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Factors affecting new students' sense of belonging and wellbeing at university

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ABSTRACT

A higher sense of belonging has been shown to be associated with general wellbeing among students, and its benefits are known to relate to academic and post-academic successes. Yet, we know little about newly enrolled students' lived experience that links sense of belonging and wellbeing. This small-scale qualitative study ($n = 8$) showed that an interplay of factors including academic, social, surroundings, and personal space influence new students' sense of belonging and wellbeing at university and within the discipline. Specifically, our findings revealed that undergraduate and post-graduate (home and international) students have different experiences depending on demographic characteristics, such as age, gender as well as socio-economic factors. Further details revealed that enhanced student support is needed to ensure that different groups of students' needs are addressed in an inclusive manner.

Introduction

Sense of belonging has its roots to Astin's (1984) definition of how much time and effort is required for a student to get themselves immersed in the university experience. While there are many definitions of a sense of belonging, the general consensus is that sense of belonging encapsulates students' perception of their involvement and meaning in a variety of settings including university and social context (Allen et al., 2021). Evidence has consistently shown that sense of belonging in a student's life affects their academic performance, motivation during the course of their study, and spills-over into their career (Dost & Mazzoli Smith, 2023; Pedler et al., 2022; Singer et al., 2022). Ahn and Davis (2020) introduced two new domains that influence students' sense of belonging; (1) surroundings (living space, geographical and cultural location), and (2) personal space (life satisfaction, life attitudes, identity, personal interest) beyond the typical domains of (3) academic engagement, and (4) social (i.e., social engagement, network, solidarity). They reported that students often used words that were synonymous with the university's own promotional material such as sheep, dragons, Wales, Welsh(ness), indicating that students have

a pre-conceived notion of how well they might like their own surroundings. Moreover, these words also suggest that students' perception and interpretation of what is a university is more than just a physical building but also a symbolic place in higher education. Whereas personal space suggests psychological aspects of belonging and this is crucial for both personal and academic achievements.

University students' mental health has deteriorated over the years in that the proportion of students with mental health problems has doubled over a 10-year span and there are more cases of self-harm and suicide (Lewis & Bolton, 2023). Dutcher et al. (2022) suggested that the absence of familiar social and emotional support is a reason for poor mental health as they contributed to feelings of isolation. Specifically, they reported that low feelings of belonging were a significant predictor to developing depressive symptoms in first-year students after controlling for baseline depressive symptomatology. Similar results were observed in postgraduate students when they perceive low sense of belonging (Matheson & Sutcliffe, 2018; Morris, 2021). More so if they are international students because they are less likely to seek support compared to home students (Clarke, 2023). International students experience additional stressors from their transition to study either directly from undergraduate or from having worked for some time, and considerations for career prospects in home or in the host country (Huang & Turner, 2018). Similarities or differences in host country's cultural norms including general life such as weather and public transportation also contribute to the stressors faced by international students (Ghalayini, 2014; Qadeer et al., 2021). Other than international students, some groups of students also have negative experiences because of their race/ethnicity and sexual orientation (Rodriguez & Blaney, 2021), feelings that they do not fit within the discipline (Crowe, 2021) or due to lack of support from the university. Taken together, there are many factors that could affect a student's sense of belonging irrespective of their demographic status, home/international, undergraduate or postgraduate status which then affects their mental health and wellbeing.

Research aim

Most previous studies included university students across all years of study and across disciplines, which may have diluted specific challenges and opportunities for newly enrolled students. Newly enrolled students face an extraordinary amount of challenges having just transitioned from high school or workplace which may impede their academic performance unlike other students. We included postgraduate taught students because literature on this group is limited. Postgraduate taught (PGT) programme students study for 1-year in the UK, making their situation more unique compared to the traditional 3- or 4-year degree programmes typically found in both undergraduate and postgraduate research degrees. These students must acclimatise quickly to their learning environment and adapt to their living and personal space which then translates to possibly more barriers to having a good sense of belonging. Some researchers noted that PGT students are often lacking in confidence and quite unprepared for the academic workload demands compared to their undergraduate days (Becker et al., 2019; Coneyworth et al., 2020).

For this project, we specifically examined newly enrolled students including both undergraduate and postgraduate comprising both home and international

students on Psychology taught programmes to determine whether the factors affecting sense of belonging and their subsequent effects are similar or different from each other and how this may then affect their wellbeing. Psychology is rather complex because it attracts students who are keen to join the professional bodies (e.g., clinical psychology) but also general enough for them to cross into any other disciplines (Ho et al., 2012) regardless of financial concerns. Higher Education Statistics Agency (HESA) has been reporting positive growth in Psychology across the UK since 2019 to present day demonstrating continued interest (Higher Education Statistics Agency, 2023b); thus, it is imperative that we examine this group closely to ensure sustainability in the long term.

Materials and methods

Study design

A qualitative study was adopted to determine what factors and/or domains affect students' sense of belonging and wellbeing. We adopt a critical realist approach that acknowledges the reality of the world while also accepting the subjectivity, contextuality, and social construction of our knowledge of it (Bhaskar, 1998). We interviewed participants in November 2022 at a UK university. The analysis of findings was influenced by our existing knowledge and experience as researchers on students' sense of belonging. In terms of our positionality, our research team includes two colleagues from the Department of Psychology and one Education Developer. We worked collaboratively to further our understanding and to explore approaches to improve new students' sense of belonging to the university, and in different teaching and learning contexts including psychology and beyond. We observed that there was an exponential increase in student numbers and that students who had just returned to campus from COVID-19 restrictions showed many examples of poor adjustment to university life, and this led to the development of this research. We obtained ethical approval from [information redacted for anonymity]. Participants provided written consent prior to their participation in the study.

Participants

The findings discussed are drawn from the experiences of eight students (four males, three females, one identified as non-binary) enrolled in Psychology programmes. They were recruited from faculty-wide notices in North-East England. The age range of the participants was from 18 years up to 53 years with a mean of 32.75, SD = 14.11. Out of the eight participants, three were staying in student halls, while the rest lived with family members (see Table 1).

To be eligible for this study, participants were at least 18 years and older and that they have not attended the University of X [information redacted] (UoX) previously. Although some recommended that researchers interview between 8 and 12 participants for a qualitative study (Fugard & Potts, 2015), we reached data saturation with no new categories emerging by the 8th participant.

Table 1. Participants' demographic details.

Unique ID	Gender	Age	Ethnicity	Living arrangements
UGH-1	Male	29	White	Family home
UGH-2	Male	53	White	Own house with family member
UGH-3	Male	18	South Asian	Student accommodation – alone
UGInt-1	Nonbinary	18	Latin	Student accommodation – alone
PGInt-1	Female	45	Black	Accommodation – with family
PGInt-2	Female	25	Black	Student accommodation – alone
PGInt-3	Male	25	Black	Student accommodation – alone
PGH-1	Female	49	Other	Own house with family members

UGH – undergraduate home student, UGInt – undergraduate international student, PGH – postgraduate home student, PGInt – postgraduate international student.

Measures and procedure

We understood that choosing a university is a significant decision influenced by various factors such as academic reputation, course offerings, and personal aspirations. Students often seek a course that aligns with their career goals and provides a challenging yet supportive academic environment. In addition, university life comes with its set of challenges, including adapting to a new living situation, managing academic demands, and navigating social interactions. The extent of face-to-face interaction can significantly affect one's sense of belonging and overall well-being. Feelings of loneliness, stress, or anxiety are not uncommon, and coping mechanisms are vital for maintaining good mental health. A sense of belonging can be fostered through integration into the university community, which may be influenced by cultural differences and the availability of support systems. The learning environment also plays a crucial role in shaping the sense of belonging, and improvements in this area can enhance the overall university experience. Furthermore, sharing personal experiences and concerns can lead to a better understanding of individual needs and the collective student experience. It is against this backdrop that several questions were asked around these different themes during the interviews. We designed the Interview questions by adapting ideas discussed in studies conducted by Dutcher et al. (2022) and Ahn and Davis (2020). All interviews started by asking students why they selected the UoX as this was considered to be non-judgemental and to allow participants to lead the conversation and highlight what was most relevant for them. Follow-up questions were asked to generate more descriptions and details. Some of the main questions and prompt questions used in the interviews are available in online Appendix 1.

Participants were invited to attend the interview either online (MS Teams) or in-person at a date and time of their convenience. All interviews were conducted individually. They were provided with the participant information sheet 1 week before the interview, and we obtained consent for the interview as well as to audio record the interview for subsequent analyses. The participants were permitted to stop for breaks whenever they wanted and to withdraw from the study without any explanation should they no longer wished to continue. Interviews ranged from 30 min to 45 min. Participants were thanked and debriefed after the interview.

Data analysis

Given that all interviews were recorded in MS Teams, we used MS Teams transcription service to transcribe the audio recordings. All the interview transcriptions were cross-checked and edited by the interviewer before sending them to the interviewees to

confirm the details (Birt et al., 2016). This was then transferred to MS Word with each interview anonymised. We used basic thematic data analysis to analyse the interview data (Braun & Clarke, 2012). Initial codes were constructed next to relevant data in the interview transcripts and then grouped into categories. All codes and categories were adjusted as when needed for all the transcripts. The codes and categories were finalised and named after the full analyses were completed. In sum, the codes and categories were constructed from interview transcripts, and we then aligned the constructed categories with Ahn and Davis's (2020) four domains. All issues raised by the participants fit in one of the four domains demonstrating the comprehensive nature of the four domains. Selected interview excerpts were identified and incorporated in the findings to substantiate the responses given by the participants. To ensure data credibility and trustworthiness, immediate checking was performed during or at the end of the interview using response validation to ensure the researcher understood the participants' experiences clearly. Participants elaborated on specific parts of their experience that they felt their meaning had not been clearly captured. Coding of the interview transcripts was done after all interviews were completed. To avoid researcher bias, [information redacted] completed the initial analyses and this information was second-checked by [information redacted] to minimise interpretive bias on all transcripts. The first author was not involved throughout the recruitment and interview process to avoid influencing students' responses as she was the programme leader. Commonalities and differences were examined and resolved over the course of multiple discussions. Discussions with collaborating researchers were also conducted over the course of the data analysis process to stimulate self-reflection and self-awareness. These steps were aimed at implementing reflexivity throughout the process, considering that two researchers were from the Psychology department (Mercer, 2007). The following section presents and discusses the results of our study.

Findings

Our findings revealed that there is an important interplay between the academic, social, surroundings, and personal space of students and the institutional systems that are critical for the students' sense of belonging and wellbeing (Ahn & Davis, 2020; Cena et al., 2021). The factors affecting each of these domains were observed from both undergraduate and postgraduate students who participated in our study. It was also evident that there were some similarities and differences between the perceptions of undergraduate and postgraduate students as well as the views of home and international students. The following section elaborates these findings further.

Academic domain

Our findings revealed that students' sense of belonging is influenced by their perceptions of the curriculum and their expectations from the university programme of study. A considerable majority of the students were positive about the course stating that the course was well structured. For instance, one undergraduate home student said: *'it's a different [experience] to everything that I went through last year at college . . . but I like how it's structured'* (UGH-1). However, international students with no strong background in psychology faced some problems as they grappled to keep up with the expectations of

the course. One said: '*I have never done psychology before . . . err, I struggled a little trying to understand but now it's going well*' (PGInt-1). It also emerged that there were some aspects of the course that some international postgraduate students were unhappy with. For example: '*I have three assessments to do at once and I have to submit them so it's not really that easy for me*' (PGInt-2). In the same vein, some undergraduate students cited some discomfort with the new approach to teaching and learning that was used in the delivery of their programme. '*There is some team-based learning . . . I'm not overly keen on that because it's loud and I'm not. I'm not really good with it when it's loud, I lose track of things, so apart from the team-based learning, everything's going well*' (UGH-2).

Social domain

It emerged that students' sense of belonging is strongly affected by social factors including social engagement with friends, societies, and the use of available support systems in the university. The university does present students with opportunities to interact with each other. Depending on students' interests and personal choices, some chose to meet with friends face-to-face, while others preferred to have less social interaction. It does appear that many students tend to have more friends at the university than outside the university. This is particularly true for international students or home students who were not from the same city where the university is located. For example, one undergraduate student said: '*out of university, I don't have many friends. At university, I talk to classmates, people in the society*' (UGH-2). Some students were able to integrate into societies and taking affirmative action themselves, thus firming up their sense of belonging. '*I believe I've integrated very well. As I say, I've set up a society [UoX Gaming Society]. I did the student Ambassador careers booster week. I'm a student ambassador as well [and] I'm in the process of applying to be a Student Rep as well. So I'm doing everything I can to be a part of* [information redacted]'. (UGH-2).

Likewise, some students agreed that the university support and structure is sufficient and provided ample opportunities. '*I've had a lot of opportunities to get involved with activities that have helped my sense of belonging in the university to improve*' (PGInt-2). '*I had guidance on what to do, and where to go. It was easy to make friends on my course*' (UGH-3).

Yet, this was not the case for others. For example, mature students and LGBT students felt isolated. '*I've got the forms to set up the Mature Student society because that's a place where I really don't feel the University is geared for [mature] people . . . Universities are geared mainly for undergraduates. And it's very much first career focused, which it should be. But there's a lot that it's missing for mature students*'. (PGH-1). '*I don't feel like I have adequate support and I wouldn't know how [to access support]*'. (PGInt-3).

Arguably, a holistic approach should be adopted to ensure that all students are supported to develop the sense of belonging regardless of their demographic features.

Surroundings domain

Our data showed that students' sense of belonging is strongly affected by their emotional responses to their living space 'accommodation' as well as family and cultural location. Some students live at home with their parents, others live in the university

accommodation while others live with their own families in private accommodation. One undergraduate student alluded to how they felt out of place when they joined the university just because of where they live in society. For example, the student felt inferior compared to others given that they came from a poor neighbourhood: *'Err so I live in* [information redacted] *and I live with my parents but I always thought of myself as somebody who wouldn't be able to go to university and achieve. So, when I started, I did feel a little bit out of place here like I didn't kind of feel I belong, but erm as I'm going through each week, I'm starting to feel more at place here'* (UGH-1). On the other hand, others who lived at home were comfortable: *'I don't live alone, so I have support and I have people to talk to and relate with'* (PGInt-2). For those who lived in student accommodation, they felt that they were able to make friends and receive some social support: *'It's made me get out more and just like talk to people and just get along with people'* (UGH-3). For other students who were not from the same city as the university, they were satisfied with their physical surroundings. I had a look around the university, and I was very impressed. I didn't want to go to a really big university … so, [information redacted] was just the right fit. I liked the courses, the lecture rooms, everything about it just appealed to me. (UGH-2)I came here for an open evening, and it just seemed like the right environment for me because they just like a mix of people I could get along with and the lecturers [were] really nice too. (UGH-3)

On the other hand, being away from home does affect some students' general wellbeing. For instance, one undergraduate student said: *'it's just really challenging being so far away from everyone and I also have a heart condition, so trying to like navigate that with the university and all of my diagnosis and everything … '* (UGInt-1). Other students feel isolated because they are separated from their families. This was well-articulated by a student who stated that: *'I'm living alone now but I'm married with kids and [they are] all over there so it's quite a challenge for me'* (PGInt-3). Having a support system at home in close proximity does appear to mitigate the negative aspects of being in an unfamiliar environment. *'My wellbeing is good, I'm not struggling mentally or anything. I do get anxious at times, however, the fact that I am not alone physically has helped me as well'* (PGInt-1).

One of the students felt dissatisfied with the university infrastructure which she found difficult to navigate due to her disability problem. 'due to my physical health, I do find it difficult to get up the stairs. There's something wrong with my back and I can't use the lift at student Central' (PGH-1). It is worth considering the extent to which the needs of students with different disabilities are addressed, including access to different buildings across the university.

Personal space domain

Our study findings revealed that students' personal space influences their sense of belonging. We found that students' personal interests shaped their expectations at university and within their discipline. For instance, all the students who participated in our study indicated that they had clear rationale for choosing the university. This included the university's reputation for the quality of delivery, proximity to the university and the availability of research facilities in their chosen discipline. One of the undergraduate students commented that: *'for me, it was nice and close because I do*

live in [[information redacted]] and there is a good reputation with UoX for Psychology' (UGH-1).

For international students, they cited the low cost of living as well as affordable tuition fees as the major attractions to the university. The views of the international students were captured by someone who said: *'living costs and the tuition fees [were] actually affordable for me'* (PGInt-2). Similarly, another international postgraduate student commented on the prospect of finding a job after graduation and the provision of scholarships by the university: *'I'll be able to attain a good job and [the university] gives a scholarship for sub-Saharan students'* (PGInt-3). It must be noted that students are attracted by the opportunity to work while studying, and the opportunity to gain the Graduate Work visa that permits all international graduate students to work in the UK upon successful completion of their studies at a UK university.

It was also demonstrated that students' personal identity plays an important role for their sense of belonging. For instance, one home postgraduate student enjoyed her interactions with international students because of her identity. She said: *'I'm mixed race, half Ugandan and half English, and I think being older as well, lots of people come to me and ask for clarification about things'* (PGH-1). Another student felt comfortable in the University and within the city, adding that there were no cultural problems as most people were Muslims like her, hence she felt more religious belonging. The multicultural nature of the city was highlighted as an advantage by a student who said: '*this helps to reduce stress and increases the feeling that you might fit in*' (PGInt-2). However, one international undergraduate student experienced some challenges as she could not find anything similar to her home culture in the North of England. On that note, she did not feel that the university and the city were inclusive enough. Reflecting on the experiences she had in the school, she said: '*I've had issues when it comes to like sexism and homophobia in the school, and it's not been great*' (UGInt-1). The same student raised concerns of homophobia stating that this was a real surprise to them given that they expected the UoX to be very inclusive. An initiative to welcome LGBT community – rainbow lanyard on staff and student tags – may have been inadvertently caused more backlash. *'We actually still have a lot of homophobia so this (referring to the rainbow lanyard) is basically a walking hat on me sign. So it's not great. er, they try to like put up the sidewalk crossings with the pride flags or whatever but that's really just putting lipstick on a pig like that'* (UGInt-1). The student was critical of the tick-box nature of some of the initiatives embraced by the university which did not appear to translate to real change in practice.

Every effort must be made to ensure that all students feel welcome and safe at the university irrespective of their background and/or sexual orientation. It is, therefore, important for the university to create an enabling environment for all the new students to adapt quickly to the new situation.

Discussion

Our study corroborates previous research findings suggesting that a sense of belonging is influenced by a complex interplay of various factors (see Figure 1 for a visual representation).
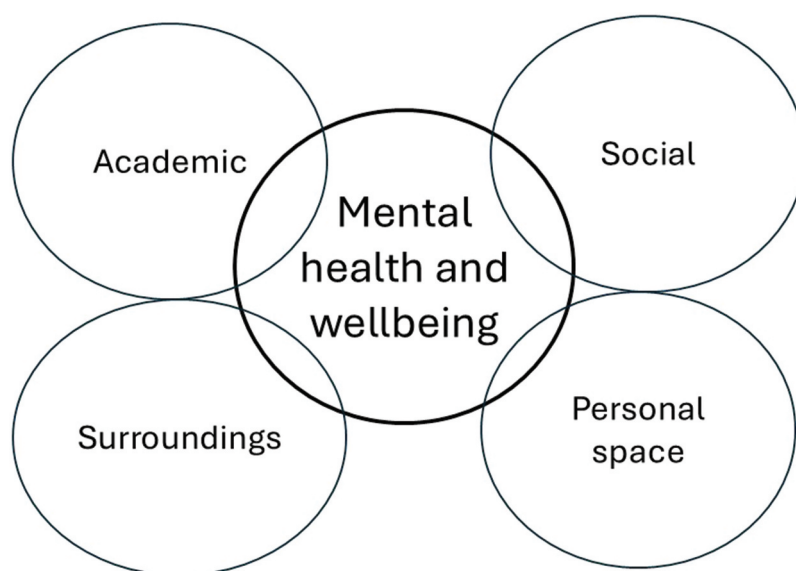
Figure 1. Proposed model.

For instance, similar to a study by Ahn and Davis (2020), our study asserted that students' sense of belonging is affected by different factors in the four domains namely the academic, social, surroundings and the personal space. Our findings further showed that students with a good sense of belonging to the course and to the university also reported good mental health and wellbeing. We, therefore, posit that good mental health and wellbeing take place at the intersection of these four domains of sense of belonging. Although good mental health and wellbeing have an indirect impact on academic success or future career, we cannot discount the effects of these four domains on students' wellbeing at present. It is highly likely that failing to meet the threshold in all four domains will result in students' failure to complete their studies. Attention to these four domains can help the students by laying a strong foundation for them later in life, making them attractive to employers, and to be upstanding citizens in the society. This is aligned with Dutcher et al. (2022) in that they found that those with a low sense of belonging had higher depressive symptoms, thus adding more importance to sense of belonging in newly enrolled students.

The academic domain in a university student's life cannot be ignored as it does not only mean working towards academic success but helping them maintain a healthy wellbeing throughout their university life. It starts with them deciding on which programme and which university thus the wider impact of the social, personal and surroundings domain on their decision too. In particular, if students' expectations are not matched with the reality in the university or within their discipline, students would struggle to adapt to university life (Hassel & Ridout, 2018). Similarly, Briggs et al. (2012) asserted that students often have difficulty envisaging university life which sometimes leads to a mismatch between expectations and reality. This underscores the importance of supporting student transitions from high school, for example, providing good induction to the university and to the discipline of study (Briggs et al., 2012). Several studies showed

that if students make uninformed decisions regarding the choice of the institution and the study programme, this might lead to withdrawal from the university (Hillman, 2005; Yorke & Longden, 2008). Lazell (2023) provides good advice which include consideration of factors such as location, the availability of the programme of study, among others to help them choose the university of their choice. Universities should provide students with information to help them to make informed decisions before they join the university. In the same vein, students should take the responsibility to find out everything they need to know about the university of their choice.

Other than the academic aspect, there is well-documented evidence in literature which demonstrate that non-academic aspects in students' lives are critical to them feeling that they belong (Cena et al., 2021; Dutcher et al., 2022). It is important for students to be able to interact and socialise with others at the university and within their disciplines. Our study revealed that while some students have taken proactive actions, for example, being a student ambassador and participating in societies, others do feel isolated thus reducing their sense of belonging. Our findings indicated that some groups, for instance, the mature students, students from the LGBT community and students with disabilities feel particularly isolated from the rest. This finding resonates with observations made in other studies where it has been shown that the needs for different categories, such as mature students or LGBT are often overlooked and this may lead to lack of belonging (Kirchner, 2015; Rodriguez & Blaney, 2021). We acknowledge that we only had one student with a disability in our study, thus limiting a wider conclusion regarding this particular group. Yet, that one student raised concerns about access to some of the buildings in the university, suggesting that her needs are not met satisfactorily. It has been observed that the number of students with disabilities being enrolled in universities is increasing annually (Higher Education Statistics Agency, 2023a). Further, some researchers have argued that universities do not include or have not considered neurodiversity enough when making decisions, particularly when it affects students' teaching and learning environment (Grose-Hodge & Hamilton, 2023). Thomas (2021) reiterates the importance of addressing the needs of this group of students stating that this is crucial for promoting higher feelings of belonging in students. Likewise, Lau et al. (2019) report that university support systems and structures should be accessible and known by students to help them to develop a good sense of belonging. We acknowledge that our study was completed in November 2022, a time when which the UK general population had just returned to pre-pandemic public spaces. It is possible that our participants' responses could have been affected by services availability as well as some fear of contracting the virus thus limiting their social activities. International students may have experienced varying degrees of movement restrictions in their home countries before arriving in the UK. These could potentially influence their perceptions and expectations regarding social interactions and surroundings in their new environment.

Our study findings showed that students' sense of belonging is strongly affected by their emotional responses to their living space 'accommodation' as well as social networks of friends and/or family members, and the wider geographical and cultural location 'surroundings' as well. It has been suggested that international students tend to form in-groups with other international students, thus reducing their opportunity to develop cross-cultural skills (Rivas et al., 2019). We did not ask our international students whether they had any difficulty forming relationships with home students and for that reason, we

can only speculate that having their own family members close to them may have fulfilled their needs for relationships. We did seek clarity on whether the university provided sufficient support for them to form relationships with others and this has been confirmed as affirmative by them. Yet, this support is only positive when students make decisions to take an action about it. Some have highlighted that the choices provided by the university are limited to undergraduates, with minimal consideration for postgraduate and mature students. It is worth thinking about the adequacy of the support given to this group of students.

In addition, our study highlighted the importance of students' personal space (i.e., personal choices, financial, wider UK education and environment) for the development of sense of belonging and wellbeing (Ahn & Davis, 2020). It has been argued that students require more than just physical spaces but also space to form new relationships and promote healthy behaviours (Mulrooney & Kelly, 2020). Students who lived with their family members perceived that their daily lives are minimally impacted by the negative aspects of transitioning to a new environment. In addition, students who perceived the advantages of pursuing their studies, for instance, the opportunity to attain a graduate work visa had a higher sense of belonging, which contributes to higher wellbeing.

Our study findings revealed various factors that influence students' sense of belonging to the course and to the university, ultimately affecting their overall wellbeing. This information was enlightening for the Psychology department, as this facilitated the identification of areas for further development. By addressing them, we can maintain a good reputation, attract more students and foster an environment that promotes a sense of belonging and enhances students' wellbeing.

Conclusion and future work

In sum, our findings support the four domains (academic, social, surroundings, personal space) proposed by Ahn and Davis (2020) and that students' perceptions of the programme and general surroundings influence their sense of belonging. Diversity in student population (individual variations in social and economic factors, educational backgrounds, health statuses) all play a role in students' sense of belonging. Universities should create an enabling environment for students with varying needs to ensure that they can thrive both physically and mentally in a university environment.

From an application perspective, our findings were shared within the Psychology department and have now been translated into action. For example, there is a DePsych initiative led by staff and students on how to expand and include other world views into the current curriculum. Further, we have also dedicated professional staff to support international students to gain practical work experience and adjust to life in the UK. Both activities contribute to fostering a stronger sense of belonging to the University and the improvement of student wellbeing.

As a result, we would like to suggest that future work can focus on exploring how to support the development of sense of belonging and students' wellbeing in a more inclusive manner that addresses the needs of both undergraduate and postgraduate students, home and international students as well as mature students and students with disabilities. To achieve this, it is fundamentally important to pay attention to the students' voices.

Disclosure statement

No potential conflict of interest was reported by the author(s).

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Notes on contributors

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