Study aims	Study methodology	Sample characteristics
Crews & Allinson (2022) UK	To define the experience of belonging and why it matters and laying out the epistemological and methodological context within which we position the work.	Text and opinion	N/A
Graham & Moir (2022) UK	To challenge the notion of belonging, problematising it as a neoliberal construct of 21st century higher education that prioritises domestication and conformity to social and economic expectations of employability, entrepreneurialism, and acquisitive individualism.	Text and opinion	N/A

Larsen & James (2022) Australia	To discuss how a sense of belonging can be instilled in marginalised students to improve retention and success and widen participation.	Text and opinion	N/A
Murray et al. (2022) Australia	To report on learnings following the implementation of the Pledge over three iterations and reflects upon its impact on shaping students' sense of belonging.	Reflective practice	63 first-year law students and instructors.
Nieminen & Pesonen (2022) Hong Kong and Norway	To explore a conceptual model for anti-ableist pedagogies to promote belonging and to challenge the exclusion and marginalisation of students with a disability.	Text and opinion	N/A
Pratt et al. (2021) Canada	To explore ethical relationality and the practical ways in which their heterarchical ensemble mentorship aims to decolonise and advance a shared vision for reconciliation for university teaching and learning.	Text and opinion	N/A
Press et al. (2022) Australia	To take a critical perspective to the authors' own standpoint in relation to pedagogies of belonging.	Text and opinion	N/A
Tice et al. (2021) Australia	To describe learnings from the pandemic experience about student belongingness and what instructors can do to improve it, even under difficult circumstances.	Text and opinion	N/A
Wilson & Morieson (2022) Australia	To explore a range of initiatives that assisted staff and students maintain a sense of belonging as they shifted to an online learning and teaching environment during COVID-19.	Text and opinion	N/A

Note. Most studies using other approaches were text and opinion pieces and were written from educators' perspective. Similar to Table 3b, all studies were from industrialised countries, and two reported on issues pertaining to the COVID-19 pandemic.

How is the concept of 'belonging' defined and understood in the context of higher education, as presented in the Journal of University Teaching and Learning Practice?

Thematic analysis was used to identify themes from the curated studies relating to the definition of belonging in higher education. Drawing on the approach outlined by Ryan and colleagues (2018), articles were read, coded, and organised according to identified themes. Themes were then reviewed, refined, and confirmed with the broader research team prior to reporting. Four overarching themes relating to the definition of belonging in higher education were identified through the review: connectedness to peers, staff, and the institution or learning environment; feeling safe, at home, and a part of the community; being valued and accepted; and emphasising diversity and inclusion. Table 4 provides a summary of studies' definitions of belonging, according to identified themes.

Connectedness to Peers, Staff, and the Institution/Learning Environment

Sixteen studies (48.50%) described belonging as involving a sense of connectedness to other students, higher education staff, and the broader institution or learning environment. Press et al. (2022) described belonging as being the "connections, interactions and relational endeavours associated with academic achievement and a prosperous life at university" (p. 3). Sense of connectedness was also described as important in ensuring quality relationships. For example, Rockinson-Szapkiw et al. (2014) described belonging as involving social integration into the tertiary institution, involving a feeling of connectedness, and the development of quality relationships with peers and faculty staff. However, our analysis reveals that connectedness often intersects with other themes, such as feeling safe and being valued. For instance, Keyser et al. (2022) not only describe the significance of connectedness but also intertwine it with the need for creating a safe and inclusive environment, illustrating how these themes collectively enhance students' sense of belonging.

Feeling Safe, at Home, and a Part of the Community

Seven studies (21.21%) included in their definition of belonging a sense of feeling safe, at home, and a part of the higher education community. For example, Wilson and Morieson (2022) described belonging as including "a feeling of emotional attachment, of feeling at home and of feeling safe" (p. 1). Keyser et al. (2022) further described belonging as including "classroom climates and cultures where students feel safe, known, and valued" (p. 1).

Being Valued and Accepted

Another critical aspect of belonging, described in seven studies (21.21%), involves students' experiences of being acknowledged and embraced for their authentic selves within the academic setting. Within this definition, the ability to be oneself and in doing so to feel accepted and valued was considered essential. For example, James et al. (2022) drew on the definition provided by Amaral da Fontoura (2012) where belonging "deals with our inner self, to be part of something bigger than ourselves, to be accepted and loved, with our strengths and weaknesses" (p. 50). An important part of acceptance is safety, and thus students from marginalised backgrounds must also be free to study and participate in higher education free from abuse, harassment, or unfair criticism (Keyser et al., 2022).

Diversity and Inclusion

Ten studies (30.30%) included in their definition of belonging the concepts of diversity and inclusion, that is that a sense of belonging in higher education requires that all students, regardless of background, experience a sense of being included and that they are an important

and valued member of the higher education community. Central to this are higher education institution policies and practices that facilitate inclusive environments and learning experiences. For example, Joubert et al. (2023) drew on Kahu and Nelson's (2018) student engagement framework for the purposes of their study, where "individual student engagement occurs dynamically within an educational interface at the intersection of the student and their characteristics and background, and the institution and its practices" (p. 2). Bowskill et al. (2022) emphasised the need for institutions to have students and staff from a range of cultures and backgrounds, while Graham (2022) explains that individuality is a factor that is important, whereby higher education institutes embrace unique knowledge, backgrounds, and experiences. Crawford and colleagues (2022) note that students will enter HE with a range of varied circumstances and challenges, and thus for belongingness to be achieved, staff and the HE community should understand, and consider such characteristics in order to 'know' students.

Table 4

Definitions of Belonging

First author (Year)	Identified themes within definitions			
	Connectedness to peers, staff, and the institution/learning environment	Feeling safe, at home, and a part of the community	Being valued and accepted	Diversity and inclusion
Andrew et al. (2021)	✓			
Bowskill et al. (2022)	✓	✓		✓
Cohen & Viola (2022)				
Crawford et al. (2022)				✓
Crews & Allinson (2022)			✓	
Graham & Moir (2022)				✓
Graham (2022)				
Hews et al. (2022)	✓			
James et al. (2022)	✓		✓	
Joubert et al. (2023)	✓			✓
Keevers et al. (2019)				
Keyser et al. (2022)	✓	✓		✓
Kinash (2021)	✓			✓

Larcombe et al. (2007)					
Larsen & James (2022)	✓				
Larsen et al. (2021)	✓				
Mandalawi et al. (2022)					
Mann (2022)		✓	✓		
Midford et al. (2023)					
Morley & Aston (2023)			✓		
Muir et al. (2020)					
Muldoon & Macdonald (2009)					
Murray et al. (2022)	✓				
Nieminen & Pesonen (2022)				✓	
Perrin (2014)	✓				
Pratt et al. (2021)	✓				
Press et al. (2022)	✓		✓		
Rockinson-Szapkiw et al. (2014)	✓			✓	
Russell & Slater (2011)	✓				
Seary et al. (2023)	✓	✓	✓		
Singh (2022)		✓		✓	

Tice et al. (2021)	✓	✓	
Wilson & Morieson (2022)	✓		✓

What are the key factors or determinants identified that influence a student's sense of belonging in higher education?

Results of thematic analysis yielded four themes relating to the determinants of belonging in higher education: institution-wide approaches; creation and maintenance of inclusive environments; educator practices; and quality relationships with educators and peers. Table 5 provides a summary of the determinants of belonging identified across studies included in the review.

Institution-wide Approach

Seven studies (21.21%) included in the review described the importance of institution-wide approaches in contributing towards a student's sense of belonging in higher education. For example, Wilson and Morieson (2022) argued that an institutional approach which focuses on placing values (e.g. care, integrity) and community at the centre of the student and staff experience can contribute towards a sense of belonging, thereby increasing academic engagement and student retention. Russell and Slater (2011) further suggested that institution-wide approaches should particularly focus on supporting students from diverse backgrounds (e.g., mature age students, international students) to experience a sense of inclusion and belonging. This may involve introducing policies and procedures and providing institution-wide professional learning to increase inclusion and the valuing of diversity (e.g., Nieminen, 2022). Thus, belonging should not be siloed, and fall upon the responsibility of management or educators: rather, it is a collective effort in which belonging is prioritised at all systems and levels.

Inclusive Environments

Fifteen studies (45.45%) described the role of inclusive environments as a factor that influences a student's sense of belonging in higher education. Seary et al. (2023) described the importance of creating inclusive environments to support students to develop a sense of connection and engagement with their learning, peers, and educators, while Press et al. (2022) emphasised the importance of access and inclusive spaces within the environment to facilitate a sense of belonging for all students. An example of this may be an institution having comfortable facilities for those students who may pray during the day, or for breastfeeding mothers.

Educator Practice

Sixteen studies (48.50%) reported on the importance of educator practice in contributing towards students' sense of belonging. Practices which support students to develop a sense of connection and inclusion, such as facilitating informal discussions between students, using technology to create opportunities for connection, being available, present and open, giving students time to develop relationships, and demonstrating care, interest and respect towards students were described as important in facilitating a sense of belonging (e.g., Larsen & James, 2022; Russell & Slater, 2011; Tice et al., 2021). Similarly, educators should adjust their teaching approaches, as necessary (James et al., 2022), and practices such as replying personally to emails or responding to posts on a discussion board fosters inclusivity and creates a sense of belonging (Crawford et al., 2022).

Several studies described the importance of educator practice which supports the inclusion of students from diverse backgrounds (e.g., Keyser et al., 2022; Mann, 2022; Nieminen et al., 2022). For example, Nieminen et al. (2022) described the importance of educator practice

which ensures the voices of all students are heard, acknowledged and respected within the classroom. Keyser and colleagues (2022) described the benefits of educators drawing on their diverse lived experiences to increase the relatability of course content and to support sense of inclusion and belonging for all students, but particularly students from diverse or marginalised backgrounds.

Quality Relationships with Educators and Peers

Seventeen studies (51.51%) described quality relationships with peers and educators as a key factor which influences a students' sense of belonging in higher education. As reported by Larsen and James (2022) "developing relationships between an educator and student cannot be underestimated in the discussion around building a sense of belonging within the higher education sector" (p. 10). Several studies reported on the importance of facilitating quality relationships between students, their peers, and educators, particularly in the context of reduced opportunities for connection experienced during COVID-19. Studies described the importance of identifying creative ways to support student connection and engagement in online learning environments where opportunities for in-person connection are limited. The pandemic highlighted the role of informal social connections within education settings – for example, students could no longer approach a diligent educator before or after class, for an informal chat or engage in co-curricular activities where they might get to know their peers (Hews et al., 2022).

Findings from the review reveal that fostering a sense of belonging transcends singular efforts. It requires a holistic and integrated strategy that touches every aspect of the educational experience. Several studies corroborately (e.g., Wilson and Morieson, 2022; Russell and Slater, 2011; Nieminen, 2022) illustrate the foundational role of institution-wide approaches that prioritise core values and community at the heart of the educational experience. The importance of creating physically and socially inclusive environments is also highlighted by Press et al. (2022) and Cohen and Viola (2022), who argue for spaces that accommodate diverse student needs and promote a sense of openness and accessibility. Educator practices, on the other hand, as studied by Larsen and James (2022), Tice et al. (2021), and Keyser et al. (2022), emphasise the necessity of behaviours and strategies that facilitate connection, inclusion, and respect towards students from diverse backgrounds, directly influencing the cultivation of quality relationships critical to a sense of belonging (see Larsen and James, 2022; Hews et al., 2022). The intersection of these themes across studies, particularly in works by Russell and Slater (2011), James et al. (2022), and Cohen & Viola (2022), showcases the interdependent nature of these determinants. Thus, a coordinated approach that combines institutional strategies, inclusive practices, effective educator engagement, and the nurturing of interpersonal connections emerges as essential for creating a supportive and engaging educational environment where every student can truly feel they belong. Integrating these multiple facets of the educational ecosystem is pivotal for enhancing student engagement, satisfaction, and overall academic success in higher education settings.

Table 5

Determinants of Belonging

First author (Year)	Identified themes			
	Institution-wide approach	Inclusive environments	Educator practice	Quality relationships with educators and peers
Andrew et al. (2021)			✓	
Bowskill et al. (2022)			✓	✓
Cohen & Viola (2022)	✓	✓	✓	
Crawford et al. (2022)		✓		✓
Crews & Allinson (2022)			✓	
Graham & Moir (2022)			✓	
Graham (2022)		✓	✓	
Hews et al. (2022)	✓			✓
James et al. (2022)		✓	✓	✓
Joubert et al. (2023)	✓			✓
Keevers et al. (2019)			✓	✓
Keyser et al. (2022)			✓	✓
Kinash (2021)			✓	
Larcombe et al. (2007)				

Larsen & James (2022)				✓
Larsen et al. (2021)			✓	✓
Mandalawi et al. (2022)			✓	
Mann (2022)		✓		✓
Midford et al. (2023)	✓			✓
Morley & Aston (2023)			✓	
Muir et al. (2020)		✓		
Muldoon & Macdonald (2009)		✓		✓
Murray et al. (2022)				✓
Nieminen & Pesonen (2022)	✓	✓	✓	
Perrin (2014)		✓		✓
Pratt et al. (2021)		✓		
Press et al. (2022)		✓		
Rockinson-Szapkiw et al. (2014)				✓
Russell & Slater (2011)	✓	✓	✓	✓
Seary et al. (2023)		✓		
Singh (2022)		✓		
Tice et al. (2021)			✓	✓

Wilson & Morieson (2022)	✓	✓

How does belonging vary across different student populations?

Sixteen papers (48.48%) included discussion of belonging for diverse student populations (e.g., international students, LGBTQ+ students, students from groups considered traditionally or historically marginalised, students from lower SES backgrounds, first-generation students). These studies included discussion regarding issues associated with conceptualisations and definitions of belonging which prioritise the dominant culture and tend to exclude the perspectives and experiences of diverse student groups (e.g., Graham, 2022; Russell & Slater, 2011), and specific interventions and practices to support a sense of belonging in students from diverse backgrounds including preparatory or transition courses (e.g., Larsen et al., 2021; Seary et al., 2023), encouraging the voices of diverse student groups and learning from diverse perspectives (e.g., Nieminen et al., 2022; Pratt et al., 2021; Press et al., 2022), and specific classroom strategies including real talks and alternative lessons (e.g., Keyser et al., 2022). Most of these studies described the importance of conceptualising belonging as a construct that includes valuing diversity and prioritising inclusion.

Overall, these studies collectively critique the prevalent conceptualisations and definitions of belonging, which often reflect and prioritise dominant cultural norms, thereby marginalising the unique experiences and perspectives of diverse student groups (as discussed in Graham et al., 2022; Russell & Slater et al., 2011). A common thread across these papers is the emphasis on interventions and practices designed to foster an inclusive sense of belonging (e.g., preparatory or transition courses; Larsen et al., 2021; Seary et al., 2023; active encouragement of diverse voices; Nieminen et al., 2022; Pratt et al., 2021; Press et al., 2022. These approaches underscore a critical overlap in the literature, and highlights the necessity of redefining belonging to value diversity and prioritise inclusion.

How does a sense of belonging influence student outcomes in higher education?

Five themes were identified regarding the outcomes associated with sense of belonging in higher education in the studies included in the review as outlined in Table 5. Seventeen studies (51.51%) discussed the role of sense of belonging in contributing towards academic engagement and motivation, seven studies (21.21%) reported benefits in terms of student retention in higher education; six studies (18.18%) identified increased institutional and social capital of diverse student populations as an outcome associated with sense of belonging; five studies (15.15%) described improved academic outcomes; and four studies (12.12%) reported improved wellbeing associated with a sense of belonging in higher education. Crawford et al. (2022) highlights the feelings of pride, excitement. Safety, comfort, and support that are experienced by the higher education student who feels that they belong.

In addressing research questions on belonging variability (i.e., How does belonging vary across different student populations?) and influence (i.e., How does a sense of belonging influence student outcomes in higher education?), we observe several overlaps. These overlaps illustrate that fostering a sense of belonging within educational environments does not singularly influence one aspect of the student experience but rather contributes to a holistic improvement across various dimensions. For example, the studies by Crawford et al. (2022) and Larsen and James (2022) reveal a direct correlation between academic engagement and motivation and higher rates of student retention, suggesting that students who feel a strong sense of belonging are more inclined to continue their academic journey. This relationship is indicative of a broader pattern where emotional and social support, as shown in the wellbeing improvements reported by Crawford et al. (2022) and Mann (2022), plays an important role in academic success. The enhancement of institutional and social

capital (as seen in Larsen et al., 2021; Wilson & Morieson, 2022), exemplifies how belonging contributes to creating a supportive network that bolsters learning and achievement. These nuanced outcomes (see Table 6), highlight the role of belonging in not just boosting academic performance but also in nurturing a supportive, inclusive, and vibrant educational environment.

Table 6

Outcomes Associated with Belonging

First author (Year)	Identified themes				
	Academic engagement and motivation	Student retention	Increased institutional and social capital of diverse student populations	Academic success	Wellbeing
Andrew et al. (2021)		✓			
Bowskill et al. (2022)					
Cohen & Viola (2022)					
Crawford et al. (2022)	✓	✓			✓
Crews & Allinson (2022)					
Graham & Moir (2022)	✓				
Graham (2022)					
Hews et al. (2022)					
James et al. (2022)	✓				
Joubert et al. (2023)	✓				✓
Keevers et al. (2019)				✓	
Keyser et al. (2022)	✓		✓		
Kinash (2021)	✓		✓		
Larcombe et al. (2007)			✓		

Larsen & James (2022)	✓	✓		✓	
Larsen et al. (2021)		✓	✓	✓	
Mandalawi et al. (2022)					
Mann (2022)					✓
Midford et al. (2023)				✓	
Morley & Aston (2023)					✓
Muir et al. (2020)	✓				
Muldoon & Macdonald (2009)		✓			
Murray et al. (2022)	✓				
Nieminen & Pesonen (2022)			✓		
Perrin (2014)	✓				
Pratt et al. (2021)					
Press et al. (2022)	✓				
Rockinson-Szapkiw et al. (2014)	✓	✓			
Russell & Slater (2011)	✓				
Seary et al. (2023)	✓				
Singh (2022)	✓				
Tice et al. (2021)	✓			✓	

| | | |

What challenges or barriers do students face in their pursuit of belonging in higher education settings?

Results of thematic analysis identified three themes concerning the challenges or barriers experienced by students in their pursuit of belonging in higher education (see Table 7): exclusion of diverse student groups; lack of opportunities for connection (such as during remote learning during COVID-19); and lack of supportive relationships with educators and peers.

Exclusion of Diverse Student Groups

Twelve studies (36.36%) reported on practices and approaches that result in the exclusion of students based on a range of personal characteristics including gender, sexuality, culture, socio-economic status, disability, age, and geographical location as barriers to belonging in higher education. These studies described how systems, practices and approaches that fail to consider the needs of diverse student groups can result in a sense of social exclusion which contributes towards a lack of belonging and engagement with learning. For example, the tendency for higher education institutions to have strictly hierarchical systems and be predominantly white may alienate those from underrepresented backgrounds, who may also have 'belonging uncertainty' (Keyser et al., 2022). Socially stigmatised groups may be subject to biases, and there may be lack of visibility of marginalised students in course content (for example, in textbooks or in practicum guides). Marketing activities and materials put out by higher education facilities may not seek to represent marginalised students, and similarly on-campus support services may not meet the unique needs of groups such as nursing mothers, those needing spaces for religious practices during the day, or LGBQTIA+ students. Non 'traditional' students, such as mature age students, may have multiple commitments in addition to study which can hamper efforts to socially integrate, simply due to such students having limited time (van Rhijn et al., 2016).

Lack of Opportunities for Connection *(such as during remote learning during COVID-19)*

Eight studies (24.24%) described lack of opportunities for connection between students, their peers, and educators as a significant barrier to developing a sense of belonging in higher education. Several studies discussed the specific challenges associated with establishing and maintaining the connections which are essential in creating a sense of belonging for students in the context of remote learning necessitated by the COVID-19 pandemic (e.g., Hews et al., 2022; James et al., 2022; Joubert et al., 2023; Tice et al., 2021).

Lack of Supportive Relationships with Educators and Peers

Ten studies (30.30%) described a lack of supportive relationships with educators and peers as being a barrier to belonging in higher education. For example, non-traditional students (including mature age, those from lower SES background, those living with mental ill health, or students engaged exclusively in off campus education) may lack opportunities to connect with peers in the context of classes and casual on-campus activities such as meal breaks and extracurricular activities, and Crawford et al. (2022) also highlighted the importance of 'being known'.

The thematic analysis of challenges and barriers to belonging in higher education settings reveal overlaps that highlight the interconnected nature of these obstacles. For example, studies such as those by Crawford et al. (2022), Keyser et al. (2022), and Singh (2022) illustrate how the exclusion of diverse student groups, lack of opportunities for connection,

especially during remote learning induced by the COVID-19 pandemic, and the absence of supportive relationships with educators and peers form a complex web that hinders the pursuit of belonging among students. These barriers are not experienced in isolation but are deeply interwoven, affecting students across various demographics, including those from marginalised backgrounds, non-traditional students, and those engaging in remote learning. The overlapping nature of these barriers underscores the importance of holistic and inclusive strategies within higher education institutions to dismantle systemic inequities, enhance connectivity, and foster supportive, meaningful relationships, thereby creating an environment where all students can feel a sense of belonging.

Table 7

Barriers to Belonging

First author (Year)	Identified themes		
	Exclusion of diverse student groups	Lack of opportunities for connection (such as during remote learning during COVID-19)	Lack of supportive relationships with educators and peers
Andrew et al. (2021)		✓	
Bowskill et al. (2022)			
Cohen & Viola (2022)			
Crawford et al. (2022)	✓	✓	✓
Crews & Allinson (2022)			
Graham & Moir (2022)	✓		
Graham (2022)	✓		
Hews et al. (2022)		✓	
James et al. (2022)		✓	
Joubert et al. (2023)		✓	
Keevers et al. (2019)			✓
Keyser et al. (2022)	✓		✓
Kinash (2021)			✓
Larcombe et al. (2007)	✓		

Larsen & James (2022)	✓			
Larsen et al. (2021)				✓
Mandalawi et al. (2022)			✓	
Mann (2022)				
Midford et al. (2023)				
Morley & Aston (2023)				
Muir et al. (2020)				
Muldoon & Macdonald (2009)				
Murray et al, (2022)				
Nieminen & Pesonen (2022)	✓			
Perrin (2014)				✓
Pratt et al. (2021)	✓			
Press et al. (2022)	✓			✓
Rockinson-Szapkiw et al. (2014)			✓	✓
Russell & Slater (2011)	✓			✓
Seary et al. (2023)	✓			
Singh (2022)	✓		✓	
Tice et al. (2021)			✓	✓

What strategies or interventions are presented in the literature to foster a sense of belonging for students in higher education?

Thematic analysis yielded five overarching themes from the articles included in the review related to strategies or interventions that foster a sense of belonging in higher education (see Table 8). These included strategies that target multiple system levels (macro and micro level); strategies that build relationships; effective educator practice and pedagogies; effective use of technology; and creating inclusive environments that value diversity.

Targeting Multiple System Levels (Macro/Micro)

Seven studies (21.21%) reported on the value of strategies which target multiple system levels to increase student belonging in higher education. Strategies at the macro level include institution-wide policies and practices that aim to increase belonging, such as staff professional learning (e.g., Nieminen et al., 2022), programs to support the engagement of diverse student groups (e.g., Russell & Slater, 2011) and policies that facilitate student voice, connection and belonging (e.g., Wilson & Morieson, 2022).

Building Relationships

Ten studies (30.30%) described strategies that facilitate relationship building between students, peers, and educators. For example, Tice and colleagues (2021) described a range of strategies to build relationships in online environments including incorporating facilitated informal conversations between students in lectures, and educators having a greater online presence by arriving early and staying late in online sessions to be available for informal discussions with students. Russell and Slater (2011) described how integrating meaningful and supportive educator/student, student/student and small group interactions can be helpful in providing opportunities to build relationships within large classes.

Educator Practice and Pedagogies

Fifteen studies (45.45%) discussed specific educator practices and pedagogies that can foster a sense of belonging in higher education. Rockinson-Szapkiw et al. (2014) described how educators can create opportunities for students to connect and socialise through collaborative assignments and discussion forums dedicated for social interactions. Muldoon & Macdonald (2009) reported on the value of providing layered, personalised learning support and opportunities for peer mentoring in a non-threatening, social environment to meet individual needs. Larsen and James (2022) described the opportunities for increasing the sense of belonging of diverse student groups associated with educators opening up and sharing their own experiences and vulnerabilities. Keyser and colleagues (2022) provided an example of the application of this strategy in practice through the implementation of ‘real talks’ where educators share stories from their own lives and give students space to share their stories, a strategy that was particularly valued by LGBTQ+ students and students from different racial and cultural groups. Graham (2022) described the value of a relational pedagogical approach that embraces open communication, care for and valuing of students.

Effective Use of Technology

Four studies (12.12%) described how technology could be used to facilitate student belonging to higher education. Singh (2022) reported on the value of online collaborative meetings and Rockinson-Szapkiw et al. (2014) reported on the value of web-based social media systems to support doctoral students’ sense of belonging and connectedness to higher education. Andrew et al. (2021) provided clear examples of effective use of technology to garner

belongingness: creating opportunity for audio and video interactions, utilising text chat, developing interactive group work activities (e.g., breakout rooms, polls, quizzes, and whiteboard discussions). An example of this might be to create a fun poll on a 'non-learning' related topic: e.g., 'what is the best TV streaming service?' to create an atmosphere of connection.

Creating Inclusive Environments that Value Diversity

Eight studies (24.24%) reported the importance of creating inclusive environments that value diversity in building sense of belonging. Pratt and colleagues (2021) described how the inclusion of diverse voices and the upholding of Indigenous knowledge and traditions can facilitate a sense of belonging for students from Indigenous backgrounds. Nieminen and colleagues (2022) emphasised the importance of applying anti-ableist pedagogies that promote the inclusion and belonging of students with a disability by encouraging and valuing diverse student voices in the classroom. Larsen and colleagues (2021) described the value of preparatory programs in creating a sense of belonging and supporting engagement for students from lower SES backgrounds and first-generation students.

The thematic analysis of strategies to foster a sense of belonging in higher education (see Table 8) reveals an interplay across the five key themes, emphasising a holistic approach to enhancing belonging, where interventions are not siloed but integrated across various aspects of the educational experience. For example, James et al. (2022) demonstrate a cross-cutting strategy that involves educator practices, technology use, and fostering relationships, highlighting the synergy between direct interpersonal interactions and digital platforms in creating a sense of community. Similarly, the work by Crawford et al. (2022) exemplifies how strategies spanning from institutional policies to classroom dynamics and technological engagement can collectively cultivate an environment where diversity is valued, and connections are strengthened. The nuanced overlaps between these themes, such as combining macro-level policy reforms with micro-level pedagogical changes and leveraging technology to enhance inclusivity, suggest that fostering belonging requires a robust, interconnected approach that addresses the multifaceted nature of student experiences in higher education.

Table 8

Strategies that Facilitate Belonging

First author (Year)	Identified themes				
	Targeting multiple system levels (macro, micro)	Building relationships	Educator practice and pedagogies	Effective use of technology	Creating inclusive environments that value diversity
Andrew et al. (2021)			✓		
Bowskill et al. (2022)				✓	
Cohen & Viola (2022)	✓				
Crawford et al. (2022)	✓	✓			
Crews & Allinson (2022)			✓		
Graham & Moir (2022)			✓		
Graham (2022)			✓		
Hews et al. (2022)			✓		
James et al. (2022)		✓	✓	✓	
Joubert et al. (2023)	✓	✓	✓		
Keevers et al. (2019)		✓	✓		
Keyser et al. (2022)			✓		✓
Kinash (2021)		✓			
Larcombe et al. (2007)		✓			✓
Larsen & James (2022)					✓
Larsen et al. (2021)		✓	✓		

Mandalawi et al. (2022)						
Mann (2022)						✓
Midford et al. (2023)		✓				
Morley & Aston (2023)						
Muir et al. (2020)			✓			
Muldoon & Macdonald (2009)			✓			
Murray et al. (2022)						
Nieminen & Pesonen (2022)	✓				✓	
Perrin (2014)						
Pratt et al. (2021)					✓	
Press et al. (2022)	✓				✓	
Rockinson-Szapkiw et al. (2014)			✓	✓		
Russell & Slater (2011)	✓	✓	✓			
Seary et al. (2023)					✓	
Singh (2022)				✓		
Tice et al. (2021)		✓	✓			
Wilson & Morieson (2022)	✓					

Discussion

Definitions of Belonging

In this systematic review, a variety of definitions for a sense of belonging in higher education were identified across the studies published in the *Journal of University Teaching and Learning Practice*, resulting in the delineation of four overarching themes. Consistent with prior studies illustrating the concept of belonging, the following elements emerge as critical components: (1) a global sense of connectedness to the institution and its members (Freeman et al., 2007; Furlong, 2013; Pittman & Richmond, 2008; Slaten et al., 2014), (2) diversity and inclusion (Gopalan & Brady, 2020; Museus & Quaye, 2009; O'Keeffe, 2013; Tachine et al., 2017), (3) feelings of safety and attachment (Baumeister & Leary, 1995), and (4) acceptance with respect (Alkan, 2016; Goodenow & Grady, 1993; Slaten et al., 2018). Thus, while particular to the setting of higher education, definitions evident in the present review reflect closely and build upon the definitions of belonging in other education settings that were published by earlier researchers.

Furthermore, the approach to defining and understanding belonging in the context of higher education has been developed to consider not only its multifaceted dimension but also its grounding in students' uniqueness (Cohen & Viola, 2022; O'Keeffe, 2013; Tachine et al., 2017). This approach recognises the interplay between the institutional culture and students' diverse cultural and educational backgrounds (Bourdieu & Wacquant, 1992). The experience of belonging in higher education may vary depending on students' identities and experiences of marginalization (Gopalan & Brady, 2020; Slaten, Elison et al., 2016; Slaten, Ferguson et al., 2016). This also suggests that the comprehension of belonging in higher education has extended from a definition centered on the institution and its dominant culture to one where students play a leading role in constructing their own meaningful sense of belonging (Graham & Moir, 2022).

Determinants of Belonging

Four key determinants were identified as contributors to the development of a sense of belonging in higher education: (1) institution-wide approach, (2) inclusive environments, (3) educator practice, and (4) quality relationships with educators and peers. Establishing positive social relations with peers and educators is widely recognised as a significant factor contributing to students feeling more integrated into higher education communities (Hagenauer & Volet, 2014; Walton & Brady, 2017; Slaten et al., 2018). Inclusive campus environment and teaching practices have also been discussed as critical determinants of belonging in higher education contexts (Museus et al., 2017; Strayhorn, 2021; Taff & Clifton, 2022).

Specifically, the reviewed studies highlighted several factors, including small group interactions within large classes, orientations/programs designed for successful transitions or experiential-learning projects with real-world implication, access to learning resources (e.g., peer mentoring, technologies) and financial and social support services. Inclusive pedagogy practices encompass acknowledging student names, maintaining instructor presence, responding to the needs and concerns of students, sharing educators' commitment to social justice, involving the voices of diverse populations (e.g., real talk), and integrating varied lived experience into course content to enhance its relatability. It is not surprising that institutional-level approaches were mentioned

alongside other determinants in this review. This observation underscores the importance of institutional support structures as the foundation for implementing various strategies aimed at nurturing students' sense of belonging in higher education. Consequently, the reviewed studies advocate for institutional transformation through the enhancement of educational practices, policies, and programs.

Student Outcomes of Belonging

The findings from the current review suggest that the benefits of a sense of belonging in higher education span five key themes: student academic engagement and motivation, student retention, increased institutional and social capital among diverse student populations, improved academic outcomes, and enhanced wellbeing. Aligned with previous research findings (Allen et al., 2018; Glass & Westmont, 2014; Pedler et al., 2022; Ulmanen et al., 2016), this review reveals a positive association between students' academic dispositions and their performance and outcomes with a sense of belonging. The psychological benefits extend beyond academic realms to encompass mental health and overall wellbeing (Gopalan & Brady, 2020; Gummadam et al., 2016). Moreover, the role of a sense of belonging is highlighted as both institutional and social capital for a diverse student population in higher education. The perceived sense of belonging can function as a protective factor, yielding a positive impact on students who are first-generation, LGBTQ+, or other historically marginalised individuals in the context of higher education (Hausmann et al., 2007; Museus et al., 2017).

Variability of Belonging Across Groups and Populations

Almost half of the studies identified in this review examined some specific student population, including but not limited to: LQBTQ+ students, students from historically marginalised backgrounds, and first-generation students. These studies generally communicated the need for specific interventions and practices for these unique student populations and advocacy for more empirical research to be completed in this area. In the current review, only two studies addressed specific interventions designed to support unique student populations. This identifies a gap in the literature and consistent with other recent research calling for more empirically studied belonging interventions in higher education generally, but more specifically for diverse student populations (Chang et al., 2014; Slaten et al., 2016). Belonging interventions are a promising way to help diverse college students feel more connected to their campus community and succeed in their academic endeavours. For example, institutions may create designated 'safe' spaces on campus for subgroups of students (e.g., LGBTQIA+), thus offering them an environment of safety (Witherup & Verrecchia, 2020). It is imperative that universities and other HE facilities welcome all students, accepting and expressing a diverse range of ideas, opinions, and beliefs (Barnett, 2020; Clauson & McKnight, 2018) and enable all students, irrespective of their characteristics, to fully participate in teaching, learning, work, and social activities (Astin, 2014). By implementing these interventions, colleges and universities can create more inclusive and supportive environments for all students.

Barriers to Belonging

Among the primary barriers to belonging in higher education are exclusion of diverse student groups, lack of opportunities for connection, and lack of supportive relationships with educators and peers. Social exclusion manifests in various forms, including a lack of representation in

student organisations and social groups, feelings of isolation from peers and faculty, and experiences of prejudice and stereotyping (Harper & Hurtado, 2007). These experiences can lead to feelings of alienation and disconnection from the campus community, hindering students' ability to fully engage in the academic and social aspects of college life. Furthermore, physical and financial barriers can limit access to resources and support services essential for academic success. Students with disabilities may encounter physical barriers that impede their movement around campus, while low-income students may struggle to afford textbooks, tutoring, and other necessary resources. Additionally, microaggressions, subtle yet hurtful comments or behaviours that reinforce negative stereotypes about marginalised groups, can create a hostile and unwelcoming environment for diverse students (Gurin et al., 2002). These microaggressions can undermine students' sense of belonging and erode their confidence in their ability to succeed in higher education.

Strategies and Approaches to Build Belonging

Across all the studies examined in this review, there were five overarching themes that relate to strategies for fostering belonging in higher education: strategies targeting multiple system levels (at the macro and micro levels); building relationships; effective educator practices and pedagogies; utilising technology effectively; and creating inclusive environments that value diversity. These themes encompass a comprehensive approach to building belonging, from institutional policies to individual interactions and have been supported, discussed, and studied in previous literature, although largely as it relates to descriptive and theoretical manuscripts (Allen et al., 2021; Tice et al., 2021).

The future of research in this area should truly be examining the empirical effectiveness of some of these studies through rigorous research designs that control for other conditions and examine these strategies, themes listed above, longitudinally. Specifically, future studies should aim to quantify the impact of relationship-building programs and practices on students' sense of belonging, over time and across diverse educational contexts. Walton and Brady (2017) have begun this process and have an immense body of work available on belonging interventions in higher education. Further, others have also designed belonging interventions, such as Museus et al.'s (2017) examination of culturally engaging campus environments and increase in belonging on campus. New research could consider these evaluations with the role of technology in creating virtual spaces that support belonging, particularly for online and remote learning environments. Assessing these interventions' long-term effects on student retention and success could guide the development of more effective strategies to foster a sense of belonging within higher education institutions and potentially garner more government-level support.

Limitations

Several limitations emerge from this systematic review, the major one being the limitation of being a single-source systematic review drawn exclusively from the *Journal of University Teaching and Learning Practice*. The results, therefore, must be seen within the context of trends for this particular journal. This means the review excludes works published in other journals and in other time frames – potentially excluding seminal works, diverse populations, and historical pieces that may better inform the research questions related to belonging.

The use of the specific search terms and operational definition of belonging may have also narrowed the scope of identified articles, while arguably not necessarily a limitation given the concerns with terminology use in belonging research (Allen et al., 2021). Terms such as 'engagement' were included only when they were congruent with our defined understanding of 'belonging.' This approach may have inadvertently excluded relevant studies that utilise a broader conceptualisation of 'engagement' and its relationship to belonging.

Furthermore, the exclusion of non-empirical articles such as opinion pieces and editorials may have led to the omission of valuable theoretical and conceptual insights. While this decision strengthens the empirical basis of the review, it also limits the inclusion of different perspectives and potential innovations.

Future Directions

The limitations of this review highlight potential avenues for future research. This review, serving essentially as a pilot, underscores the necessity to broaden the scope of future reviews to encompass a more diverse range of publications and sources. Such expansion is particularly vital for interdisciplinary research, given the wide-ranging interest in the concept of belonging across disciplines such as medicine, economics, anthropology, and politics (Allen, Riley, Boyle et al., 2022). Interdisciplinary collaboration on the concept of belonging could significantly enhance our understanding of the field and offer pathways to address major, interrelated global challenges such as climate change, geopolitical conflicts, and loneliness.

Future research should aim to focus on underrepresented student populations, delving into their unique strengths, knowledge, and challenges. This approach would facilitate the development of educational practices that are both refined and focused. As the number of international students grows, especially in Australia, this demographic deserves further research. Studies could investigate how Australian universities can intensify their efforts to ensure all students feel they belong and are represented (Hurley & Hildebrandt, 2023).

Another critical research domain is the evaluation of the effectiveness of interventions designed to promote belonging. Replicating existing studies and leveraging our current knowledge are essential steps in this process. Universities recognising the importance of belonging for their student cohorts may initiate self-driven interventions to foster belonging. However, ensuring these interventions are tested and evidence-based is crucial for informed decision-making and policy formulation regarding the most effective strategies.

Implications

It is possible that practical implications can emerge from this systematic review and certainly, the finding that the outcomes associated with a sense of belonging—ranging from academic engagement to wellbeing—emphasise the need for universities to prioritise belonging as a key objective for their agenda. Universities need to respond to barriers to belonging. This can occur through interventions aimed at transition (Pittman & Richmond, 2008; Walton et al., 2023), building social networks (Tinto & Goodsell, 1994), or leveraging student autonomy and voice (Riley, 2014). In the classroom, educators can adopt low-cost practices that facilitate social connection and belonging – helping students feel valued, respected, safe, and included are important first steps. To do this, educators can employ specific strategies such as personalised

feedback on assignments or video-based feedback (Henderson & Phillips, 2015), create opportunities for students to share their backgrounds and experiences in discussions and feel comfortable to participate, notice if a student is not in attendance and be proactive to reach out, look for ways to personally connect with students, and ensure that all communication (content, delivery materials) are accessible and psychologically and culturally safe (Centre for Youth Policy and Education Practice (CYPEP), 2021).

Strategic approaches could include the co-design the development of a belonging policy or guidelines and the implementation of cultural competency training that is practical, individualised and aimed at building skills and competencies rather than reiterating what staff may already know. For example, knowing students by their names is a well-established strategy to build belonging. However, many staff members report feeling unequipped to pronounce names from various global alphabets, and students are often unable to translate their names into English phonemes—an issue that is frequently overlooked. This situation could potentially lead to some students not participating in class or being addressed properly (if at all) (Swee-Lin Price, 2007). A practical approach could involve recruiting the assistance of a linguistic expert to provide a pronunciation guide for all new enrolments, to accompany student names, or employing supervision-style models with consultants or experts in these areas to offer a personalised approach to staff development needs. The outcome of such strategies could be that staff members genuinely develop a skill that enhances their ability to foster belonging.

Ultimately, students require ongoing opportunities to belong (van Gijn-Grosvenor & Huisman, 2020), competencies related to belonging (Thomas, 2013), the perception that they do belong, and the motivation to belong (Allen et al., 2021). These antecedents of belonging can be facilitated by the major findings of this review: an institution-wide approach, the creation of inclusive environments, effective educator practices, and the cultivation of quality relationships with educators and peers and the effectiveness of which is contingent upon overcoming barriers (i.e., social exclusion, lack of accessibility to opportunities to connect, and instances of discrimination and bias). For instance, the development of inclusive environments must explicitly address the exclusion of diverse student groups by embedding policies and practices that actively dismantle systemic biases and promote representation and visibility for all students. A concerted investment in both macro and microsystems within higher education institutions is essential to foster student belonging, considering the likely benefits. These benefits include not only the enhanced emotional wellbeing of students but also the provision of a framework for the growth of higher education in the decades to come.

Conclusions

Belonging possesses multidimensional definitional properties commonly concerned with connectedness to peers, staff, and the institution, feelings of safety and acceptance, and the acknowledgment of diversity and inclusion. The critical importance of belonging will continue to be unravelled as more research prevails, but the role of belonging in influencing a broad range of outcomes, including academic engagement, motivation, retention, and overall wellbeing, presents a strong case for why it needs to be a priority for all universities. The review also identified factors influencing belonging, such as the need for institution-wide approaches, inclusive environments, and educator practices that promote quality relationships. These factors may provide a basis for further research and intervention, as well as potential implications on policy and practice. One

key message of this review is that the challenges to belonging should not be ignored or understated, particularly for diverse and traditionally or historically marginalised student groups. Barriers of belonging that exist within higher education require ongoing work in order to foster an environment where everyone's fundamental right to feel a sense of belonging can be fulfilled.

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