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# Understanding higher education students' sense of belonging: a qualitative meta-ethnographic analysis

Gulsah Dost and Laura Mazzoli Smith

School of Education, Durham University, Durham, UK

**ABSTRACT**

The current literature on 'sense of belonging' spans a number of disciplines, with no apparent consensus on definition between these, complicated by the fact that sense of belonging is temporal and context-sensitive (such as during COVID-19). In particular, a closer look at how students define sense of belonging is needed from an up-to-date perspective to help them feel more connected to the faculty/campus and improve their wellbeing and mental health in the 'new normal' and 'next normal' post-pandemic eras. Therefore, this study explores higher education students' sense of belonging, a concept that has not been adequately conceptualised, from their perspectives. As these perspectives are subjective, an interpretive approach is required to generate rich meanings. This study has adopted a meta-ethnographic approach to synthesise qualitative studies, which allows for comparison and synthesis of studies into a new interpretation through translations. Interpretive qualitative synthesis resulted in one higher-order concept, four main concepts, and nineteen sub-concepts that conceptualise higher education students' understanding of sense of belonging to their universities.

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Sense of belonging; higher education; meta-ethnographic analysis; qualitative analysis; Covid-19 pandemic

## Introduction

Based on Maslow's (1962) theory of human motivation, all human beings have five basic needs, which can be arranged in a hierarchy according to how important they are to their survival. The basic needs for living (the essentials of life) go from the bottom of the pyramid to the top (the psychological desire to fulfilment), which include physiological needs, safety needs (a predictable and secure world), and a sense of belonging and love, esteem-related needs (e.g. self-confidence, worth, self-respect, and esteem from others), and self-actualisation (self-fulfilment or achieving one's potential). This theoretical perspective describes the desire to be accepted by others and to belong to a group, which could be a family, neighbourhood, a religious group, a work group, etc (Maslow and Lewis 1987). Feeling a sense of belonging is an essential human need that, when met, is associated with positive outcomes, and vice versa (Baumeister and Leary 1995). In addition to Maslow's seminal theory, several definitions specifically of sense of belonging have been identified in the literature across several fields; however, key studies across disciplines suggest different definitions of sense of belonging and there is little consensus (e.g. 'sense of community' used by McMillan and Chavis (1986); 'fit in' used by Reay, Crozier, and Clayton (2010), feeling 'safe' used by Ignatieff (2011), and Lewis et al. (2016); 'sense of membership' used by Tinto (2012), and the term is widely used in many different contexts. Several psychological studies have demonstrated the

**CONTACT** Gulsah Dost gulsah.dost@durham.ac.uk School of Education, Durham University, Durham, UK

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importance of sense of belonging in psychological development. According to Baumeister and Leary (1995), belonging is an essential human need driven by stable and consistent relationships. They argue that a need to belong is vital to mental and physical well-being. Belonging is a basic human need that refers to becoming connected or related (Strayhorn 2012). As Kestenberg and Kestenberg (1988, 536) explained, belonging affects a person's psychological development: 'Belonging encompasses many spheres of interest. It is a component of identity and object relationships. It manifests itself of familiar space and objects to whom the space belongs'. The experience of belonging is also related to identity, both the sense of self-identification and the sense of belonging with others (Bettez 2010). The term 'sense of belonging' is also defined in health literature 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, 173). In educational science, school belonging is defined by Goodenow (1993) as the degree to which students feel welcomed, respected, included, and encouraged in their school's social environment. It includes their feelings about themselves, their sense of importance and significance to the school, and their sense of value to the school as a whole (Arslan and Duru 2017). Using Goodenow's (1993) conceptualisation of school belonging, Benner, Graham, and Mistry (2008) also add the concept of 'fairness', which refers to the extent to which students believe that school rules are fair, and that all students are treated equally. Tinto (2012, 66) also described the concept of sense of belonging as 'a generalised sense of membership that stems from students' perception of their involvement in a variety of settings and the support they experience from those around them'. Van Ryzin's (2011) concept of belonging is the perception of support students receive from their peers and teachers such as motivation and assistance for learning as well as personal care and support. Furthermore, Astin (1984) emphasises the importance of academic and social engagements in the educational environment. The involvement level of students in academic and social activities is one of the most significant factors determining their retention.

Earlier higher education research studies have consistently paid attention to college students' sense of belonging because of its relation to how they persist at their institutions (e.g. Brunsting et al. 2019; Wolf et al. 2017). Hurtado et al. (2007, 842) defined sense of belonging in higher education as 'psychological or normative sense of academic and social integration in their transition to college'. To put it simply, a sense of belonging involves a student feeling like part of a particular community just the way they are, not having to conform to a particular set of form. Being part of a university, feeling accepted, and being included, is important to university engagement because students who feel that they are part of the university are more likely to be engaged in their university and campus community (Masika and Jones 2016). Similarly, Hurtado et al. (2007, 856) interpreted sense of belonging in quantitative studies as 'the extent to which the student felt part of the campus community, saw him/herself as a member of the college, and had a strong sense of belonging at his or her respective institution'.

Studies have demonstrated that active learning environments in higher education facilitate social interactions and collaborations, and that formal and informal interactions at university are related to an increased sense of belonging (Peacock and Cowan 2019). In the literature, a sense of belonging depends upon an interaction of factors in higher education – environmental, social, and cognitive – that allow students to feel connected to their university and to feel purposeful in their studies and career plans (Meehan and Howells 2019). Students' sense of belonging to their university can be influenced by a number of factors, including individual characteristics (gender, ethnicity, socioeconomic status) and situations and contexts, such as school organisational practices, peer relationships, student-teacher interactions, institutional climate, or circumstantial changes like the Covid-19 pandemic (Rainey et al. 2018; Ahn and Davis 2020; Goodenow 1993; Freeman, Anderman, and Jensen 2007). According to Wallace, Ye, and Chhuon (2012), there are four distinct factors that contribute to adolescents' sense of belonging: perception that they fit in with their classmates, generalised interaction to teachers, connection to a particular teacher, identification and participation in official school-sponsored activities.

A greater sense of belonging has been linked with better wellbeing and mental health outcomes (Gopalan, Linden-Carmichael, and Lanza 2022). There is compelling evidence demonstrating that a sense of school belonging can help prevent anxiety, stress and depression (Moffa, Dowdy, and Furlong 2016; Arslan, Allen, and Ryan 2020), improve resilience for individuals and communities worldwide (Allen et al. 2021), increase academic motivation (Neel and Fuligni 2013) and resilience (Scarf et al. 2016), decrease health problems and loneliness, and an overall increase in happiness (Baumeister and Leary 1995), contribute to interpersonal relationships and perceived competence (Rainey et al. 2018; Whitcomb, Maries, and Singh 2022). Among university students, loneliness was significantly found to be linked with anxiety, somatic complaints and depressive symptoms (Werner et al. 2021) and aggressive behaviours (Yavuzer, Albayrak, and Kılıçarslan 2019). In addition, some researchers have examined the association between a variety of outcomes and loneliness during the COVID-19 pandemic. For example, Li and Wang (2020) found that over one-third of British citizens reported loneliness sometimes or frequently during the pandemic. Young people were more likely to experience psychological disorders and loneliness, including somatic disorders and depression. Additionally, Chen and Lucock (2022) sought to investigate factors associated with higher levels of distress among university students at an early stage in the pandemic. They found that more than half of the respondent experienced anxiety or depression levels above the clinical cut-off points, and females scored significantly higher than males. von Keyserlingk et al. (2022) also found that students felt more stressed about studying after the COVID pandemic, followed by the closure of campus and the subsequent transition to virtual classrooms. Samura (2018) notes that students have a unique opportunity to meet one another and develop and strengthen social relationships with each other and with their academic staff on campus, which is crucial for the development of a sense of belonging and a sense of security as a learner. However, many universities have taken the necessary steps (switching to online education, limiting social interactions, etc.) to combat the COVID-19 pandemic, which causes major disruption to students' daily lives. Due to the increasing mental health concerns throughout higher education in the pandemic and the 'new normal' period, the concept of belonging needs to be comprehensively understood in order to respond to the pandemic and take the necessary precautions to transition to the 'next normal' post pandemic phase. Therefore, the purpose of this study is, firstly, to provide a comprehensive overview and analysis of sense of belonging to higher education in the more recent literature, and secondly, to highlight differences in definitions of sense of belonging to higher education by exploring holistically its main characteristics and basic sub concepts. This study also re-evaluates this concept in light of current conditions and employs an interpretive synthetic approach in order to evoke rich meanings, as perspectives are necessarily situated and subjective.

The following research questions are addressed in this systematic review:

In what ways does the more recent literature describe sense of belonging to higher education?

What main concepts and sub concepts does the recent literature provide us to reveal in the definition of the concept of belonging?

What are the differences and similarities in the definitions of sense of belonging to higher education?

## Method and design

A meta-ethnographic approach was used in this study in order to synthesise qualitative studies exploring students' experiences of sense of belonging. Originally developed by Noblit and Hare (1988), meta-ethnography combines findings from ethnographic research conducted in the field of education into an interpretive framework (Rycroft-Malone and Burton 2015). This systematic method of qualitative interpretation allows for a comparison between studies and their synthesis into new interpretations, rather than aggregate findings (Thorne 2015). Through the translation of such studies, ideas, concepts and metaphors from one study to another can be better understood and transferred. Meta ethnography involves identifying and developing new overarching concepts,

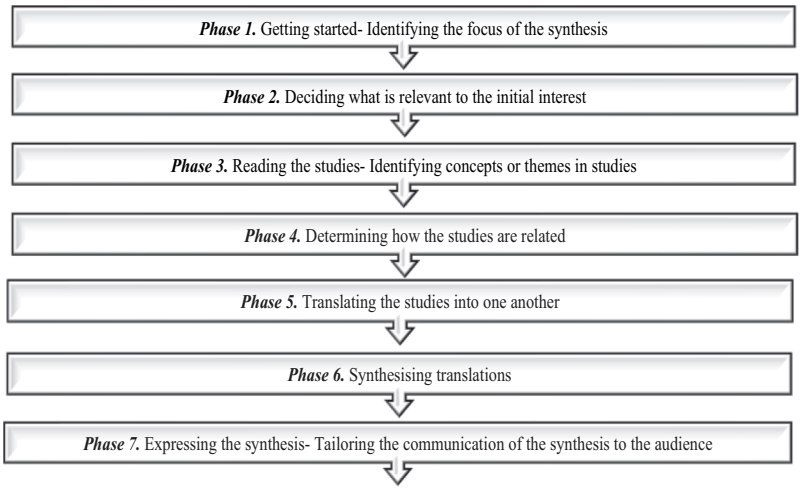


Figure 1. The seven stages of meta ethnography approach adapted from Noblit and Hare (1988).

theories, and models by systematically comparing conceptual data from primary qualitative studies (Noblit and Hare 1988). According to Dixon-Woods et al. (2004), this approach is strong because it preserves primary data's interpretive properties. Atkins et al. (2008) also found that this method provides more information about the methods of the review than a traditional narrative review. In addition, higher order interpretations can be reached, and theory can be generated from multiple studies. Our aim was to create a new conceptual understanding of a phenomenon, and not simply to summarise the literature, so we chose a meta-ethnography that had clear methodological guidelines and could synthesise a variety of qualitative studies focused on that phenomenon. Meta-ethnography has seven stages (see Figure 1) and can provide new insights into a phenomenon, help refute or re-evaluate its understanding, generate theories, models and hypotheses, provide a historical perspective of concepts or theories; enhance the applicability of findings from individual qualitative studies; reveal avenues of future research, point to the absence of new conceptual developments in a field; and facilitate the design of complex interventions and boost the interpretation of systematic reviews of intervention effectiveness.

## *Inclusion and exclusion criteria*

To maximise the scope of the review within the given timeframe, researchers generated key words based on the research questions to build a series of test searches across various databases, including Scopus and SAGE. The researchers conducted systematic searches in August 2022 for systematic reviews, focusing on the term of sense of belonging to higher education. Based on the results of preliminary tests and scoping searches, key databases from the fields of education and social science were systematically searched. A total of five databases were searched: Scopus, Education Resources Information Centre (ERIC), SAGE, PsycINFO, and the British Education Index (BEI). Approximately two-months were required to complete the systematic searches. Records were stored and screened in Zotero programme (version 6.0.18). For the purpose of finding relevant qualitative research reports, the searched databases and search filters can be found in Table 1. As we mentioned earlier, the term 'sense of belonging' has been covered in a wide range of disciplines with no apparent consensus. Therefore, the words connect* (Booker 2004), relate* (Kim and Drumwright 2016), bond* (Catalano et al. 2004), engag* (Thomas 2012) were included in the first search string section. We chose these terms because they are defined as terms that can replace the specific term 'belonging'. Our purpose was to gain a clearer conceptual understanding of 'sense of belonging' and 'belonging', hence a second search

Table 1. Databases and search filters.

| Databases | Date of searches | Date range | Search filters | Number of hits (before deduplication) | Number of hits (after de-duplication) | Search String |
|---|---|---|---|---|---|---|
| Scopus | 1 August 2022 | 1 January 2021 – 31 December 2021 | *Search in*: Article Title<br>*Document type*: Article<br>(Full Text and Peer-reviewed)<br>*Source type*: Journal<br>*Language*: English | *354* | *337* | Search 1: 'University belong*' OR 'college belong*' OR 'higher education belong*' OR 'tertiary education belong*' OR 'college belong*' OR 'undergraduate belong*' OR 'University attach*' OR 'college attach*' OR 'higher education attach*' OR 'tertiary education attach*' OR 'college attach*' OR 'undergraduate attach*' OR 'University bond*' OR 'college bond*' OR 'higher education bond*' OR 'tertiary education bond*' OR 'college bond*' OR 'undergraduate bond*' OR 'University connect*' OR 'college connect*' OR 'higher education connect*' OR 'tertiary education connect*' OR 'college connect*' OR 'undergraduate connect*' OR 'University relate*' OR 'college relate*' OR 'higher education relate*' OR 'tertiary education relate*' OR 'college relate*' OR 'undergraduate relate*' OR 'University engag*' OR 'college engag*' OR 'higher education engag*' OR 'tertiary education engag*' OR 'college engag*' OR 'undergraduate engag*' |
| Scopus | 1 August 2022 | 1 January 2021 – 31 December 2021 | *Search in*: Article Title<br>*Document type*: Article<br>(Full Text and Peer-reviewed)<br>*Source type*: Journal<br>*Language*: English | *65* | *62* | Search 2: (university OR college OR 'higher education' OR undergrad* OR 'tertiary education' AND 'sense of belonging' OR belong*) |

(*Continued*)

Table 1. (Continued).

| Databases | Date of searches | Date range | Search filters | Number of hits (before deduplication) | Number of hits (after de-duplication) | Search String |
|---|---|---|---|---|---|---|
| Education Resources Information Centre (ERIC) (EBSCO host) | 1 August 2022 | 1 January 2021 – 31 December 2021 | *Search in*: Article Title<br>*Document type*: Article (Full Text and Peer-reviewed)<br>*Source type*: Journal<br>*Language*: English | *222* | *198* | Search 1: 'University belong*' OR 'college belong*' OR 'higher education belong*' OR 'tertiary education belong*' OR 'college belong*' OR 'undergraduate belong*' OR 'University attach*' OR 'college attach*' OR 'higher education attach*' OR 'tertiary education attach*' OR 'college attach*' OR 'undergraduate attach*' OR 'University bond*' OR 'college bond*' OR 'higher education bond*' OR 'tertiary education bond*' OR 'college bond*' OR 'undergraduate bond*' OR 'University connect*' OR 'college connect*' OR 'higher education connect*' OR 'tertiary education connect*' OR 'college connect*' OR 'undergraduate connect*' OR 'University relate*' OR 'college relate*' OR 'higher education relate*' OR 'tertiary education relate*' OR 'college relate*' OR 'undergraduate relate*' OR 'University engag*' OR 'college engag*' OR 'higher education engag*' OR 'tertiary education engag*' OR 'college engag*' OR 'undergraduate engag*' |
| Education Resources Information Centre (ERIC) (EBSCO host) | 1 August 2022 | 1 January 2021 – 31 December 2021 | *Search in*: Article Title<br>*Document type*: Article (Full Text and Peer-reviewed)<br>*Source type*: Journal<br>*Language*: English | *216* | *190* | Search 2: (university OR college OR 'higher education' OR undergrad* OR 'tertiary education' AND 'sense of belonging' OR belong*) |

(*Continued*)

Table 1. (Continued).

| Databases | Date of searches | Date range | Search filters | Number of hits (before deduplication) | Number of hits (after de-duplication) | Search String |
|---|---|---|---|---|---|---|
| PsycINFO (EBSCO host) | 1 August 2022 | 1 January 2021 – 31 December 2021 | *Search in*: Article Title<br>*Document type*: Article (Full Text and Peer-reviewed)<br>*Source type*: Journal<br>*Language*: English | *78* | *58* | Search 1: 'University belong*' OR 'college belong*' OR 'higher education belong*' OR 'tertiary education belong*' OR 'college belong*' OR 'undergraduate belong*' OR 'University attach*' OR 'college attach*' OR 'higher education attach*' OR 'tertiary education attach*' OR 'college attach*' OR 'undergraduate attach*' OR 'University bond*' OR 'college bond*' OR 'higher education bond*' OR 'tertiary education bond*' OR 'college bond*' OR 'undergraduate bond*' OR 'University connect*' OR 'college connect*' OR 'higher education connect*' OR 'tertiary education connect*' OR 'college connect*' OR 'undergraduate connect*' OR 'University relate*' OR 'college relate*' OR 'higher education relate*' OR 'tertiary education relate*' OR 'college relate*' OR 'undergraduate relate*' OR 'University engag*' OR 'college engag*' OR 'higher education engag*' OR 'tertiary education engag*' OR 'college engag*' OR 'undergraduate engag*' |
| PsycINFO (EBSCO host) | 1 August 2022 | 1 January 2021 – 31 December 2021 | *Search in*: Article Title<br>*Document type*: Article (Full Text and Peer-reviewed)<br>*Source type*: Journal<br>*Language*: English | *236* | *182* | Search 2: (university OR college OR 'higher education' OR undergrad* OR 'tertiary education' AND 'sense of belonging' OR belong*) |

(*Continued*)

**Table 1.** (Continued).

| Databases | Date of searches | Date range | Search filters | Number of hits (before deduplication) | Number of hits (after de-duplication) | Search String |
|---|---|---|---|---|---|---|
| SAGE | 1 August 2022 | 1 January 2021 – 31 December 2021 | *Search in*: Article Title<br>*Document type*: Article<br>(Full Text and Peer-reviewed)<br>*Source type*: Journal<br>*Language*: English | *85* | *81* | Search 1: 'University belong*' OR 'college belong*' OR 'higher education belong*' OR 'tertiary education belong*' OR 'college belong*' OR 'undergraduate belong*' OR 'University attach*' OR 'college attach*' OR 'higher education attach*' OR 'tertiary education attach*' OR 'college attach*' OR 'undergraduate attach*' OR 'University bond*' OR 'college bond*' OR 'higher education bond*' OR 'tertiary education bond*' OR 'college bond*' OR 'undergraduate bond*' OR 'University connect*' OR 'college connect*' OR 'higher education connect*' OR 'tertiary education connect*' OR 'college connect*' OR 'undergraduate connect*' OR 'University relate*' OR 'college relate*' OR 'higher education relate*' OR 'tertiary education relate*' OR 'college relate*' OR 'undergraduate relate*' OR 'University engag*' OR 'college engag*' OR 'higher education engag*' OR 'tertiary education engag*' OR 'college engag*' OR 'undergraduate engag*' |
| SAGE | 1 August 2022 | 1 January 2021 – 31 December 2021 | *Search in*: Article Title<br>*Document type*: Article<br>(Full Text and Peer-reviewed)<br>*Source type*: Journal<br>*Language*: English | *8* | *8* | Search 2: (university OR college OR 'higher education' OR undergrad* OR 'tertiary education' AND 'sense of belonging' OR belong*) |

(*Continued*)

Table 1. (Continued).

| Databases | Date of searches | Date range | Search filters | Number of hits (before deduplication) | Number of hits (after de-duplication) | Search String |
|---|---|---|---|---|---|---|
| The British Education Index (BEI) (EBSCO host) | 1 August 2022 | 1 January 2021 – 31 December 2021 | *Search in*: Article Title<br>*Document type*: Article (Full Text and Peer-reviewed)<br>*Source type*: Journal<br>*Language*: English | *34* | *34* | Search 1: 'University belong*' OR 'college belong*' OR 'higher education belong*' OR 'tertiary education belong*' OR 'college belong*' OR 'undergraduate belong*' OR 'University attach*' OR 'college attach*' OR 'higher education attach*' OR 'tertiary education attach*' OR 'college attach*' OR 'undergraduate attach*' OR 'University bond*' OR 'college bond*' OR 'higher education bond*' OR 'tertiary education bond*' OR 'college bond*' OR 'undergraduate bond*' OR 'University connect*' OR 'college connect*' OR 'higher education connect*' OR 'tertiary education connect*' OR 'college connect*' OR 'undergraduate connect*' OR 'University relate*' OR 'college relate*' OR 'higher education relate*' OR 'tertiary education relate*' OR 'college relate*' OR 'undergraduate relate*' OR 'University engag*' OR 'college engag*' OR 'higher education engag*' OR 'tertiary education engag*' OR 'college engag*' OR 'undergraduate engag*' |
| The British Education Index (BEI) (EBSCO host) | 1 August 2022 | 1 January 2021 – 31 December 2021 | *Search in*: Article Title<br>*Document type*: Article (Full Text and Peer-reviewed)<br>*Source type*: Journal<br>*Language*: English | *37* | *32* | Search 2: (university OR college OR 'higher education' OR undergrad* OR 'tertiary education' AND 'sense of belonging' OR belong*) |
| | | | | **Total**:1335 | **Total**:1182 | |

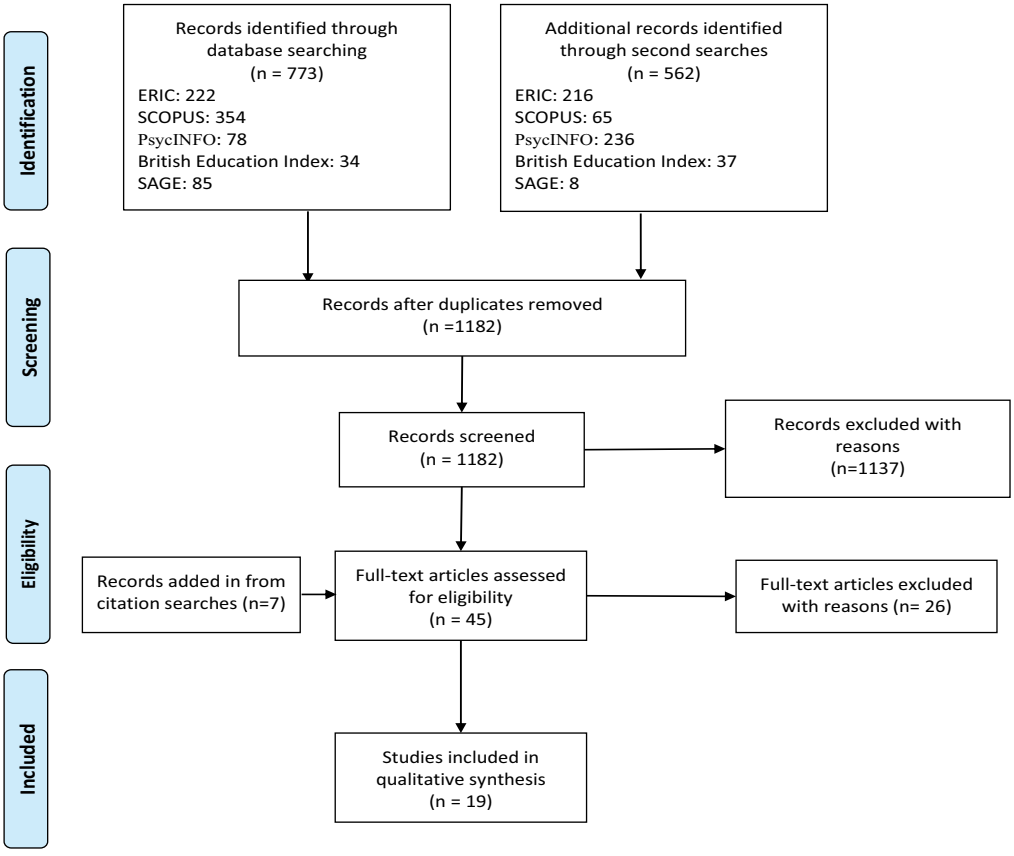


Figure 2. PRISMA flow diagram showing the result of the search and screening process. From: Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). Preferred Reporting Items for Systematic Reviews and MetaAnalyses: The PRISMA Statement. PLoS Med 6(7): e1000097. doi:10.1371/journal.pmed1000097

string was also included in the study and specifically these two terms were searched within the selected databases (see Table 1). The 'AND' and 'OR' Boolean operators were used, and a total of 1335 peer-reviewed articles were included in the first set of searches and after screening nineteen studies were included (see Figure 2). The inclusion criteria were; studies that used higher education students' voices in the qualitative data, studies that addressed university belonging, studies examining the factors that cause them to attend or not attend university, studies presenting the perspectives of participants concerning belonging, and studies that provided a rich picture of participants' belonging experiences. A two-stage selection process was conducted – first title/abstract screening, then full-text paper screening. A double screening was conducted to determine whether the study titles and abstracts met the inclusion criteria. After removing duplicates, all titles and abstracts were reviewed studies were not considered further if their abstract or their title (in situations where the abstract was unavailable) clearly indicated that; the focus was not on higher education students' sense of belonging to university; the study was quantitative in nature, a systematic review, a commentary, and/or had not been peer-reviewed. Any relevant titles/abstracts of full-text articles were obtained and screened, with the reasons for their exclusion added. The authors used a checklist to guide them towards ensuring consistency in the application of the eligibility criteria at each stage.

### *Quality appraisal*

The papers included were selected for their conceptual quality and high-quality appraisal. Walsh and Downe (2006) developed the Critical Appraisal Skills Programme (CASP) framework, which was modified later by Long, French, and Brooks (2020). In the selection of qualitative articles for meta-ethnography analysis, we used a modified version of the CASP framework's questions and response 'yes', 'no' or 'can't tell' options were taken from the original tool (see Table 2). In terms of transparency and reporting standards, the CASP tool has been found to be reasonably good and more accurate than other appraisal methods like a quality framework when it came to indicating procedural aspects and details that need to be reported (Long, French, and Brooks 2020; Dixon-Woods, Booth and Sutton, 2007). The CASP tool is designed to assess the strengths and limitations of qualitative research methodologies by asking ten questions, each focused on a different methodological aspect. The nineteen included papers were assessed for quality using the CASP tool. The studies were of moderate to high quality; hence all nineteen articles were included in this study for in-depth analysis. During the quality appraisal, we found limited reporting of ethics and descriptions of the analysis process in several studies, but most had a clear statement of aims and findings. Details of the synthesised studies are presented in Table 3 below.

## Stages of meta-ethnography

During the next three phases, Noblit and Hare (1988) suggest researchers determine which aspects are relevant to their initial interest (phase 2), repeatedly reading the studies (phase 3), and determine how the studies are related (phase 4) by constructing and juxtaposing a list of concepts from each study to evaluate whether the concepts are similar, contradictory, or relate to different aspects of the topic. In the present synthesis, this was achieved by comparing the interpretations advanced in the nineteen studies before making 'an initial assumption about the relationship between studies'. Phase 5 of the meta-ethnographic analysis entails systematically comparing and 'translating' themes, metaphors, as well as concepts, across and within primary study accounts, resulting in the production of nineteen sub-concepts and four main concepts (see Table 4). 'Synthesizing translations' repeats this process of synthesis by using the main concepts to create a 'synthesis of translation', resulting in a single higher-level concept. The synthesis of translation represents a comprehensive interpretation synthesising the key concepts, whilst the last phase, 'Expressing the synthesis', focuses on conveying the findings relating to that interpretation in the most appropriate form for the target audience.

## Synthesis of translation

The overarching higher-order concept for sense of belonging that arises from the meta-ethnography is 'feeling part of somewhere an individual can be themselves and feel confident in their personal and social identities, through secure, meaningful, and harmonious support in cohesion with other diverse group members and creating ethnically heterogeneous communities and learning areas both on and off the faculty/campus setting'. This higher-order concept was formed through a process of reciprocal translation (Noblit and Hare 1988, 28) of the four main concepts: (1) University belonging and social capital; (2) University belonging and ethnic groups fit and cohesion; (3) University belonging and social exclusion; and (4) University belonging and on/off faculty/campus connection. The higher-order concept attempts to conceptualise participants' understandings of university belonging as a co-constructed, intersubjective phenomenon involving social capital, ethnic groups fit and cohesion, and feelings of social exclusion in an on/off faculty/campus context. The interactions between the higher-order concept, and the main and sub-concepts are illustrated in Figure 3 below.

Table 2. Quality assessment tool for qualitative studies according to modified Critical Appraisal Skills Programme (CASP) (Long, French, and Brooks 2020).

| | Was there a clear statement of the aims of the research? | | | Is a qualitative methodology appropriate? | | | Was the research design appropriate to address the aims of the research? | | | Are the study's theoretical underpinnings clear, consistent and conceptually coherent? | | | Was the recruitment strategy appropriate to the aims of the research? | | | Was the data collected in a way that addressed the research issue? | | | Has the relationship between researcher and participants been adequately considered? | | | Have ethical issues been taken into consideration? | | | Was the data analysis sufficiently rigorous? | | | Is there a clear statement of findings? | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Author & Year | Y | CT | N | Y | CT | N | Y | CT | N | Y | CT | N | Y | CT | N | Y | CT | N | Y | CT | N | Y | CT | N | Y | CT | N | Y | CT | N | Score |
| Ensmann et al. (2021) | * | - | - | * | - | - | * | - | - | * | - | - | * | - | - | * | - | - | - | * | - | - | - | * | * | - | - | * | - | - | 9/10 |
| Steinhauer and Lovell (2021) | * | - | - | * | - | - | - | * | - | - | * | - | * | - | - | * | - | - | * | - | - | * | - | - | - | * | - | * | - | - | 7/10 |
| Mallman et al. (2021) | * | - | - | * | - | - | * | - | - | - | * | - | * | - | - | * | - | - | * | - | - | * | - | - | * | - | - | * | - | - | 9/10 |
| Worsley, Harrison, and Corcoran (2021) | * | - | - | * | - | - | - | * | - | - | * | - | * | - | - | * | - | - | * | - | - | * | - | - | * | - | - | * | - | - | 8/10 |
| Le Roux and Groenewald (2021) | * | - | - | * | - | - | * | - | - | * | - | - | * | - | - | * | - | - | - | * | - | * | - | - | * | - | - | * | - | - | 9/10 |
| Collins (2021) | * | - | - | * | - | - | * | - | - | * | - | - | * | - | - | * | - | - | * | - | - | * | - | - | * | - | - | * | - | - | 10/10 |
| Viola (2021) | * | - | - | * | - | - | - | * | - | - | * | - | * | - | - | * | - | - | - | * | - | * | - | - | * | - | - | * | - | - | 7/10 |
| Lewis et al. (2021) | * | - | - | * | - | - | * | - | - | * | - | - | * | - | - | * | - | - | - | * | - | * | - | - | * | - | - | * | - | - | 9/10 |
| O'Shea (2021) | * | - | - | * | - | - | * | - | - | * | - | - | * | - | - | * | - | - | - | * | - | * | - | - | * | - | - | * | - | - | 9/10 |
| Brodie and Osowska (2021) | * | - | - | * | - | - | * | - | - | - | * | - | * | - | - | * | - | - | - | * | - | * | - | - | * | - | - | * | - | - | 8/10 |
| Gao and Liu (2021) | * | - | - | * | - | - | * | - | - | * | - | - | * | - | - | * | - | - | - | * | - | - | * | - | * | - | - | * | - | - | 8/10 |
| Knekta and McCartney (2021) | * | - | - | * | - | - | - | * | - | * | - | - | * | - | - | * | - | - | - | * | - | * | - | - | * | - | - | * | - | - | 8/10 |
| Potts 2021 | * | - | - | * | - | - | * | - | - | * | - | - | * | - | - | * | - | - | - | * | - | - | - | * | * | - | - | * | - | - | 8/10 |
| Baleria 2021 | * | - | - | * | - | - | * | - | - | * | - | - | * | - | - | * | - | - | - | * | - | - | * | - | * | - | - | * | - | - | 8/10 |
| Rodriguez and Blaney (2021) | * | - | - | * | - | - | * | - | - | * | - | - | * | - | - | * | - | - | * | - | - | * | - | - | * | - | - | * | - | - | 10/10 |
| Penner et al. (2021) | * | - | - | * | - | - | * | - | - | * | - | - | * | - | - | * | - | - | - | * | - | * | - | - | * | - | - | * | - | - | 9/10 |
| Bettencourt (2021) | * | - | - | * | - | - | * | - | - | * | - | - | * | - | - | * | - | - | * | - | - | - | * | - | * | - | - | * | - | - | 9/10 |
| Cooper and Newton (2021) | * | - | - | * | - | - | * | - | - | * | - | - | * | - | - | * | - | - | * | - | - | - | - | * | * | - | - | * | - | - | 9/10 |
| Acevedo et al. (2021) | * | - | - | * | - | - | * | - | - | * | - | - | * | - | - | * | - | - | * | - | - | - | - | * | * | - | - | * | - | - | 9/10 |

Note: Y = Y; N = No; CT = Can't tell.

Table 3. Descriptive summaries of included studies.

| Author/Year | Country | Purpose/ Study Focus | Method | Participant Characteristics | Key Findings |
|---|---|---|---|---|---|
| Ensmann et al. (2021) | USA | To evaluate the support and connection needs of students during a time of substantial confusion and disconnection in higher education | A quantitative and qualitative single-case design approach at a mid-sized, private university in the south-eastern region of the United States. | *N* = 4<br>Interviews with two participants held in July 2020, and other two held in August 2020. | First-year college students felt a great deal of anxiety and recommended that their instructors and course community demonstrate more empathy, interaction, and flexibility to help them succeed with their academic coursework. |
| Steinhauer and Lovell (2021) | USA | To understand what motivates non-traditional students in their pursuit of academic success as well as to clarify the obstacles and triumphs they describe | A phenomenological approach was used. | *N* = 7<br>(6 x females and 1 x male).<br>Non-traditional-aged students (ages 25+) | Four key themes were found: a) the greatest obstacle described was available time to meet many responsibilities, (b) a more comfortable – like-minded connection to engage with other non-traditional students rather than traditional students, (c) strong support systems that were identified and in place included off-campus friends and family, while on-campus included faculty, but not friends on campus, and (d) primary rationale for returning to school was to earn a better wage. |
| Mallman et al. (2021) | Australia | To examine how new migrant students perceive their experiences of cross-cultural interactions | Semi-structured interviews with domestic (Australian citizens or permanent residents) university students and graduates with migrant and refugee backgrounds | *N* = 24<br>(Out of the 24 student and graduate interviewees, 20 had refugee backgrounds)<br>Residents from Afghanistan, Burundi, Democratic Republic of the Congo, South Sudan, Sudan, and Zimbabwe. | Students' sense of legitimacy in relation to patterns of social power are influenced by symbolic convivialities. Commonplace interactions are the practices that can reinforce racialised hierarchies of legitimacy and belonging because they are often viewed as non-conflictual and as transcending race. |
| Worsley, Harrison, and Corcoran (2021) | UK | To explore the unique transition period from home or school to university in order to identify aspects of the university experience (teaching, curriculum, support services, accommodation) that could be adapted to better support student mental health and well-being | Eight focus groups (size ranging from four to five) were conducted across two higher education institutions in northwest England including a Russell group and a post 92 institution. | *N* = 38<br>(33 x females-5 x males/ between 18 and 19 years old – first year students) | A total of four overarching themes emerged: "preparing students for college and university", "friendships", "tackling multiple challenges", and "university staff and services: feeling supported/unsupported". |

(*Continued*)

Table 3. (Continued).

| Author/Year | Country | Purpose/ Study Focus | Method | Participant Characteristics | Key Findings |
|---|---|---|---|---|---|
| Le Roux and Groenewald, (2021) | South Africa | To explore and understand a black female student's lived experience of developing a sense of belonging at a diverse university campus | Narrative inquiry was used<br>The data used for this article were generated over four years<br>Inductive thematic analysis | *N* = 1<br>Zahra (a pseudonym) from a four-year education Qualification in the School of Education | The presence of shared values enables intragroup cohesion, cross-cutting barriers of difference and the navigation of a sense of belonging. |
| Collins (2021) | UK | To present findings from three studies that explored the perceptions and experiences of belonging among PhD students at one UK university, with the goal of hypothesising about how validation and self-validation might contribute to a difference in doctoral education, as well as what practices might facilitate this | Qualitative approach-the data was thematically analysed using NVivo 12. | *N* = 30<br>Three studies carried out at one UK university on PhD journeys and communities. | Supervisory feedback and validation are a crucial process in (positive) doctoral identity work. Facilitating the development of coaching skills can improve the validation (e.g. through supervisory training) and self-validation (e.g. through peer mentoring). |
| Viola (2021) | UK | To investigate students' experiences of belonging in a multicultural institution, along with their attitudes towards current political issues prior to and during the outbreak of COVID-19 | A longitudinal, mixed-methods study at a STEM university | *N* = 32<br>27 semi-structured interviews – five walking interviews (students of all course levels, departments, and faculties for participation)-were used. | Three key themes were found: experiences of belonging (through shared values and interests, a sense of feeling at home, and feeling valued by others), experiences of community (the role of clubs, societies, and sports), and experiences of global citizenship (by expression of interest – and experience of – gender issues and racism). |
| Lewis et al. (2021) | USA | To find how subtle forms of interpersonal racism, such as racial microaggressions, are related to students' sense of belonging | Quantitative and qualitative data from an online survey<br>Qualitative data: open-ended survey responses | *N* = 1,710<br>39% women X 40% men X 21% who did not report their gender<br>21.8% Black/African American X 45.6% Asian/Asian American X 25% Hispanic/ Latino X 0.4% American Indian/Alaska Native X 0.5% Native Hawaiian/Pacific Islander X 6.7% Multiracial | A significantly greater frequency of racial microaggressions was experienced by African American students than Asian American, Latinx, and Multiracial students. In addition, students with a greater frequency of racial microaggressions also reported a lower sense of belonging. |

(*Continued*)

Table 3. (Continued).

| Author/Year | Country | Purpose/ Study Focus | Method | Participant Characteristics | Key Findings |
|---|---|---|---|---|---|
| O'Shea (2021) | Australia | To examine how current and graduate students conceptualise belonging within the higher education environment, and how entitlement understandings impacted this conceptualisation | Two national Australian studies that occurred between 2017 and 2019<br>A narrative inquiry approach that sought to encourage participants to deeply reflect about either their experiences of persisting in higher education (Study A) or how they navigated employment post-graduation (Study B). | Study (A) 2017 × 69 interviews<br>Study (B) 2019 × 18 interviews | A descriptive analysis revealed emotional undercurrents and complex relationships common to first-generation university students and the ways they negotiated between new and existing expectations. |
| Brodie and Osowska (2021) | UK | To investigate whether a virtual learning space can effectively support entrepreneurship students in developing a sense of belonging while studying for their online degrees | Qualitative data gathered through semi-structured interviews. | *N (student)* = 8, *N* (staff/tutor) = 4<br>Eight students from a year class of 42 in 2018/2019 who self-selected alongside two support staff and two tutors.<br>The student participants: 5 females X 3 male at different stages of their degree studies in the UK or overseas<br>Two teaching and two support staff: 3 female X 1 male in the UK | Three key themes were found: a) the importance of making connections with the programme's academics and their support team, b) the importance of peer interactions, c) a sense of belonging was not always valued by the students. |
| Gao and Liu (2021) | Hong Kong | To explore how students of south/ southeast Asian ethnicity in Hong Kong perceive their sense of belonging at university and the factors affecting their sense of belonging | Qualitative approach through semi-structured interview | *N* = 12<br>12 university students (6 Filipinos x 3 Pakistanis x 1 Indian x 1 Sri Lankan x 1 Nepalese) of South/Southeast Asian ethnicity in Hong Kong | South/southeast Asian Ethnic minority students' sense of belonging is influenced by their connection to the programme and the university, as well as their knowledge of intragroup dynamics. |
| Knekta and McCartney (2021) | USA | To examine the sense of belonging and involvement in a biology department among biology major students enrolled in Quantifying Biology in the Classroom (QBIC) | Semi structured interviews with biology majors at an American state university. | *N* = 10<br>5 x females/ 5 x males in biology majors and desire to enrol in medical school.<br>3 x freshmen/ 7 x sophomores | Positive social environments did not fully translate into feeling like a part of the biology department and feeling involved. The students are highly focused on careers related to medical school, and those students who do not share that focus may feel excluded. |
| Potts (2021) | USA | To examine the sense of belonging among first year students during the Covid-19 pandemic | Focus group study | *N* = 18<br>(7 x men/11 x women)<br>(11 x White students/ 4 x Black/ African American students/ 2 x Latinx students/1 x Asian/Asian-American student) | Three themes emerged from the analysis: navigating uncertainty; seeking in-person connection; developing resilience. |

(*Continued*)

Table 3. (Continued).

| Author/Year | Country | Purpose/ Study Focus | Method | Participant Characteristics | Key Findings |
|---|---|---|---|---|---|
| Baleria (2021) | USA | To explore whether a single, relational micro-intervention focused on respectful conversation over difference might influence students' sense of belonging and level of curiosity related to their college experience | Exploratory, phenomenological qualitative study | *N* = 16<br>Students from a Northern California community college<br>Many students who identified as White belonged to other marginalised groups, including LGBTQ+, first gen, and low SES. | Researchers found that semi-structured, relational micro-interventions led to a sense of belonging and curiosity among students, facilitating small-scale relationships and building rapport. |
| Rodriguez and Blaney (2021) | USA | To investigate the academic and social experiences of Latina undergraduate students in STEM, and how those experiences shape their sense of belonging in STEM programmes | A qualitative, phenomenological approach | *N* = 17<br>Undergraduate Latina students majoring in STEM disciplines at a tier-one predominantly white public research university in the southwest. | Latina students reframed their experiences as trailblazing and engaged with identity-based STEM organisations to resist marginalisation and build a sense of belonging. |
| Penner et al. (2021) | Canada | To explore factors contributing to mental health problems among minority groups, including official languages minorities (OLMs), international students, and students learning a second language | A qualitative approach through focus groups and individual semi-structured interviews | *N* = 35<br>35 students from different ethnolinguistic backgrounds between the ages of 18 and 24 and enrolled at a French-language university in Winnipeg, Manitoba.<br>15 x francophones, 14 x international students x 6 anglophones with French as a second language | Passages were initially sorted into four main categories: (a) sense of belonging, (b) social climate, (c) barriers to belonging and positive social climate, and (d) facilitators to belonging and positive social climate<br>Language insecurities (within international students, students with French as a second language and domestic students with French) in one of the official languages were a common barrier to connecting with others and feeling a sense of belonging. |
| Bettencourt (2021) | USA | To examine how students from working-class backgrounds described their sense of belonging at public research institutions | A critical constructivist narrative inquiry | *N = 24*<br>Working-class student | The concept of belonging was seen as something students created themselves, rather than something that was facilitated by institutions. Even though participants felt a range of levels of support, and belonging, the institutions they were affiliated with seldom valued their labour or tokenised their presence under the guise of supporting diversity. |

(*Continued*)

Table 3. (Continued).

| Author/Year | Country | Purpose/ Study Focus | Method | Participant Characteristics | Key Findings |
|---|---|---|---|---|---|
| Cooper and Newton (2021) | USA | To investigate the academic, athletic, and social experiences of Black female college athletes at a Division I historically Black college and/ university (HBCU). | A qualitative approach through two semi-structured focus groups, and seven in-depth individual interviews | *N = 10* Black female college athletes | Implementing routine faculty training and interacting with the athletic department to better understand the culture and responsibilities that accompany being a college athlete helps promote a sense of belonging among students. The authors recommended that college athletes should be offered a more balanced college experience that allows them to engage in activities that are educationally relevant in order to increase their sense of belonging within the campus community. |
| Acevedo et al. (2021) | USA | To examine first-generation Latina community college students' experiences with choosing to major in STEM and preparing to transfer from two Hispanic-serving community colleges to a four-year university. | A qualitative approach through semi-structured interviews | *N = 8* Eight Latina students who applied, and were selected, for the STEM Scholarship Programme | Spiritual activism reinforced a sense of belonging for Latina students who encountered both inequities and microaggressions in STEM. |

## Results

The meta-synthesis process (with resulting higher order, main, and sub-concepts) is represented in Table 4. Four main concepts emerged from Noblit and Hare's (1988) meta-ethnographic phases are explained below.

### *University belonging and social capital*

Students' social networks, relationships, and interaction, as a form of social capital (Helliwell and Putnam 2007), play an important role in their belonging. A learning community, like a university, is seen as a place where social capital and learning can be maximised through productive relationships between the social network and the learning environment. An atmosphere of positive support and trust, as well as trusting and supportive relationships with peers and lecturers/supervisors, provides a sense of belonging that influences engagement and performance as well as more positive attitudes towards school, class work, and their lecturers/supervisors and peers (Collins 2021; Viola 2021). According to Penner et al. (2021), friendly and welcoming staff and students were found to contribute to the positive climate in campus or classroom and sense of belonging. In their study (Gao and Liu (2021), Gao and Liu also concluded that university administrators and practitioners could only instil a sense of belonging in students if they understood and valued their involvement. Although the support of educators can have the most direct impact on students' motivation, parents and peers also contribute in different but equally important and complementary ways. Some students find that their flatmates in halls of residence meet their support needs quite adequately over time, eventually replacing their reliance on their families as a source of support (Worsley, Harrison, and Corcoran 2021). They also highlighted that 'with minor changes to living and learning environments, this human touch is possible, and friendly and supportive environments will foster a sense of belonging and community' (Worsley, Harrison, and Corcoran 2021, 11). Besides their social networks, relationships, and interactions, working-class students created a sense of belonging through their traits associated with their social class backgrounds, like maturity, work ethic, and resourcefulness (Bettencourt 2021).

### *University belonging and ethnic groups fit and cohesion*

When individuals feel that they belong to the group, they are more likely to feel connected with other members of the group. These members are more likely to become trusted and respected by their fellow group members, fostering social cohesion within the group. Social cohesion can be understood as the practice of bringing people together by allowing them to feel like part of a group and to identify with that group. Recognising and engaging with difference can also foster empathy and understanding, which are two important components of establishing relationships, which can enhance sense of belonging and curiosity (Baleria 2021; Worsley, Harrison, and Corcoran 2021). Aside from forming a harmonious group including different ethnic groups, it is also crucial that members of an ethnic group have social integrity and interact with one another. For example, Gao and Liu (2021) found that participants felt a sense of belonging to the university because their ethnically similar peers made them feel part of the campus community. An important feature of friendships that made the participants feel like they belonged was to get to know their ethnically similar peers, have fun and receive task-related and/or deeply affective support. Students from Latino backgrounds encountered multiple moments when their intersecting identities clashed with STEM settings. As a way to overcome such negative experiences and foster a sense of belonging, Latina students reframed their isolation in ways that acknowledge how their intersectional identities of race and gender help them connect with peers from similar backgrounds (Acevedo et al. 2021). According to Cooper and Newton (2021), fostering

**Table 4.** Stages of meta-ethnography.

| Stage of synthesis process | |
|---|---|
| ***Stage 3 and 4***<br>**Stage 3**: 'Reading the studies'; 'the repeated reading of the studies and the noting of interpretative concepts/ metaphors [. . .] this requires extensive attention to the details in the accounts'. (p. 28).<br>**Stage 4**: 'Determining how studies are related to each other' involves creating a list of themes or metaphors, juxtaposing them, and identifying their connections (p. 28). | "Feeling connected with others" (Worsley, Harrison, and Corcoran 2021, 8).<br>"The development of resilience led to a feeling of belonging; that their ability to cope with challenges (like Covid-19 pandemic) strengthened their connection to the institution and to one another". (Potts 2021, 219).<br>"Belonging or not belonging was not only a feeling but instead was worn like a skin" (O'Shea 2021, 71).<br>"Experiences of cross-cultural interactions in positive terms" (Mallman et al. 2021, 1456).<br>"Experiencing academic and social validation as a step toward inner healing from previous traumas in STEM" (Acevedo et al., p.74)<br>"Staying in one place to do learning, lack of face-to-face interaction, lack of motivation, and inability to gather with friends [. . .] feeling lost and disconnected from school due to other priorities with the pandemic situation" (Ensmann et al. 2021, 48).<br>"Having a strong support system including spouse/partner, children" (Steinhauer and Lovell 2021, 225).<br>"Either felt a strong connection to the university or felt accepted at the university [.] to find myself here" (Penner et al. 2021, 32).<br>"The involvement helps you to be someone and involved more with a community that you do not know [. . .] 'being part of something larger', 'standing' for something/ someone, and empowering others" (Collins 2021, 724).<br>"Feeling 'at home' somewhere, or with certain people, can yield a sense of comfort, familiarity, and safety" (Viola 2021, 6).<br>"An experience of shared values with friends" (Le Roux and Groenewald 2021, 863).<br>"Being "singled out" and made hyper visible" (Lewis et al. 2021, 15).<br>"Making connections with the programme's academics and their support team" (Brodie and Osowska 2021, 355).<br>"Belonging to somewhere when you feel you are comfortable to be who you are, and no one puts you down for not following what other people think" (Gao and Liu 2021, 1012).<br>"Sense of being accepted, valued, included, and encouraged by others (teachers and peers) in the department setting and of feeling oneself to be an important part of the life and activity of the department" (Knekta and McCartney 2021, 724)<br>"Building a community with students who shared their gender and racial/ethnic identities and faced similar challenges" (Rodriguez and Blaney 2021, 450).<br>"Discovering commonality across difference gave many students comfort, a foundation for relationship building and increased sense of belonging and level of curiosity" (Baleria 2021, 282).<br>"Shaping a positive experience through individual efforts" (Bettencourt 2021, 775)<br>"A desirable blend of positive racial and cultural affirmation, a meaningful educational experience, and<br>an athletic opportunity to compete with peers who looked like them" (Cooper and Newton 2021, 80) |

(*Continued*)

**Table 4.** (Continued).

| Stage of synthesis process | |
|---|---|
| ***Stage 5***<br>'Translating the studies into one another' refers to systematically comparing metaphors, themes or concepts, and their interactions in one account with those in the other account and synthesising them into sub-concepts (p. 28). | Affiliate with others and be socially accepted<br>The ability to cope with challenges<br>Subjective reflection of belongingness<br>Culture fit/ mismatch<br>Developing an asset-based approach<br>Alienation to university due to current situations<br>Off campus support from close connections<br>Gaining acceptance, attention, and support from members of the group<br>Group identity and cohesion<br>Sense of comfort and safety<br>Shared values/beliefs/ideals<br>Disapproval/rejection<br>Academic support<br>Accepting people for who they are<br>Feeling a member of the department<br>The importance of creating ethnically heterogeneous communities<br>Building familiarity and connection among students<br>Self-consciousness and individual resilience<br>Racial and cultural composition |
| ***Stage 6***<br>'Synthesising translations' implies determining whether there are types of translations or if metaphors or concepts are able to encompass those in other accounts and creating synthesises in order to generate main concepts (p. 29). | ***University belonging and social capital***<br>Affiliate with others and be socially accepted<br>Group identity and cohesion<br>Sense of comfort and safety<br>Accepting people for who they are<br>Self-consciousness and individual resilience<br>***University belonging and ethnic groups fit and cohesion***<br>Developing an asset-based approach<br>Building familiarity and connection among students<br>Racial and cultural composition<br>Gaining acceptance, attention, and support from members of the group<br>***University belonging and social exclusion***<br>Subjective reflection of belongingness<br>Culture fit/ mismatch<br>Shared values/beliefs/ideals<br>The importance of creating ethnically heterogeneous communities<br>***University belonging and on/off campus connection***<br>The ability to cope with challenges<br>Alienation to university due to current situations<br>Off campus support from close connections<br>Academic support<br>Feeling a member of the department<br>Disapproval/rejection |
| ***Stage 7***<br>Synthesising the main concepts to produce a 'higher order concept' and 'expressing the synthesis' | *Belonging to university is 'feeling part of somewhere an individual can be themselves and feel confident in their personal and social identities, through secure, meaningful, and harmonious support in cohesion with other diverse group members and creating ethnically heterogeneous communities and learning areas both on and off the faculty/campus setting' (higher order concept).* |

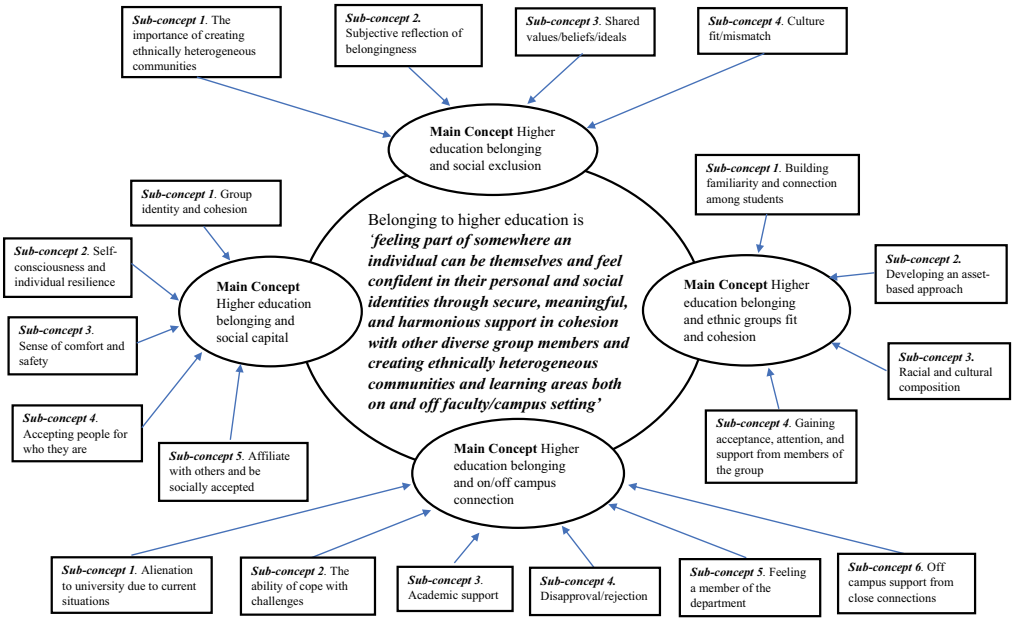


Figure 3. Diagrammatic representation of the higher-order concept, main concepts, and sub-concepts.

more culturally affirming spaces on campus and enhancing cohesion among Black females from similar racial and cultural backgrounds is critical. International students were also more likely to feel like members of a group that was similar to their own ethnic group, which was related to better mental health scores and may therefore have protective effects on student wellbeing (Penner et al. 2021).

## *University belonging and social exclusion*

The term 'social exclusion' refers the situation in which individuals are excluded from social groups or other individuals, in such a way that they cannot build social relationships/interactions and satisfy their needs for belonging. This exclusion can take different forms, including majority and minority groups, or between different groups, or explicit and implicit. When considered in the university concept, Viola (2021) stated that the issues that students engage with inside and outside university reflect their lack of belonging-specifically, and feelings of exclusion and marginalisation. For example, O'Shea (2021) implied that higher education functions as a stratified system based on a system of hidden recognition of similar capitals and habitus. The author continued that the participant (Nicole), who was in the final years of an education degree, similarly indicated difficulty securing employment if she did not feel included – without similar social capital and capabilities, she was effectively an outsider. In many cases, regardless of the background, social capital or culture, experiencing exclusion, and being made to feel invisible on campus, negatively affects the sense of belonging of students (Mallman et al. 2021). For example, mainstream students' actions, such as laughing and commenting, contributed to relational divides between students, and adversely affected a sense of belonging when uncomfortable encounters caused embarrassment for students (Mallman et al. 2021).

The struggle to belong is entwined with complex intersectionality of race, ethnicity, gender and language (Le Roux and Groenewald 2021). As a result of the lack of diversity in a specific major like STEM, racism, sexism, and general scepticism on campus, students also questioned their abilities, felt

marginalised and isolated (Rodriguez and Blaney 2021). Indeed, racial microaggressions significantly predicted the sense of belonging of Black, Asian, Latinx, and Multiracial students, as a greater frequency of racial microaggressions was associated with an overall low sense of belonging on campus (Lewis et al. 2021). Mallman et al. (2021, 1456) stressed that 'the students described miniscule but potent interactional enforcements of ethnic-based parameters for belonging'. They implied that migrant students do not belong as full, legitimate, equal members of the student community.

### *University belonging and on/off faculty/campus connections*

Universities create a climate that can be supportive, or indeed unsupportive, of student belonging. In terms of university belonging, this may refer to the number of groups a student belongs to and the number of extracurricular activities (sports teams, clubs, leadership positions, band/orchestra, etc.) they participate in. Therefore, Brodie and Osowska (2021) mentioned the need for at least one assignment to engage students in a fun, non-academic activity during their orientation. They believe that this would assist in breaking down some of the barriers between students in different locations, and they endorse the significance of social engagement in an online context. In the study carried out by Rodriguez and Blaney (2021), Latina/o/x students' feeling of isolation was mitigated through engagement with women's organisations, Latina/o/x organisations, and Latina-based organisations on campus that fostered relationships and a sense of belonging in higher education and STEM. On the other hand, Knekta and McCartney (2021) expressed that the students who described their lack of involvement explained it as not being aware of available opportunities (such as volunteering in nature reserves or attending research seminars and poster sessions).

One of the factors limiting students' use of campus facilities/opportunities was the COVID-19 pandemic. While taking precautions to reduce the spread of COVID-19, the institution created protocols and procedures to facilitate in-person experiences on campus. During the first three weeks, most courses were delivered online, but thereafter some switched to a hybrid format, face masks had to be worn at all times in the cafeteria, etc. Students expressed uncertainty about how to navigate the social and academic experience because the protocols and procedures required to create a safe environment changed their expectations and daily realities (Viola 2021). Viola (2021) also found that participants felt disconnected from their communities as a result of the COVID-19 pandemic, especially for those first-year students eager to meet new friends and join the clubs and societies that interested them. The lack of opportunities for student engagement, being disconnected from their college community, and limited visitors in halls of residence created a frustrating dynamic for many participants due to social distancing expectations, limited engagement opportunities, and limited campus programming (Potts 2021; Ensmann et al. 2021). Creating in-person relationships proved to be difficult, and most relationships formed in-person lacked depth, resulting in feelings of loneliness and isolation. Steinhauer and Lovell (2021) also stated participants had strong support systems, which included their spouses/partners and children, as well as limited on-campus connections, indicating an emphasis on off-campus academic support. The number of on-campus connections mentioned was meagre, with slight mention of associations with other non-traditional students.

## Discussion and conclusion

This meta-ethnography analysis reconceptualises and provides a new understanding of the concept of sense of belonging to higher education by synthesising the recent literature, and highlights differences in definitions of sense of belonging to higher education by exploring holistically its main characteristics and basic sub concepts (see Table 4). After the articles included in the study were examined and analysed in depth, this study concluded sense of belonging is a multidimensional experience that interweaves many aspects of our being in our social world. The four main concepts

constituted the four pillars of the higher concept of sense of belonging to higher education. These are social capital, ethnic groups fit and cohesion, social exclusion and on/off faculty/campus connections. Among the nineteen selected articles, Potts (2021) and Ensmann et al. (2021) cited the Covid-19 pandemic in their descriptions of sense of belonging. Potts (2021) described sense of belonging as students' ability to overcome difficulties like the Covid-19 pandemic will strengthen their bonds with their peers and their social environment, and the capacity to withstand or to recover quickly from difficult circumstances creates a sense of belonging. Ensmann et al. (2021) used the term 'connectedness' and highlighted its importance in determining sense of belonging and class interaction. 'Disconnection' was also used by the researcher as students were interviews regarding their experiences in the pandemic, and they defined it as a lack of interaction and 'spirited conversations' and inability to engage in social interaction. As onsite classes were transferred online, semesters were postponed, and exams were adjusted, etc.; this transition was unquestionably unprecedented and very stressful in a general sense. During the closed period, students lived in environments with varying circumstances and had varied options to keep their social lives as normal as possible. According to Markel and Guo (2020), many online learning environments do not adequately replicate the physical delivery of education, and even though remote technologies can contribute to inclusivity in some ways, they cannot foster as much ambient awareness or spontaneous interaction. As new students transition to higher education, social interaction, both with academic staff and with others in the university community, plays an important role in supporting their academic and personal success in the university environment (Xerri, Radford, and Shacklock 2018). Frequent and positive interactions between students and teachers have been linked to a firm sense of belonging to the institution in question, which subsequently increases their persistence in continuing higher education (Li et al. 2015). A department setting was a prominent part of Knekta and McCartney's (2021) description of sense of belonging. In their study, sense of belonging was described as feeling part of the life and activity of the department as well as feeling accepted, valued, included, and encouraged by others (teachers and peers). Similarly, Brodie and Osowska (2021) described sense of belonging as having connections with the academics and programme support team. The definition of belonging encompasses not only the support of

teachers and peers, but also spouses/partners and children in an off campus setting and this is an essential component in defining sense of belonging (Steinhauer and Lovell 2021). In two of the nineteen selected articles (Potts 2021; Ensmann et al. 2021), the Covid-19 pandemic was included in their definition of sense of belonging, while three of the nineteen articles (Brodie and Osowska 2021; Knekta and McCartney 2021; Steinhauer and Lovell 2021) included a connection to the departmental setting/support in their definition of sense of belonging. As a result, we decided to incorporate the concept of 'on/off faculty/campus connections' into one of our main concepts.

The social capital of higher education students in an on/off faculty/campus setting was found to be a significant dimension of university belonging in the synthesised studies and was closely linked to teacher and peer relationships. According to Putnam (2000), social capital is classified into two types: bonding capital and bridging capital. 'Bonding social capital' refers to relationships between individuals and their close friends and family members who can provide emotional support when needed. Bridge social capital, in contrast, refers to ties that are weak or loose between acquaintances. As seen in the selected studies, teacher-student, student-student and student-family interaction have been regarded as one of the more critical issues in the higher education context. When students feel valued and respected in the educational context, they are motivated to learn because warm, respectful, cooperative interactions foster a sense of belonging, student engagement, and develop a positive learning environment (Worsley, Harrison, and Corcoran 2021). Collins (2021) uses the term 'validation' to describe students' sense of belonging and describes it as a scaffold to build their self-confidence and help them to feel a part of something larger. In Viola's (2021) description, the term sense of belonging refers to feeling 'at home' somewhere, or with certain people and feeling valued by others, which in turn can yield a sense of comfort, familiarity, and safety. According to Gao and Liu (2021), belonging goes beyond familiarity, friendship and academic support, and is

defined as a sense of socio-psychological comfort, a connection to the depth and quality of intragroup dynamics, a sense of social validation and the feeling of being considered 'authentic' in the friendship cliquishness. When students feel partially connected and supported, or if they feel seldom valued on campus, they see belonging not as something provided or facilitated by the institution, but as something that they have succeeded or created on their own. Therefore, Bettencourt (2021) defined sense of belonging as something that individuals themselves create or achieve.

Peer acceptance and rejection are both predictive of outcomes that are related to behavioural engagement like participation and emotional engagement such as interest and satisfaction in school (Stigmar 2016). Similarly, Law, Cuskelly, and Carroll (2013) stressed that friendship has a fundamental role to play in satisfying the emotional aspects of a sense of belonging, as it serves as a buffer against experiences of exclusion and inclusion derived from peer group acceptance, while linking young people's experiences within their peer group with affective adjustments, such as a sense of belonging. O'Shea (2021) conceptualised belonging as more than a feeling, belonging or unbelonging was a matter of wearing like a skin. Belonging can have a variety of repercussions, some of which are tangible, and some of which are more emotional or embodied. The lack of belonging is worn like a cloak of despair for some students. In Lewis et al.'s (2021) study, students described their sense of belonging to university as being 'singled out' and being 'made hyper visible' because of negative comments from other students (p. 15). Indeed, multiracial students experienced a greater frequency of racial microaggressions, which led to a lower sense of belonging on campus for these students. According to Rodriguez and Blaney (2021), meeting and connecting with other students who share similar interests and come from similar background creates a sense of belonging. As a result of scepticism and self-doubt inflicted by their male peers, Latina students often felt marginalised in STEM environments. A sense of belonging was built by students actively resisting marginalisation by re-framing their experiences as trailblazing and engaging with STEM organisations that were based on identity and other students who come from similar background. Le Roux and Groenewald (2021) also emphasise the shared values that are built together in a group of friends and define belonging as facilitating the process of establishing a mutual connection that transfers the tensions that students experience in the context of the university towards in-group cohesion. They also emphasised that the intersection of race, gender and language can shape students' experiences of inclusion and marginalisation on a diverse campus environment. In their explanation of belonging, Mallman et al. (2021) used the concept of convivialities, which are the social practices that occur in routine, everyday interactions in multicultural environments. Symbolic convivialities for belonging can be created through cross-cultural campus interactions that reinforce relations of dominance and subordination.

Despite the fact that belonging is significant to all students, there are reasons to believe that stigmatised racial and ethnic groups may have substantial concerns about belonging at university due to their social identities, which make them vulnerable to stereotypes and social identity threat – the fear that one's social group will be negatively viewed in a given setting (Steele, Spencer, and Aronson 2002). A sense of belonging can be experienced by ethnic minority college students in at least two ways: through feeling connected to their college, or through feeling connected to their ethnic group. Baleria (2021) describes the concept of belonging as discovering the commonality between differences. Sense of belonging within the concept of ethnic groups fit and cohesion can also be defined as a student's warm attitude from fellow students and faculty, playing a part to create a peer support network, and feeling a sense of community (Penner et al. 2021). These elements are important components for ethnic minority students to form a strong bond to university. Acevedo et al. (2021) uses the concept of inner healing in spiritual activism to describe belonging, which shows that Latino students who experience both inequalities and microaggressions strengthen their sense of belonging in STEM through inner healing (entails reclaiming the mind-body-spirit) in spiritual activism. As stated by Cooper and Newton (2021), a meaningful educational experience, a desired blend of positive racial and cultural affirmation, a critical mass of students, faculty, and

coaches with similar racial and cultural backgrounds are important elements in creating a sense of belonging.

Each community of inquiry consists of individuals in various relationships, not just to one another, but also to the collective itself and some of these relationships contribute to our sense of identity. Considering that our identities are largely shaped by the groups to which we belong, being separated from these groups may shake our sense of self. In particular, social isolation and being away from universities resulting from pandemic quarantine practices or some measures to prevent the spread of the virus can lead to loneliness or social exclusion. This meta-ethnography analysis points to the ways in which sense of belonging is inter-relational in all these ways and hence isolation would have negatively impacted on the experiences of relationality and hence of sense of belonging. A weak sense of the relational begins from a conception of the individual as being primary to relations. Relationships themselves, on the other hand, are immanent and constitutive of a strong relational sense (Emirbayer 1997; Roseneil and Ketokivi 2016). We might conclude from this meta-ethnography that the papers and approach to sense of belonging could be situated in a weak understanding of the relational, but students' experiences of sense of belonging point us towards a strong sense of the relational. This is a significant finding, as it suggests that what is in question is not just epistemological, in terms of knowledge about how institutions can best cater for individual students in ways which foster the positive inter-relational aspects mentioned here, but ontological, in terms of shifting the understanding of students as primarily relational and not individual, such that any understanding of sense of belonging begins with this already in place. In undertaking this meta ethnography synthesis, it is anticipated that it will help us to better understand how the findings better understand how sense of belonging is defined, as expressed in their experiences (before and during the pandemic), with the research potentially able to help to understand what can be done to increase students' sense of belonging to the university and improve their mental health.

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## ORCID

Laura Mazzoli Smith http://orcid.org/0000-0001-9391-6613

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