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Abstract

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Keywords

Sense of belonging, barriers, facilitators, occupational therapy education

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**Barriers and Facilitators of a Sense of Belonging Among
Occupational Therapy Students and Faculty:
A Qualitative Study Using the Ecology of Human Performance Framework**

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ABSTRACT

A sense of belonging significantly influences both student engagement and faculty motivation. The objective of this study was to identify the barriers and facilitators of a sense of belonging among students and faculty of an occupational therapy department. A qualitative descriptive study was conducted with fifty-one students and ten faculty recruited via non-random purposeful sampling. Data were collected through focus group discussions with students and semi-structured interviews with faculty. Both the focus group discussions and interviews were audio-recorded and transcribed by a professional transcription service. Inductive coding was used to identify initial themes, which were then deductively mapped to the context construct of the Ecology of Human Performance (EHP) Framework. Five main themes emerged from the focus group discussions with students: personal challenges and emotional stressors, triggers in the learning environment, peer support and cohort dynamics, faculty support and engagement, and cultural sensitivity and representation. Three main themes emerged from the faculty interviews: leadership and team cohesion, membership in social groups and committees, and the physical environment and proximity to students. Mapping these themes to the EHP framework revealed that the physical and social environments had the greatest impact on the sense of belonging for both students and faculty in this study. Increasing opportunities for social interactions and addressing physical barriers to student-faculty engagement can enhance the sense of belonging in occupational therapy educational settings.

Introduction

The concept of a sense of belonging has been described as “a subjective feeling of value and respect derived from a reciprocal relationship” (Mahar et al., 2013). It is recognized as a fundamental human need, vital for psychological well-being and mental health (Baumeister & Leary, 1995). In the context of educational settings, this sense of belonging is not merely an abstract feeling but a critical factor that significantly influences engagement, motivation, and retention (Buskirk-Cohen & Plants, 2019; Pedler et al., 2022). It enhances morale and correlates with key outcomes such as improved academic performance, increased student retention rates, and faculty job satisfaction (Gopalan & Brady, 2020a; Lewis et al., 2016).

Among students, belonging is linked to positive behavioral and emotional outcomes, such as self-efficacy, self-confidence, and social acceptance (Ahn & Davis, 2020; Korpershoek et al., 2020). Feeling valued and accepted motivates active class participation, fosters connections with peers and faculty, and builds a solid commitment to professional development (Allen et al., 2021). Similarly, for faculty, a strong sense of belonging contributes to a more engaging and innovative educational approach, reflecting positively on their motivation and capacity to mentor students effectively (O’Reilly et al., 2015).

Determinants of a Sense of Belonging

The concept of belonging is multifaceted and influenced by a wide range of cultural and contextual factors. Specifically in educational institutions, one key determinant of belonging is the presence of systemic issues that may foster environments of exclusion and marginalization. These issues often manifest as policies and practices that disadvantage certain groups of students. For example, curricular content that predominantly reflects the perspectives of a dominant culture can alienate students from minority racial or ethnic backgrounds, leading to a sense of disconnection and disengagement from the educational process (Allen et al., 2024; Cohen & Viola, 2022; Nguyen et al., 2018). The mode of learning may also influence belonging. Remote learning, for instance, may limit opportunities for social interaction and connection, thereby impeding a sense of belonging (Hews et al., 2022; James et al., 2022). Additionally, students from lower socio-economic background may experience limited access to resources, leading to feelings of isolation and exclusion (Jack & Black, 2022).

Conversely, research has shown that a sense of belonging may be fostered by supportive faculty who demonstrate interest and care for their students (Whitten et al., 2020). Faculty who actively engage with students, participate in informal discussions, and personally reply to emails help facilitate a sense of belonging (Crawford et al., 2022). Another key facilitator of belonging is the presence of culturally sensitive pedagogy, which recognizes the diverse backgrounds of students and strengthens their connection to the institution (Caingcoy, 2023). Other studies have highlighted promoters of belonging, such as peer mentorship programs and the establishment of support groups and safe spaces for minoritized populations (Gonsalves & Chestnutt, 2020; Naidoo et al., 2022; Worley et al., 2023).

Faculty Sense of Belonging

For faculty, a sense of belonging involves feeling comfortable in their professional identity, valued by their institution, and integrated into the broader academic community (Kachchhap et al., 2021; Ryan et al., 2019). Faculty who feel secure in these areas are more likely to contribute positively to the educational mission, engage in meaningful collaborations, and serve as mentors to students (Simmonds & Dicks, 2018; Ussher, 2010). Conversely, faculty who do not feel a sense of belonging may experience isolation, disengagement, or burnout, all of which can negatively impact not only their own well-being but also the quality of education they provide (Somoray et al., 2017).

The Ecology of Human Performance Framework

The Ecology of Human Performance (EHP) model provides a robust framework for understanding the dynamic interactions between individuals, their environments, and the tasks they engage in (Dunn et al., 1994). By focusing on the interplay between people and their environmental contexts—social, cultural, and physical—the EHP model is well-suited for examining the barriers and facilitators of inclusivity. It recognizes that challenges to inclusion are often rooted in environmental factors rather than individual shortcomings. This framework enables a thorough analysis of how different contexts impact a sense of belonging for both students and faculty.

The EHP model also emphasizes the importance of modifying environments to better support inclusivity. By advocating for changes to institutional policies, physical spaces, and social norms, the model promotes a proactive approach to creating environments that ensure equal participation and foster a sense of belonging for everyone, regardless of background or ability. This makes the EHP framework particularly effective in addressing the complexities of building inclusive educational settings.

Study Rationale and Objective

The field of occupational therapy (OT) emphasizes human engagement, participation in meaningful activities, and the creation of inclusive environments that support the well-being of all individuals (Dorsey et al., 2017; Reitz et al., 2020). Given OT's focus on inclusivity, the academic environment of OT departments should reflect these values to enable students to imbibe the principles of OT practice and prepare them effectively for their future roles as occupational therapists. Therefore, exploring belonging within OT education settings is crucial, as OT departments provide environments where students and faculty from diverse backgrounds come together (Grenier et al., 2020). The ability to foster a sense of belonging within such settings can significantly impact the educational experience and the professional development of future occupational therapists.

Occupational therapy as a discipline is rooted in principles of equity, diversity, and inclusion (AOTA, 2020). Understanding the specific barriers and facilitators to belonging within an OT department allows the department to align its practices with these core values. By identifying and addressing factors that may impede a sense of belonging, the department can work toward creating a more inclusive and supportive environment. This benefits the immediate community within the department and has broader

implications for the profession as a whole. Occupational therapy practitioners are trained to promote inclusion and participation in diverse contexts (AOTA, 2020); therefore, a department that models these principles internally is better equipped to instill these values in its graduates, who will carry them forward into their professional practice.

Despite the clear evidence supporting the importance of a sense of belonging and its broad impacts, the literature reveals a significant gap in understanding how to effectively nurture this sense across the diverse landscape of OT education. While studies have identified the positive outcomes associated with a strong sense of belonging, less is known about the specific barriers to and facilitators of belonging among students and faculty within the unique context of OT programs. This gap in knowledge underscores the need for focused research aimed at uncovering the nuanced dynamics of belonging within OT educational communities.

Also, although the positive outcomes linked with students' sense of belonging are well-documented, far less attention has been given to the sense of belonging among faculty, who are also deeply influenced by the academic institutions where they work. Faculty in OT programs play a crucial role not only in delivering education but also in shaping the professional development and personal growth of their students. Therefore, understanding whether faculty feel a sense of belonging within their institutions is equally essential for fostering a healthy and productive educational environment.

It is essential to study the factors influencing both students and faculty because both groups play interconnected roles in the academic environment, and the experiences and perceptions of one group inevitably influence the other. Hence, studying both groups allows for a holistic approach to identifying and addressing the challenges and opportunities for fostering a sense of belonging, ultimately leading to a more supportive environment for all members of the educational community.

The objective of this study was to explore the factors that promote or hinder inclusivity and a sense of belonging among OT students and faculty at a university.

Methods

Study Design

We adopted a qualitative descriptive design (Colorafi & Evans, 2016) because it is an approach rooted in naturalistic inquiry and is well suited to exploring a complex and multifaceted phenomenon such as sense of belonging. The study adheres to the Standards for Reporting Qualitative Research (O'Brien et al., 2014).

Sampling and Recruitment

A non-random purposive sampling strategy was used to recruit a sample of students and faculty within a single university. Eligible participants met any of the following criteria: (1) students enrolled in full-time or part-time master's or clinical doctorate OT programs at the university, at any year of study; or (2) faculty members of the university's OT department. Using publicly available demographic data of eligible

participants, purposive sampling and recruitment of seventy-five students and twenty-five faculty members were conducted to ensure representation of key subgroups and to capture diverse perspectives. The researchers sent invitation letters to the purposive cohort for participation in the study, and participants received financial incentives for their involvement.

Data Collection

Demographic information was collected from the participants via SurveyMonkey. Focus group discussions and semi-structured interviews were conducted virtually via a secure online platform over a six-week period from February to March 2024. Virtual semi-structured interviews and focus group discussions are effective alternatives to in-person qualitative research for adequate data collection (Santhosh et al., 2021) and can accommodate participants' schedules and geographic locations.

Data collection from the students was conducted through focus group discussions. Eight focus groups were held, each comprising a maximum of seven students from the same degree program to foster open discussion and capture role-specific insights. The focus group discussions lasted for a median of 45.5 minutes. Data collection from faculty was via individual semi-structured interviews, which lasted a median of 40.8 minutes.

The interviews and focus group discussions were conducted by the first five authors who were all Doctors of OT and possessed 5 to 12 years of experience in qualitative research. The Ecology of Human Performance framework was used to develop the interview guide. The interview guide is presented in the Appendix. Participants were asked open-ended questions regarding physical, social, and cultural factors in the university environment that impacted their sense of belonging and how these influences facilitated or hindered their performances. Both focus group discussions and one-on-one interviews were recorded and transcribed verbatim by Rev©, a professional transcription service provider.

Data Analysis

An initial inductive approach (Braun & Clarke, 2006) was used to analyze the qualitative data. The first, second, third, and sixth authors independently reviewed the transcripts, immersing themselves in the data to gain a deep and nuanced understanding of the content. This independent review process helped ensure that different perspectives were considered, minimizing the risk of individual bias influencing the analysis. Notably, the sixth author, who is not an occupational therapist, provided a level of objectivity that further reduced the potential for researcher bias, offering a fresh perspective through which to interpret the data.

After familiarization with the data, initial codes were systematically generated by identifying patterns, key concepts, and significant statements that were relevant to the research question. Codes were grouped into potential themes that represented broader patterns in the data. Potential themes were reviewed and refined to ensure they accurately represented the dataset. The themes were refined by merging similar ones

or discarding themes that were not sufficiently supported by the data. The goal was to ensure that the final set of themes was coherent, consistent, and representative of the participants' experiences.

Finally, the identified themes were deductively mapped to the various aspects of context as laid out in the Ecology of Human Performance (EHP) theoretical framework. This deductive phase involved aligning the emergent themes with predefined categories of the context construct of the EHP framework. By mapping the themes onto this framework, the researchers were able to connect the qualitative findings to a broader theoretical understanding of context in OT. This approach helped ensure that the findings were not only grounded in the data but also linked to established theoretical concepts, enhancing the study's overall rigor and relevance.

The study followed the four criteria described by Lincoln et al. (1985) for ensuring data trustworthiness. To maintain credibility, each author independently coded the data. To ensure dependability and confirmability, a codebook was developed, and this was regularly updated during peer debriefing sessions where new insights were discussed. Additionally, a subset of the participants reviewed the findings to ensure that they reflected their opinions and experiences. A detailed narration of the context of the research and methodology has been presented to enhance transferability.

Ethical Considerations

The study obtained approval from the university's Institutional Review Board (IRB) on December 5, 2023, with the reference number IRB23-1118-288. All participants provided informed consent before participation, were informed of their right to withdraw at any time, and were assured of their anonymity and confidentiality in the reporting of findings. To further protect participants' identities, pseudonyms were used in the presentation of the results.

Results

Participants

A total of sixty-one participants were recruited for this study. Of the students approached, fifty-one agreed to participate, resulting in a response rate of 68%. Among faculty, ten accepted the invitation to participate, yielding a response rate of 40%. The demographic details of the participants are provided in Table 1.

Table 1*Demographic Characteristics of Participants*

Characteristic	Value
Students (n=51)	
Age, mean (SD)	27.84 (3.18) years
Gender	
Male	14 (27.4%)
Female	35 (68.6%)
Prefer not to say	2 (4%)
Program	
Master's program	21 (41%)
Doctorate program	30 (59%)
Race/Ethnicity	
White	26 (51%)
Black	7 (14%)
Hispanic	12 (24%)
Asian	5 (9%)
Other/Prefer not to say	1 (2%)
Year of Study	
First year	22 (43%)
Second year	10 (20%)
Third year	13 (25%)
Fourth year	6 (12%)
Faculty (n=10)	
Years of employment at the university, mean (SD)	2.3 (3.3) years
Age, mean (SD)	45.6 (4.05) years
Gender	
Male	3 (30%)
Female	7 (70%)
Prefer not to say	0
Race/Ethnicity	
White	6 (60%)
Black	0
Hispanic	4 (40%)
Other	0

Student Themes

Five main themes emerged from the focus group discussions with the students.

Personal Challenges and Emotional Stressors

Students stated that personal challenges such as family issues or health challenges had a negative impact on their sense of belonging. These stressors affected their abilities to fully engage with their peers and participate in class activities. Student 21 stated, "I want to say, in my first term, it was almost shocking to do everything. And I had been out of school for some time, and just going right into anatomy, it was very daunting." Their personal challenges also created an overall sense of disconnectedness with the educational environment. Student 5 explained, "I am a single mom working part time... I feel a lot distracted and disconnected sometimes."

Moreover, those who experienced these challenges felt they did not receive sufficient support to help them overcome their difficulties and re-integrate them into the system. Student 14 noted, "I am a special needs mom... And when I tried to reach out to the director of the program, it (sic) didn't make me feel included... It was always, 'Let me get you off campus.' I was consistently being offered alternative off-campus solutions, whereas I preferred to remain on campus." Student 11 also described their experience, "...specifically there was my back injury...And instead of finding resources, they say, 'Oh, go to the accommodations so they can help accommodate you supposedly to stay in class.'"

The students advocated for the creation of safe and empowering learning spaces that prioritized their well-being and foster resilience in the face of adversity. Student 31 suggested this, "... integrating self-care activities into the curriculum can help us develop coping strategies and build resilience, especially in our academic environment which is quite demanding."

Triggers in the Learning Environment

Several students expressed concerns that their past negative experiences could impede their sense of connectedness in the university, highlighting that this challenge may be further intensified by triggers in the learning environment such as being put on the spot or confrontational teaching methods.

In the words of Student 3 and 22 respectively: "Being singled out in class can feel like reliving past traumatic experiences"; and "Personally, I find some role-playing scenarios in skills labs triggering because it sometimes mirrors past traumatic events..."

Peer Support and Cohort Dynamics

Students underscored the pivotal role of peer relationships and cohort dynamics in fostering a sense of belonging and support within OT programs. Student 18 stated, "Navigating through this program feels like trekking through a jungle, but having a supportive cohort is like having a reliable compass. We're in this together, sharing survival tips and celebrating each other's victories." Student 30 also said, "I've had a

really positive experience and I think the reason my experience has been so positive is because I've involved myself in a lot of clubs, class leadership activities, those kinds of things."

The students highlighted the profound sense of community and inclusivity they had experienced through interactions with their cohort and study group peers. Student 40 stated, "It's like finding an oasis... and I feel like more my cohort rather than the faculty makes me feel like more of a family kind of environment."

The students mentioned that the opportunity to share experiences, exchange perspectives, and provide mutual encouragement significantly engendered a deep sense of connection. Student 9 said, "Our study groups aren't just about textbooks and lectures; they're like mini support groups where we exchange memes, share snacks, and motivate each other." Student 25 explained, "Finding a supportive community within my cohort has been crucial for navigating the challenges of the program. Peer support networks provide a sense of camaraderie and encouragement that enhances the learning experience."

Faculty Support and Engagement

Students stressed the significance of faculty involvement and support in cultivating a nurturing learning atmosphere. They identified regular check-ins, feedback sessions, and faculty-led discussions on student concerns as contributing factors to their sense of belonging. Student 22 said:

Having faculty who provide thorough and constructive feedback on assignments is incredibly valuable to me. I appreciate those who take the time to offer detailed insights and suggestions, because it enhances my learning experience and helps me improve. Short, brief comments often leave me feeling overlooked and unsure of how to progress.

Student 10 also explained,

Faculty who take the time to genuinely inquire about our well-being and listen to our concerns create a supportive learning environment where we feel valued and understood. It's reassuring to know that they prioritize our holistic development rather than solely focusing on academic performance.

Some students pointed out that certain professors inadvertently prioritized stronger students, which ultimately undermines the sense of belonging for those who feel overlooked. Both Students 27 and 31 expressed their thoughts on this point:

...I think sometimes... And I feel like we're all human, maybe some professors don't even know they're doing it, but as an example, if you have a student who's struggling, and then you have a student who's doing really well, sometimes maybe that professor tends to migrate to the student who is doing really well...

I guess equal treatment from the faculty to the students, 'cause sometimes it's very obvious, some of the faculty just having... Not favorites, but yes, favorites per se, and it just discourages some of us when we want to get help with something, and it feels not as important as the people who they prefer...

Cultural Sensitivity and Representation

The focus group discussions with the students identified the importance of cultural representation in nurturing a sense of belonging. Differing perspectives emerged regarding the level of diversity among faculty and student cohorts. While a Black student felt under-represented, a Hispanic student felt otherwise. Student 19 said, ...I only had two Black professors. And I'm a Black person, so I'm looking for similarities within the faculty. So there were two Black professors. And then it ended up turning into one. And then within my cohort, so despite me having a rather large cohort of 60 students, it's three Black students. And so to me that's kind of like an issue.

Another African American student said, "Well, me personally, when I got there, I felt like I don't belong here. I was the only African-American student in my cohort, so I already felt like a fish out of water." On the other hand, Student 3 said, "I'm Hispanic...So I felt very represented by the diversity of a faculty that I've had for my classes. It was a good mixture of Hispanic and female."

The students opined that integrating diverse cultural perspectives and experiences into the curriculum and engaging in discussions on cultural competence would promote inclusive and equitable communities on campus. Student 39 explained, "When we see ourselves reflected in the curriculum, it validates our experiences and reminds us that our voices matter in the field of OT."

Faculty Themes

Three main themes emerged from the interviews with the faculty of the university's OT program.

Leadership and Team Cohesion

The majority of faculty related that supportive leadership and collaborative team members significantly influenced their sense of belonging and connectedness. Faculty 1 said "within my specific local OT team, ... I feel a strong sense of belonging, largely because of the direct supervisor that I have. So, I do feel a lot of support, a lot of encouragement from my direct boss." Faculty 5 had a similar experience, "For me, I guess within the program, it's been inclusive, especially with our program director. He is a very supportive program director."

Membership in Social Groups and Committees

Some faculty followed a hybrid work pattern and noted that it affected their ability to interact with colleagues. This initially hindered their sense of belonging. However, participating in social groups or committees successfully bridged this gap. Faculty 7 stated:

...but I rarely get the opportunity to interact with the rest of the faculty, but I do through book club. There's a book club and there's a research group that... So I get a chance to interact and I feel like I belong somewhat to those groups. I feel like there's a little bit of a sense of attachment to those two smaller subgroups.

Faculty 9 also corroborated the same:

I don't always get to know people as well as maybe I would have or as quickly as I would have if I was on campus five days a week every day; I think that the team teaching really helps with that approach too, though. You get to know people just because you're in class together every week and you're communicating that way.

Faculty who worked on-site full-time suggested that extracurricular activities for faculty could promote a sense of mutual support and community. Faculty 2 stated, "I was thinking maybe extracurriculars for the faculty might be fun."

Physical Environment and Proximity with Students

Most faculty noted that the current university layout, with students and faculty situated in two separate buildings, hindered smooth interaction and impacted their connection with students.

Faculty 4 and 8 explained:

I think too at ..., our campus set up, our physical environment actually doesn't foster that very well. We are in two separate buildings. The students, if they want to come in to see us in our office, they have to make an appointment or they have to come to the lobby and somebody has to call us and they have to be let down to our office.

At my last institution, our offices were integrated in the same building with the classroom. So when students were coming into class in the morning, even if I wasn't teaching, they were walking by my office, "Hey ..., good morning. How are you? How's it going? Hey, I wanted to ask you a quick question." I feel like that's not really fostered as well here, again, mostly because of the physical environment. Unless I spend all day in the academic building, which sometimes I do, then I'll see the students in the lobby. But otherwise, I think we're missing a little bit of that where students can just pop in and say, "I just want to talk to you for a few minutes just to chat." That's how you really get to know those students and help them foster that sense of belonging.

Hence, it became clear that faculty sought to establish a strong connection with the students they taught and mentored, desiring for students to recognize their impact and concern. Faculty 1 said:

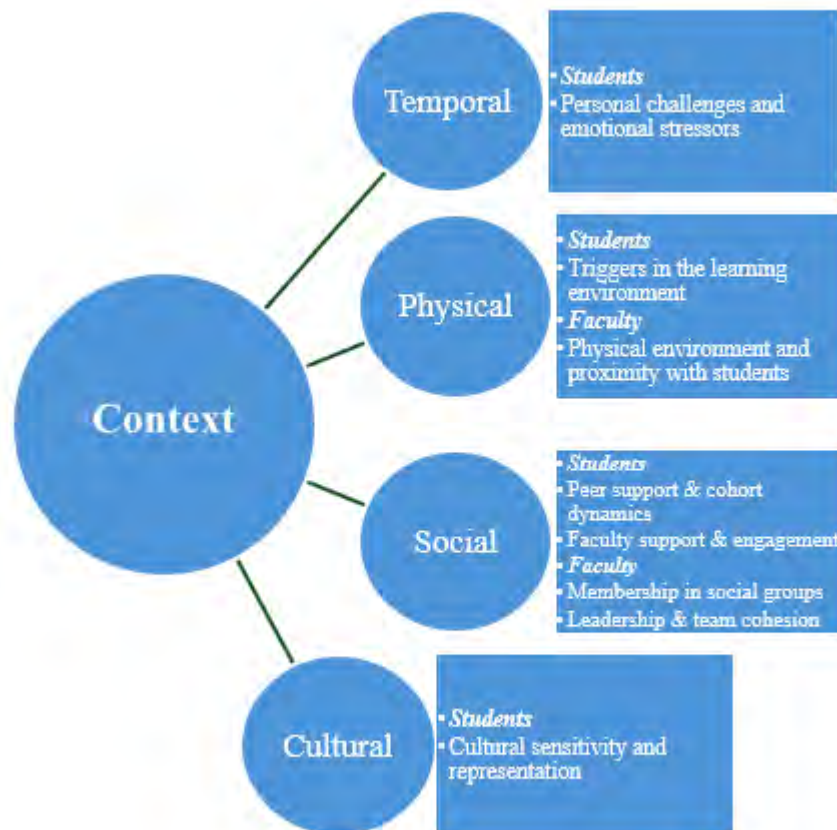
I actually don't get to have as much interaction with the students as much as I'd like. I wish that there would be more of an understanding that I am there to provide that support that students need, but I think it falls between the cracks.

Mapping Themes to the EHP Framework

Mapping the themes to the EHP framework showed that the physical and social environment had the largest impact on the sense of belonging of students and faculty. Figure 1 illustrates the mapping of the themes to the EHP framework.

Figure 1

Deductive Mapping of the Themes to the EHP Framework



Discussion

To the best of our knowledge, this is the first study to report the barriers and facilitators of a sense of belonging among OT students and faculty. The main barriers to a sense of belonging among the students were a lack of cultural representation, personal challenges, and insufficient attention from faculty, while the main facilitators were support from peers and faculty. Conversely, faculty identified supportive leadership and membership in social groups as facilitators of a sense of belonging, with a lack of proximity to students being a key barrier. These findings align with various aspects of the context construct of the Ecology of Human Performance (EHP) framework, which includes temporal aspects, physical environment, social environment, and cultural environment.

Our study found that personal challenges and emotional stressors impeded a sense of belonging among students. This corroborates the findings of Cheung et al. (2013) who reported that stressors such as family disbanding or conflict weakened respondents' sense of belonging. Also, a recent study reported a mean stress score of 7 (on a scale of 0 to 10) for master's and doctorate degree OT students, with more than half citing financial pressures as a key stressor (Grab et al., 2021). Within the EHP framework, personal challenges and emotional stressors may be categorized in the temporal aspect of the context construct, as these factors often fluctuate depending on various life stages and events. Other studies have also negatively associated stress with academic performance (Frazier et al., 2019; Lin et al., 2020). To help students manage emotional stressors, incorporating mindfulness techniques has been shown to reduce stress and enhance performance (González-Martín et al., 2023; McConville et al., 2019).

The physical environment encompasses the tangible aspects of the learning environment, including layout, resources, and activities available to students. Some students identified certain role-playing scenarios in skills labs and teaching methods as triggers that could mirror previous trauma and evoke unwanted memories. This is supported by Wolfsdorf et al. (2019), who reported that a course's content triggered a post-traumatic response in a student. Similarly, Wells et al. (2021) found that OT students identified specific topics and activities as "triggering," hampering their ability to participate effectively. These findings underscore the importance of integrating trauma-informed practices into OT education to encourage a safe learning environment (Gutierrez & Gutierrez, 2019). Occupational therapy educators should strive to adhere to the key standards proffered by the Substance Abuse and Mental Health Services Administration for trauma-informed programs. These standards include realizing the prevalence of trauma, recognizing how trauma affects all individuals, integrating knowledge about trauma into policies, procedures, and practices, and resisting re-traumatization (Substance Abuse and Mental Health Services Administration, 2018).

Similarly, faculty noted that the physical layout of the school, which limited accessibility to students, undermined a sense of belonging for both them and the students. While this point was raised primarily by faculty, it is evident that both students and faculty need to connect adequately to foster a sense of belonging. Frequent informal interactions between students and faculty have been shown to enhance student motivation, self-assurance, academic proficiency, and intellectual growth (Kim et al., 2023; Komarraju et al., 2010). Open-plan areas and clustering of offices can encourage interactions between students and faculty. Additionally, the use of technology such as video conferencing tools and online faculty-student engagement platforms can bridge this gap and facilitate stronger connections among faculty and students.

The social environment includes significant persons such as spouses and friends, as well as social groups. Students in this study emphasized the role of supportive peers and faculty in fostering a strong sense of belonging, which ultimately improved their academic performance. One student mentioned that detailed feedback from faculty enhanced the learning experience and helped identify areas needing improvement. This observation is consistent with previous research that found a positive correlation

between peer support and academic achievement (Altermatt, 2019; Schenkenfelder et al., 2020). In the context of OT education, Tyminski et al. (2023) conducted a review of nine articles that indicated both peer and faculty relationships foster a sense of belonging by reducing imposter syndrome, improving mental health, decreasing loneliness, and enhancing learning outcomes. Furthermore, Buskirk-Cohen and Plants (2019) found that students who feel valued by their professors experience a stronger sense of belonging, which contributes to their academic success and commitment. These findings underscore the crucial role of a supportive social environment in not only enhancing students' sense of belonging but also empowering them to reach their full academic potential.

Faculty similarly acknowledged that supportive leadership, collaborative team members, and membership in committees or social groups promoted a sense of belonging. The findings of Thomas et al. (2019) and Bjorklund et al. (2020) align with ours; they reported that strong social networks positively impacted educator motivation, job satisfaction, and self-efficacy. Promoting social ties and creating opportunities for social interaction among OT educators can improve their sense of belonging, thereby enhancing productivity and performance. In particular, social interactions should be prioritized in hybrid or remote work settings.

The cultural environment refers to customs and societal expectations that are accepted by the community to which a person belongs (Dunn et al., 1994). Our study found that Black/African American individuals felt underrepresented among their peers and within the faculty, a finding echoed in previous literature (Ackerman-Barger et al., 2020; Aldridge et al., 2023; Li & Koedel, 2017). According to the American Occupational Therapy Association (AOTA) 2021 Academic Programs Annual Data Report, the majority of students enrolled in master's and doctorate OT programs were of White race. In 2021, the master's and doctorate programs comprised 76% and 74% White race respectively, while 5% and 6% respectively were Black or African American (AOTA, 2022). This distribution indicates an underrepresentation of racial and ethnic minorities when compared with the general U.S. population. Creating an inclusive and diverse environment in the university is paramount for enhancing the sense of belonging among students. Aldridge et al. (2023) proposed that integrating coursework on systemic racism, bias, and health equity, and using diverse case studies, can enhance cultural awareness among OT practitioners and help underrepresented students feel included, promoting a sense of belonging.

In summary, this study sheds light on the shared and distinct factors that influence a sense of belonging among OT students and faculty, framed within the context construct of the EHP framework. Both groups identified the physical and social environments as crucial elements. For students, peer and faculty support emerged as significant facilitators. Meanwhile, faculty members underscored the importance of supportive leadership and social group membership. However, barriers such as lack of cultural representation and the physical layout of the educational environment posed challenges to fostering a sense of belonging for both groups. These barriers, particularly those

rooted in the physical environment, highlight the importance of designing inclusive spaces that promote interaction and minimize re-traumatization for students, while also facilitating better student-faculty connections.

Limitations and Suggestions for Future Research

Although this study has identified some key barriers and facilitators to a sense of belonging, some limitations exist. Firstly, this study used a non-random sample from a single institution. As such, our findings may not be representative of OT departments at a national or global level. Also, this study was conducted among postgraduate students only. It is possible that the factors that promote or hinder a sense of belonging among undergraduate students may differ slightly. Future research may explore this area further. Additionally, while this qualitative study has identified predictors of a sense of belonging, researchers may consider quantitatively assessing both the sense of belonging and occupational performance of faculty and students in an OT setting using validated measures to draw the connection between both indices.

Implications for Occupational Therapy Education

The findings of our study have significant implications for OT education. To address personal factors such as emotional stressors among students, OT programs should create supportive environments that prioritize well-being and resilience. For example, implementing regular check-ins with faculty mentors where students can discuss their emotional well-being, as well as their academic progress, would allow for early identification and support for those facing significant stressors. This can also be achieved by offering mental health resources, stress management tools, and flexible accommodations. Additionally, OT programs could incorporate mindfulness workshops and reflective journaling as part of the curriculum. These activities encourage students to manage stress actively and reflect on their experiences in a structured way. These strategies align with the holistic focus of OT on addressing both physical and emotional needs, ensuring that students feel understood and valued.

Additionally, physical barriers may be mitigated by fostering inclusive classroom environments that emphasize respect and open dialogue. In settings where the physical layout of the school discourages healthy student-faculty interaction, virtual office hours or online discussion boards could be utilized to bridge gaps, ensuring that students and faculty have consistent opportunities for meaningful engagement.

Given the current ethnic and racial demographic spread in OT educational settings, institutions should implement diversity and cultural competence training for faculty and students. This could involve regular workshops on cultural sensitivity that include case studies relevant to OT practice, such as how cultural factors influence patient care in different settings. Additionally, it would be beneficial to review admission processes to promote better representation, possibly by setting specific enrollment targets based on ethnicity. Furthermore, integrating diverse perspectives into the curriculum can help students see themselves reflected in the material, which fosters a deeper connection to

their studies. For instance, including readings and guest lectures from OT practitioners of diverse backgrounds can enhance the learning experience by providing varied viewpoints and experiences.

Additionally, encouraging peer mentoring, collaborative learning, and social events can also strengthen relationships among students and faculty, building a sense of community within OT programs. Realistic initiatives might include setting up a peer mentoring program where upper-year students support first-year students in navigating the challenges of the program. Additionally, creating opportunities for collaborative projects where students work in teams to address real-world OT scenarios can enhance both learning and social bonding. These projects could be designed to reflect interdisciplinary teamwork, which is common in clinical practice, thereby preparing students for their future professional roles.

Conclusion

This study provides nuanced insights into the contextual factors that could influence a sense of belonging among students and faculty in an OT education setting. The EHP framework provided a comprehensive lens through which these factors were analyzed. Creating more avenues for social interactions and addressing key barriers such as cultural underrepresentation and inaccessibility of faculty can promote a sense of belonging in OT settings.

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Appendix

Focus Group Discussion and Interview Guide

Session	Components
Introduction	Greetings, introductions, and purpose of the meeting
Social context	<ol style="list-style-type: none"> 1. How do interactions with peers, faculty, and staff influence your sense of belonging? 2. Can you describe any social experiences that made you feel included or excluded? 3. In what ways do relationships or group dynamics help or hinder your sense of connection?
Cultural context	<ol style="list-style-type: none"> 1. What aspects of the department's culture make you feel like you belong? 2. Are there any cultural factors that make it difficult for you to feel included in the department? 3. How does the department handle differences in background, values, or perspectives? Does this affect your sense of belonging?
Physical context	<ol style="list-style-type: none"> 1. How do the physical spaces in the department (classrooms, offices, labs) affect your sense of belonging? 2. Are there specific locations in the department where you feel more or less connected? Why? 3. Are there any teaching methods that make you feel more or less included? Why? 4. How does the accessibility or layout of the space impact your ability to participate and feel included?"
Temporal context	<ol style="list-style-type: none"> 1. Are there particular times when you feel more engaged or disengaged with the department?" 2. How do academic schedules or workload impact your sense of belonging? 3. Are there other factors that impact your sense of belonging?
General questions	<ol style="list-style-type: none"> 1. What specific things in the department make you feel welcome and valued? 2. Can you share a memorable experience when you felt a strong sense of belonging in the department? 3. What challenges or barriers make it difficult for you to feel like you belong in the department? 4. Can you describe an experience where you felt disconnected or excluded?" 5. What changes do you think would help to improve the sense of belonging for students and staff?
Conclusion	<ol style="list-style-type: none"> 1. Is there anything else you would like to share about your sense of belonging in the department?