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Arielle Ramirez
Midwestern University - Downers Grove

Anne F. Kiraly-Alvarez
Midwestern University - Downers Grove

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Abstract

The recent innumerable social and racial injustices and healthcare disparities experienced globally have catapulted diversity and inclusion discussions to the forefront. The purpose of this study was to identify the supports and barriers to inclusion in occupational therapy (OT) education from the experiences of OT students from historically marginalized groups and the perspectives of OT faculty/staff. The authors used a convergent mixed methods design for the study, which consisted of an online survey and semi-structured interviews. 131 students and 35 faculty/staff completed the survey, while 20 students and 11 faculty completed interviews. Five themes emerged from the data: 1) Barriers and facilitators exist while exploring OT as a potential career; 2) There are pros and cons to the OT admissions process for students from historically marginalized groups; 3) Students from historically marginalized groups experience varying degrees of exclusion and a limited sense of belonging within their OT programs; 4) Many OT programs have good intentions to promote diversity and inclusion through various efforts; and 5) Some OT program efforts may be counterproductive, and more actions must be taken to further promote inclusion and address barriers to inclusion. Numerous supports and barriers to inclusion in OT education were identified within these themes. Findings indicate that despite numerous inclusion efforts, students from historically marginalized groups continue to experience several barriers that impact inclusion in OT education. Based on these findings, the authors provide strategies to promote and advocate for inclusion in OT education.

Keywords

Inclusion, occupational therapy education, student experiences, faculty/staff perspectives

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Exploring Supports and Barriers to Inclusion in Occupational Therapy Education

Arielle Ramirez, OTD, OTR/L^{1,2}

Anne Kiraly-Alvarez, OTD, OTR/L, SCSS²

Chicago Public Schools¹

Midwestern University²

United States

ABSTRACT

The recent innumerable social and racial injustices and healthcare disparities experienced globally have catapulted diversity and inclusion discussions to the forefront. The purpose of this study was to identify the supports and barriers to inclusion in occupational therapy (OT) education from the experiences of OT students from historically marginalized groups and the perspectives of OT faculty/staff. The authors used a convergent mixed methods design for the study, which consisted of an online survey and semi-structured interviews. 131 students and 35 faculty/staff completed the survey, while 20 students and 11 faculty completed interviews. Five themes emerged from the data: 1) Barriers and facilitators exist while exploring OT as a potential career; 2) There are pros and cons to the OT admissions process for students from historically marginalized groups; 3) Students from historically marginalized groups experience varying degrees of exclusion and a limited sense of belonging within their OT programs; 4) Many OT programs have good intentions to promote diversity and inclusion through various efforts; and 5) Some OT program efforts may be counterproductive, and more actions must be taken to further promote inclusion and address barriers to inclusion. Numerous supports and barriers to inclusion in OT education were identified within these themes. Findings indicate that despite numerous inclusion efforts, students from historically marginalized groups continue to experience several barriers that impact inclusion in OT education. Based on these findings, the authors provide strategies to promote and advocate for inclusion in OT education.

Introduction

Within the past few years, innumerable social and racial injustices and healthcare disparities experienced globally have catapulted diversity and inclusion discussions to the forefront. These events have also called upon healthcare professional organizations and education programs to proclaim their stances on and efforts towards ensuring inclusion and diversity. According to the American Occupational Therapy Association (AOTA) Vision 2025 and the pillar of Equity, Inclusion, and Diversity, the profession of occupational therapy (OT) works towards being an inclusive profession that embraces diversity in all its forms (AOTA, n.d.). However, the current demographics within OT education and practice do not reflect these proclamations. In fact, in a recent annual report, only 10% of students in OT master's or doctoral programs self-identified as Hispanic, 8% as Asian, 5-6% as Black or African American, and <1% as American Indian, Alaska Native, Native Hawaiian, or Other Pacific Islander (AOTA, 2022). The percentages of OT practitioners who identify with these diverse races or ethnicities are even smaller, with no more than 6% of practitioners identifying with any group (AOTA, 2020a). There is also little to no data on OT practitioners or students who self-identify with other historically marginalized groups such as LGBTQ+, non-Christian, disabled, lower socioeconomic status (SES), or immigrants. Not only is this indicative of the lack of inclusion within OT education and the profession, but it also acts as an infringement on AOTA's commitment to inclusion and non-discrimination and the core values of justice and equality within the Occupational Therapy Code of Ethics (AOTA, 2020b; 2020c). Although there are numerous studies and expert opinions justifying the need for inclusion and diversity within OT education and practice (Hammel, 2013; Jaegers et al., 2020; Johnson & Lavalley, 2021; Johnson et al., 2022; Taff & Blash, 2017), there is limited research on inclusion and diversity within OT education, specifically from the perspectives and experiences of current OT students from historically marginalized groups and of OT faculty/staff. Therefore, there is a need to understand the experiences of students from historically marginalized groups within OT education. Given that OT faculty/staff are also primary stakeholders in OT education, there is also a need to explore their perspectives on the lack of inclusion within OT education. Further investigating these perspectives will help identify supports and barriers to inclusion within OT.

Literature Review

Definitions

Diversity is defined as “the unique attributes, values, and beliefs that make up an individual [Taff & Blash, 2017] when compared with the context of a group or population. Diversity comes in many forms, including, but not limited to, socioeconomic status, race, sex, ethnicity, age, disability, sexual orientation, gender identity, and religious beliefs” (AOTA, 2020c, p. 1). Inclusion has been described as a process (Williams et al., 2005) and an “active response to diversity—fostering acceptance, respect, belonging, and value for each individual. To support diversity, inclusion must be actively pursued” (AOTA, 2020c, p. 2). Although the term “students from underrepresented groups” was used throughout the recruitment and data collection processes of this study, the authors are now choosing to use the term “students from historically marginalized groups” due

to ongoing discourse surrounding terms such as “underrepresented”. The term “underrepresented groups” emphasizes representation proportionality which in turn places the ownership of difference on the marginalized persons. This terminology may indicate supremacy by the dominant majority groups and minimize importance of personhood for individuals who don’t identify as the majority (Johnson & Lavalley, 2021).

Importance of Inclusion within Healthcare

Numerous research studies have suggested the importance of diversity and inclusion within healthcare education and practice. Increased inclusion and diversity representation within healthcare professions has been associated with enhanced client-practitioner relationships, more positive client outcomes, increased access to healthcare services, and increased advocacy in policy change for historically marginalized groups (Kirsh et al., 2006; Govender et al., 2017). Previous research has suggested that healthcare professionals from historically marginalized groups are also more likely to provide services to other medically underserved areas (Zayas & McGuigan, 2006). This could help facilitate improvements in access to healthcare services for more vulnerable populations, and decrease the disparities experienced by historically marginalized groups.

The value of inclusion and diversity within OT specifically has also been explored and discussed. Due to the rising awareness of healthcare disparities and civil/racial conflicts experienced by historically marginalized groups, the concepts of diversity, equity, inclusion, and advocacy for justice and anti-racism have become more prominent in recent years (e.g., Jaegers et al., 2020; Johnson & Lavalley, 2021; Johnson et al., 2022; Salvant et al., 2021). However, these concepts have also been explored by some scholars in years prior. For example, one study found that OTs who shared the same experiences with clients from marginalized groups reported more positive practitioner-client relationships and positive client outcomes (Beagan & Chacala, 2012). Findings demonstrated that practitioners who resembled similar cultural values and interests as their clients allowed clients to feel safe, respected, valued, and included (Beagan & Chacala, 2012). Hammel (2013) argued that culture is “an integral dimension of both people and environments” (p. 231) and that cultural humility should be applied to theory and practice to ultimately help promote health and well-being. Given that culture and diversity among individuals are related to human occupations and occupational opportunities, it is imperative for OT to be inclusive to help facilitate client outcomes, ensure culturally safe practice, and foster positive client-therapist relationships. Similarly, Clark (2013) acknowledged that embracing others for their uniqueness, values, and experiences truly enriches the human experience for the practitioner and the client. Also, given the increasingly diverse needs of the United States (U.S.) population, a diverse and inclusive workforce could help address those needs (Beagan & Chacala, 2012; Taff & Blash, 2017). Inclusion and diversity within OT have significant implications for the growth and sustainability of the profession.

Current Efforts to Expand Inclusion in Higher Education and Healthcare Professions

For decades, there have been numerous efforts to enhance inclusion in higher education and healthcare, including legislation, early exposure to careers, holistic admissions processes, and various supports for students from historically marginalized groups. In 2021, legislation called the Allied Health Workforce Diversity Act (S.1679/H.R. 3320) was reintroduced. This legislation aims to increase opportunities for individuals from historically marginalized groups in various healthcare professions, including OT (Allied Health Workforce Diversity Act of 2021). Research has suggested to start promoting diversity in the healthcare workforce as early as the K-12 level through opportunities such as shadowing and volunteering within a healthcare setting, holding healthcare education seminars, and healthcare career fairs (Zayas & McGuigan, 2006). Early exposure to and observations of healthcare professionals who also come from historically marginalized groups can help facilitate interest and initiative to participate in the healthcare field (Deas et al., 2012, Guerrero et al., 2015). Holistic admissions practices also help increase inclusion of students from historically marginalized groups in higher education and healthcare professions. Several studies have found that placing higher value on admission writing prompts, past volunteer experiences, and extracurricular activity involvement resulted in higher admittance of individuals from historically marginalized groups (Deas et al., 2012; Patel et al., 2017; Simone et al., 2018;). Additionally, adding on-site interviews and proactive recruitments strategies such as recruitment fairs, seminars, and site visits led to higher enrollment and lower rates of attrition from students from historically marginalized groups (Simone et al., 2018; Wilson et al., 2018). Another strategy to promote inclusion within higher education is the provision of supports for students from historically marginalized groups. Individuals from historically marginalized groups reported that having positive relationships in the home with family members and in school with counselors, teachers, classmates and the availability of extracurricular activities (healthcare mentors, coaches, club mentors) functioned as a huge determining factor for attending higher healthcare education (Guerrero et al., 2015; Patel et al., 2017; Zayas & McGuigan, 2006). Pipeline mentoring programs have also proven effective for supporting matriculation into higher education healthcare programs (Stephenson-Hunter et al., 2021). Another study found that faculty had a critical role in fostering student's learning, and when diversity and inclusion were taught, it fostered students' sense of social agency and advocacy for inclusion (Ryder et al., 2016). Finally, another effort to support inclusion within higher education is to mandate educational programs to report their recruitment and retention efforts. For example, the Commission on Accreditation in Physical Therapy Education and the Council on Academic Accreditation in Audiology and Speech-Language Pathology mandates programs to specifically state policies, strategies, and efforts to supporting the recruitment and retention of students from historically marginalized groups in their programs (Brown et al., 2021).

In addition to efforts to promote inclusion within healthcare higher education in general, there have also been specific efforts within OT. Hammel (2013) described the importance of cultural humility (lifelong process of critical self-evaluation and acknowledgement of differences within each person) and argued that, if implemented toward theoretical development, it may help facilitate greater inclusivity with OT education. In 2014, the Coalition of Occupational Therapy Advocates for Diversity (COTAD) was created, whose mission is to promote justice, equity, diversity, inclusion, antiracism, and anti-oppression within the OT profession (COTAD, n.d.). In 2020, AOTA developed a Diversity and Inclusion Task Force aimed at developing goals for diversity and inclusion initiatives and measurable outcomes for the OT governing organizations and the OT profession (AOTA, 2021). There are also OT scholars who have published expert opinions proposing strategies to enhance inclusion in OT. Taff and Blash (2017) proposed that implementing a value-added model (perceive differences among people and groups positively as sources of strength) and mutual accommodation models (differences among people exist, but these differences should be accommodated for regardless of value-added perceptions) within OT education and the profession can offer the most potential for actionable change to enhancing inclusion and diversity in OT. The Justice-Based Occupational Therapy Network issued an article providing recommendations for action to address issues of racism, bias in our criminal justice system, and oppression of Black, Indigenous, and People of Color (BIPOC). Their action steps address professional associations, academia, practice, and community health and criminal justice reform. Their article highlights the significance of funding and supporting mentorship programs for BIPOC, implementing holistic admission policies and processes, increasing content on occupational injustices experienced by BIPOC, preventing school to prison pipeline through intervention and practice (Jaegers et al., 2020). Clifton and Taff (2021) introduced the Facilitating Occupational Performance on Campus: Uplifting Underrepresented Students (FOCUUS) Model, in hopes of assisting program administrators and educators to support and implement strategies to uplift and understand ethnic minority students' experiences.

Potential Factors that Impact Inclusion in Higher Education

Despite the various efforts to support inclusion, individuals from historically marginalized groups experience a myriad of barriers to participating in higher education and healthcare professions. These barriers stem from the prolonged and complex U.S. history comprised of systemic and individualized racism and discrimination of historically marginalized groups. The Centers for Disease Control and Prevention (CDC, 2013) Health Disparities and Inequalities Report highlighted that racial/ethnic, socioeconomic, and geographic disparities continue to persist in the U.S. population. Common themes in the literature suggest that potential factors that impact inclusion in higher education most often involve the individual's perceptions of self and their social and institutional environments (Bajwa et al., 2017; Barfield et al., 2012; Elliott et al., 2013; Jury et al., 2017; Maton et al., 2011; Megivern et al., 2003). Previous studies have indicated that individuals from historically marginalized groups have identified individual aspiration and self-efficacy as influential determinants to participating in higher education (Barfield et al., 2012; Megivern et al., 2003). Individuals who had lower self-perceptions and lower levels of self-efficacy and motivation had a more difficult time participating in and

completing their collegiate career (Barfield et al., 2012; Jury et al., 2017; Megivern et al., 2003). Oftentimes, their low self-perceptions were associated with their social environments. Researchers have found several barriers in social environments that may impact students from accessing higher education. This includes the lack of social supports from family members and peers, lower expectations from family and faculty, more stereotypical representation and greater nonrepresentation in higher education, poor or limited access to mentorship to navigate educational pathways, and poor experiences with healthcare professionals (Bajwa et al., 2017; Elliott et al., 2013; Maton et al., 2011). These barriers impact the pursuits of higher educational degrees and careers in healthcare, limiting inclusion in higher education.

In addition to social barriers, individuals from historically marginalized groups experience barriers in political, educational, and economic institutional environments that impact inclusion in higher education. Lavalley and Johnson (2022) outlined and depicted the connection among occupation, injustice, and anti-Black racism throughout U.S. history. They discussed the various barriers experienced by Black Americans including, but not limited to, Black communities displaced for White real estate needs; Black students disproportionately disciplined compared to White students who commit similar infractions, contributing to prison pipelines; and limited access to equitable healthcare services leading to more healthcare problems experienced in Black communities. They propose these barriers limit occupational engagement in attaining higher education and job acquisition for Black Americans (Lavalley & Johnson, 2022). Another study conducted by Sahay and colleagues (2016) found that undocumented Latino and Deferred Action Childhood Arrivals (DACA) recipient students perceived higher education as unobtainable given the partial and temporary nature of the policy. Individuals have expressed that the lack of support from political administration has limited their participation in higher education (Bajwa et al., 2017; Sahay et al., 2016). These findings would suggest that the limited support from national and institutional policies negatively impact individuals from historically marginalized groups in accessing and participating in higher healthcare education.

Individuals from historically marginalized groups also experience barriers in the academic environments, both during the admissions process and throughout their academic program. Students from historically marginalized groups report experiencing limited opportunities to access healthcare professional support, inadequate preparation for high collegiate demands and examinations, and poor academic and financial resources throughout their high school and collegiate careers, which limited their interest and desire to pursue a career in healthcare (Oplatka & Lapidot, 2012; Sahay et al., 2016; Zayas & McGuigan, 2006). Specifically in OT education, Collins and Carr (2018) proposed that the lack of knowledge of OT contributes to the lack of diversity and representation in OT programs. In a sample of 143 undergraduate collegiate and high school students from historically marginalized groups, they found that 49% of students had no idea what OT was. Students who were exposed to OT had no interest in pursuing a career in OT (Collins & Carr, 2018). Students also experienced several barriers throughout their academic program. Several studies indicated limited faculty and staff support, financial concerns, and decreased level of comfort sharing student life

and cultural perspectives with classmates were barriers to their educational experiences (Colaiani et al., 2022; Elliott et al., 2013; Kitchens et al., 2022). Researchers also found that faculty participants acknowledged having little training, comfort, or experience in having the power to lead diversity and inclusion efforts effectively (Elliott et al., 2013). Other findings outline different levels of discrimination based on their cultural identities and limited representation as isolating as barriers in their academic experience (Kitchens et al., 2022; Salvant et al., 2021). These findings would imply that limited supports within the academic environments function as a barrier to inclusion and diversity in higher education for individuals from historically marginalized groups.

Despite the increase in enrollment of students from historically marginalized groups in higher education in general, there are still racial and ethnic gaps in degree attainment and underrepresentation of individuals from different cultural backgrounds within higher education and the workforce (U.S. Department of Education, 2016). This does not ensure inclusion or reflect OT's core values of occupational justice or Vision 2025. Therefore, it is imperative to understand the experiences of students from historically marginalized groups within OT education and explore OT faculty/staff perspectives on what could be done to help work towards cultural inclusion within OT education.

Most studies have explored the barriers to cultural inclusion and diversity in healthcare education but are often limited to ethnicity and race and do not consider other historically marginalized groups such as LGBTQ+ individuals, non-Christian religious groups, or individuals from lower SES groups. There is also limited research in understanding why there continues to be a lack of diversity and inclusion and/or what are the supports and barriers to inclusion within OT education and practice from the perspectives of OT faculty/staff and experiences of OT students from historically marginalized groups. This study hopes to provide a foundation to identify those barriers and to further justify the need of cultural inclusion within the OT education and profession. Therefore, the purpose of this study was to further explore the experiences of OT students from historically marginalized groups throughout the admissions process and their OT programs and understand the perspectives of OT faculty/staff on the lack of inclusion in OT programs. The study answered the following research questions: How do OT students from historically marginalized groups experience the admissions process to OT programs? How do OT students from historically marginalized groups experience their OT programs? What are the perspectives of OT faculty/staff on the lack of inclusion in OT programs?

Methodology

Research Design

A convergent mixed methods design was utilized to provide a deeper understanding on the experiences of students from historically marginalized groups and OT faculty/staff perspectives on supports and barriers to cultural inclusion in OT education. Both quantitative and qualitative data were collected independently, and the results were analyzed together for overall interpretation (Schoonenboom & Johnson, 2017). The Institutional Review Board (IRB) at the authors' university approved this study and

granted a waiver of informed consent. Consent for surveys was assumed based on completion. Interview participants provided verbal consent prior to the interview and identified pseudonyms to maintain confidentiality.

Participants

The authors recruited participants through purposeful, convenience, and snowball sampling. They obtained emails of the program directors of all the U.S. entry-level master's and doctoral OT programs via publicly available websites and sent recruitment emails, asking them to forward the message to their faculty/staff and current OT students. The message contained an electronic flyer and instructions on how to participate. The authors also posted electronic flyers on local and national professional discussion forums and various social media platforms (e.g., Facebook pages and CommunOT). The student inclusion criteria required participants to have the ability to speak and understand English, currently attend an OT program in the U.S. and/or its territories, and self-identify as a member of one or more historically marginalized groups regarding their personal demographics or identity, including, but not limited to race, annual income level (both current and income while being raised), religious identity, gender identity, sexual orientation, or disability status. The faculty/staff inclusion criteria required participants to have the ability to speak and understand English, be an OT practitioner, have an appointment in an OT program in the U.S. or its territories, and have experience actively participating in the OT admissions process for their program (e.g., head of admissions, conduct applicant interviews, etc.). Participants who did not meet the inclusion criteria were excluded.

Instruments

The authors collected data using anonymous electronic surveys and semi-structured interviews. The first author utilized literature to inform the development of the survey, which consisted of Likert scale type questions to measure rank and frequency distribution and open- and close-ended questions to gather a deeper understanding of the participants' experiences and perspectives. The authors used themes from the literature to guide the focus of the questions they asked and the options they provided within multiple-choice questions. The survey began with initial eligibility questions, and then split into separate student and faculty/staff portions. The student portion of the survey consisted of four different sections: demographic information; questions about students' experiences during the admissions process; questions about students' current experiences in their OT program; and questions about students' perspectives on how to enhance cultural inclusion within OT education and the profession. The faculty/staff portion of the survey consisted of two sections: questions about faculty/staff perspectives on the inclusion within their respective OT programs and questions about faculty/staff perspectives on how to enhance inclusion within OT in general. The student portion of the survey consisted of 31 items. The faculty/staff portion of the survey consisted of 14 items. Following initial development of the survey, it went through multiple rounds of review and revision based on feedback from the second author and seven colleagues with research experience. Survey data were collected and managed using REDCap (Research Electronic Data Capture) tools hosted at the authors' university. REDCap is a secure, web-based software platform designed to support data

capture for research studies, providing 1) an intuitive interface for validated data capture; 2) audit trails for tracking data manipulation and export procedures; 3) automated export procedures for seamless data downloads to common statistical packages; and 4) procedures for data integration and interoperability with external sources (Harris et al., 2009; Harris et al., 2019).

The first author also utilized themes derived from the literature to develop the semi-structured interview guides. Interviews were intended to gather deeper and broader information on the experiences and perspectives of participants about inclusion and diversity in OT education. The student interview guide consisted of questions regarding their experiences with inclusion during their admissions process, throughout their OT program, and their perspectives on how to enhance inclusion. The faculty/staff interview guides consisted of two sections: questions about their perspectives on the inclusion within their respective OT programs and admissions processes, and questions about their perspectives on how to enhance inclusion within OT in general. Following initial development of the interview guides, they went through multiple rounds of review and revision based on feedback from the second author and two colleagues with research experience.

Procedures

After receiving approval from the IRB of the university, authors collected qualitative and quantitative data from February-March 2020. Upon receiving the study flyer or invitation to participate, participants choosing to complete the survey were able to link directly to the survey to complete. Surveys took approximately 15-30 minutes to complete. Upon completion of the survey, participants had the option to link to a separate survey to enter their contact information to enter a raffle to win a \$25 Amazon gift card in appreciation for their time and participation in the survey. Participants choosing to complete an interview contacted the first author to confirm eligibility, complete a demographic form, and set up an interview time. The first author conducted interviews via phone call, video conference, or face-to-face in a private room. Interviews were audio recorded and lasted approximately 45 minutes. Upon completion, participants had the option to link to a separate survey to enter their contact information to enter a raffle to win a \$25 Amazon gift card in appreciation for their time and participation in an interview.

Data Analysis

The authors used descriptive statistics to analyze quantitative data from the survey. Survey responses were collected and exported into Microsoft Excel to analyze frequencies, percentages, and measures of central tendency to summarize demographic data and responses. Additionally, they used rank and frequency distribution to understand the supports and barriers to enhanced inclusion within their OT program and their experiences during the admissions process.

The authors utilized thematic analysis to analyze qualitative responses from the surveys and interviews. They used a phenomenological approach to the thematic analysis in order to more fully understand the participants' experiences (Braun & Clarke, 2006).

Audio recordings of the interviews were transcribed verbatim. The first author reviewed transcripts and qualitative survey data to identify initial codes and to group patterns, concepts, and ideas. The second author completed a second round of review of the transcripts, confirming existing codes and suggesting some additional ones.

Once the authors completed all quantitative analysis and completed developing the qualitative codes, they met multiple times to discuss the data and how it should be integrated. Through frequent rounds of review and revision, they came to consensus on how to integrate all data and developed the final themes (Braun & Clarke, 2006; Schoonenboom & Johnson, 2017). Analysis of the quantitative and qualitative data from both the surveys and interviews resulted in triangulation of the data. Triangulation can help strengthen the conclusions drawn from data through cross verification from multiple data sources (Bryman, 2006). To further enhance the rigor of the data analysis process, the first author also completed member checking (Morse, 2015). Once data analysis was completed and the developed themes were finalized by both authors, the first author presented the themes to all 31 interview participants and asked them to review the themes to ensure they were an accurate reflection of what they discussed during the interview. The participants who responded to the member checking request responded positively and did not have suggested edits.

Results

Participant Demographics

Two hundred eleven individuals opened or started the survey, but several respondents did not meet the inclusion criteria or they did not answer any of the survey questions after the eligibility questions. Incomplete responses were utilized as long as the respondents answered at least one question beyond the demographic questions. Ultimately, survey data were gathered from 131 student participants and 35 faculty/staff participants. Thirty-one individuals participated in an interview, including 20 students and 11 faculty/staff. Because participants could choose to participate in either the survey or interview, or both, and due to the anonymity of the survey, authors do not know how many of the survey participants also participated in an interview. Table 1 summarizes the demographic information for the student participants, while Table 2 summarizes the demographics of the faculty/staff participants.

Table 1*Demographic Characteristics of Student Participants*

Characteristic	Survey Participants (N=131) % (n)	Interview Participants (N=20) % (n)
Disability		
Yes	17.5 (23)	15.0 (3)
No	79.4 (104)	85.0 (17)
No response	3.1 (4)	0 (0)
Primary Language		
Arabic	1.5 (2)	n/a
English	85.5 (112)	n/a
English and Spanish	1.5 (2)	n/a
Mandarin	1.5 (2)	n/a
Portuguese	0.8 (1)	n/a
Spanish	3.1 (4)	n/a
No response	3.8 (5)	n/a
Religious Affiliation		
Agnostic	6.9 (9)	10.0 (2)
Agnostic & Taoism	1.5 (2)	0
Atheist	5.3 (7)	5.0 (1)
Baha'i	0.8 (1)	0
Buddhism	1.5 (2)	0
Catholicism/Roman Catholicism	19.1 (25)	20.0 (4)
Christianity	38.2 (50)	25.0 (5)
Falun Dafa	0.8 (1)	0
Hinduism	0.8 (1)	0
Islam	3.8 (5)	10.0 (2)
Judaism	6.9 (9)	5.0 (1)
Quaker	0.8 (1)	0
Seventh-Day Adventist	1.5 (2)	0
Spiritual	3.1 (4)	0
None	6.9 (9)	0
No response	2.3 (3)	25.0 (5)
Racial or Ethnic Groups		
Asian/Pacific Islander	23.7 (31)	40.0 (8)
Black/African American	13.0 (17)	10.0 (2)
Hispanic/Latino/a/x	19.1 (25)	15.0 (3)
Middle Eastern/North African	3.1 (4)	20.0 (4)
Multiracial or Biracial	3.1 (4)	0
Native American/American Indian	0.8 (1)	0
White/Caucasian	46.6 (61)	10.0 (2)
Other	2.3 (3)	5.0 (1)
No response	0.8 (1)	0

Sexual Orientation		
Asexual	1.5 (2)	0
Bisexual	11.5 (15)	0
Gay	5.3 (7)	0
Heterosexual	67.2 (88)	85.0 (17)
Lesbian	4.6 (6)	0
Queer	9.2 (12)	5.0 (1)
Questioning	2.3 (3)	0
Pan- or omnisexual	5.4 (7)	10.0 (2)
No response	0.8 (1)	0
Gender Identity		
Cisgender	0	10.0 (2)
Female	84.7 (111)	65.0 (13)
Male	9.9 (13)	20.0 (4)
Non-binary/gender nonconforming	2.3 (3)	0
Transgender	2.3 (3)	0
No response	1.5 (2)	5.0 (1)
Other historically marginalized groups		
Non-U.S. Citizen	3.8 (5)	0
First generation undergraduate student	25.2 (33)	0
First generation graduate student	57.3 (75)	65.0 (13)
Other	3.1 (4)	0
	Average (range)	Average (range)
	25.4 years	n/a
	(18-63)	
Household Income	\$65,366	n/a
	(\$0-700,000)	

Note. Some percentages within certain characteristics may not add up to 100% because participants could choose more than one response for some characteristics.

Table 2*Demographic Characteristics of Faculty/Staff Participants*

Characteristic	Survey Participants (N=35)	Interview Participants (N=11)
	Percentage (n)	Percentage (n)
OT Program Type		
Masters	37.1 (13)	9.1 (1)
Doctorate	51.4 (18)	90.9 (10)
Program offers both Doctorate and Masters	11.4 (4)	0
Role in admissions process		
Director/chair of admissions	28.6 (10)	18.2 (2)
Conduct applicant interviews	31.4 (11)	45.5 (5)
Admissions committee	31.4 (11)	36.4 (4)
Other	8.6 (3)	0

Themes

A total of five themes emerged through analysis of the qualitative and quantitative data from both the surveys and interviews. These themes, two of which have two subthemes, relate to experiences of diversity and inclusion within the various phases of OT education, including career exploration, admissions, and enrollment as an OT student. Barriers and supports to inclusion that emerged within these themes are presented in Table 3.

Table 3*Barriers and Supports to Inclusion in Various Phases of OT Education*

Phase of OT Education	Barriers	Supports
OT Career Exploration	Lack of awareness of OT as a profession Decreased representation of OT practitioners from historically marginalized groups	Opportunities to observe or be exposed to OT Desire to pursue a career to help others from historically marginalized groups
OT Admissions	Financial costs of applying Inconsistencies in prerequisite courses and numerous requirements Lack of guidance throughout the application process Difficulty navigating OTCAS	Social support from family, peers, counselors Mentorship Pre-OT preparation programs Values-based admissions

OT Program	<p>Difficulty relating to peers or feeling belonging</p> <p>Underrepresentation of faculty and peers from historically marginalized groups</p> <p>Experiences of microaggressions, insensitive behaviors, and overt discrimination</p> <p>Lack of representation in lectures, case studies, and test questions</p> <p>Difficulty addressing diversity and inclusion conflicts</p> <p>Some OT program inclusion efforts are ineffective or poorly implemented</p>	<p>Committees designed to promote diversity and inclusion</p> <p>Increased educational opportunities to learn more about topics related to diversity and inclusion</p> <p>Opportunities for students to interact with OT practitioners from historically marginalized groups</p> <p>Supportive faculty, staff, and peers</p> <p>Methods for identifying and addressing diversity and inclusion conflicts</p> <p>Scholarships or funding for academics and extracurricular activities</p>
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Theme 1: Barriers and Facilitators Exist While Exploring OT as a Potential Career

Subtheme 1.1: The Lack of OT Awareness Among Historically Marginalized Groups Limits Exploration of OT as a Potential Career. The lack of knowledge of OT among historically marginalized groups was identified as a barrier to inclusion in the career exploration process. Students from different cultural backgrounds or immigrant families described how OT was not an established profession and/or there was a lack of language to describe OT as a profession in their countries of origin. One student described, “My parents had no idea OT existed. The idea of OT is life coaching, counseling... Those [OT concepts] aren't things that people within my ethnic group typically think of, much less as a career.” Given this limited awareness of OT, students were often initially encouraged by family members and advisers to explore other, more well-known careers such as nursing or law. One student explained, “I come from a huge family of nurses and so I had plenty of exposure to nursing throughout my entire childhood. I had zero interest in nursing and I felt there was a lot of pressure for me to be in healthcare.” Sixty-three percent of faculty/staff also identified the lack of knowledge of OT as a barrier to inclusion in OT education. The limited awareness of OT among historically marginalized groups limited opportunities for students to envision OT as a potential career.

Subtheme 1.2: The Lack of Representation of Historically Marginalized Groups in the OT Profession May Deter Students from Pursuing OT as a Career. Another barrier included the underrepresentation of historically marginalized groups in the OT profession. Some students described that they initially questioned if OT was a good career fit for them since they did not observe or meet any OT practitioners who represented similar identities as their own. One student explained, “Representation MATTERS and current practitioners of OT do not represent the diversity of the nation.

Seeing a person of color or of a different ethnicity is powerful and is instrumental to getting young future applicants that represent the aforementioned [groups] to apply.” Another student added, “if you’re looking at a field and you don’t see yourself represented, it’s easy not to be interested in pursuing that field.” The limited representation of historically marginalized groups may dissuade students from initially pursuing OT, therefore limiting their inclusion in OT education.

Subtheme 1.3. Some Supports Exist to Facilitate OT Career Exploration.

Most student participants identified that having experience with OT services or observing an OT (specifically OTs who also identified as a member of a historically marginalized group) functioned as a support to their OT career exploration. Seventy-eight percent of student respondents reported that personal experience working with an OT was an impactful factor for choosing OT as a career. Through observation, students were attracted to how OT was a holistic profession that aligned with their values and beliefs regarding healthcare. Participants also recognized the vast opportunities within OT to help individuals from other historically marginalized groups. Ninety-two percent of student respondents ranked their desire to help other historically marginalized groups as another impactful factor for choosing OT. Observing the valuable attributes of OT helped encourage participants to pursue OT as a potential career.

Theme 2: There are Pros and Cons to the OT Admissions Process for Students from Historically Marginalized Groups

Subtheme 2.1: The OT Admissions Process is Burdensome and Expensive.

Student and faculty/staff participants identified that the process of applying to OT programs is difficult to navigate, hard to accomplish, and time-consuming. Sixty-three percent of the student survey respondents reported having limited knowledge or guidance on how to apply to OT school. Many students described the OT application process as unorganized with variable OT program admission requirements and inconsistencies with prerequisite requirements. Some students reported that it was difficult to find admissions information online. One student interview participant shared, “the requirements can be so daunting to students that don’t have experience in [applying to graduate programs] and don’t have the resources to get help with the process.” Students who self-identified as first-generation graduate and undergraduate students also reported that navigating the Occupational Therapist Centralized Application Service (OTCAS) was especially difficult.

Many student and faculty/staff participants also reported that application requirements are sometimes difficult to attain. Some students reported difficulties finding shadowing opportunities, a common admissions requirement, or finding mentors to support them through the application process. Other barriers during the application process that students reported included a lack of or limited social support (24.4%), limited academic resources (22.1%), and inadequate preparation for high collegiate demands and examinations (22.1%). Many faculty/staff described that students from historically marginalized groups have demonstrated difficulty meeting the minimum admission

criteria such as minimum grade point average (GPA), Graduate Record Examination (GRE) scores, obtaining leadership roles, and engaging in extracurricular activities. From their perspectives, this may prevent students from historically marginalized groups from being admitted, or even from being able to apply.

In addition to investigating and completing all application requirements, the process of applying to OT programs also takes a lot of time, especially when applying to more than one program. Students reported applying to anywhere from one to 41 programs (mean = 4.5; median = 3; mode = 1). Seventy-three percent of the respondents were offered at least one interview, with the majority of students attending one interview (52%) or two interviews (27%). Interviews were offered in various formats, including face-to-face (75%), videoconference (18%), and telephone (7%). Some students described the time to complete the application process as a barrier for them, given their other educational, work, and family obligations. In addition to the time it took students to complete applications, they also spent much time discerning their options when choosing which program to attend once they were accepted into a program. Student survey respondents reported several factors that ultimately played a role in selecting the program they currently attend (respondents could select more than one response, therefore the percentages do not add to 100%): geography (71.0%), program ranking (54.2%), tuition (35.9%), being the only program to accept them (31.3%); program best matched their learning style (29.0%), faculty (28.2%), and scholarship opportunities (19.1%).

Even after successfully navigating the application process, many participants reported the application process to be extremely costly. According to student and faculty/staff participants, costs associated with preparing for and taking the GRE, seeking assistance with writing a personal statement and resume, submitting applications, and sending in transcripts were barriers within the application process. Fifty-two percent of student survey respondents and 60.0% of faculty/staff survey respondents reported a lack of financial resources to be a barrier during the application process. Some students responded that they chose not to attend an interview session due to the cost of traveling to it. Other students reported that they had to decline offers from programs due to the financial burden of attending the program. One student explained, “I was offered minimal academic scholarships which ultimately resulted in me turning down an offer from the #1 program in the U.S. because I couldn't afford tuition or the cost of living in that city.”

Subtheme 2.2: Supports Exist to Help Historically Marginalized Students Overcome Challenges with OT Admissions. Despite the many barriers related to the complexities and cost of the OT admissions process, participants also reported several supports to overcome these challenges, including increased social support and participation in OT preparatory programs. Many students described receiving social support and mentorship during the admissions process from their family, friends, peers with similar experiences, undergraduate counselors, and OT practitioners who they shadowed. Seventy-four percent of the student survey respondents reported that family and peer support helped them address the challenges they faced while applying to OT

programs. Several student interview participants also claimed that participating in OT preparation programs provided them further instruction and guidance in successfully completing the OT admissions process. For example, one student described, “We had GRE prep... resume workshops, personal statement workshops [and] observation hours at the hospital. It really focused on everything the application needed so I felt like I was ready for the application process through this program.”

Another support was the use of a value-based or holistic admissions process. Many students reported specifically applying to OT programs that did not require the GRE and appreciated OT programs that seemed to consider personal experiences in addition to academic performance. Faculty/staff reported that taking on a more holistic approach to admissions may have yielded a small increase in representation of students from historically marginalized groups. Twenty percent of faculty/staff survey respondents reported that implementing holistic admissions resulted in increased enrollment of historically marginalized students in their programs.

Theme 3: Students from Historically Marginalized Groups Experience Varying Degrees of Exclusion and a Limited Sense of Belonging Within Their OT Programs

Students from historically marginalized groups reported various experiences related to a lack of inclusion in their programs. Many students described program cultures or attitudes of peers or faculty that made them uncomfortable with disclosing some aspect of their identity. Almost half (47.5%) of student survey respondents have avoided disclosing a part of their identity in their program due to fear of negative consequences or feeling less included. For example, one student shared “I also sometimes feel hesitant to tell professors about my significant other because we are in a non-heterosexual relationship and am worried they would discriminate against me because of my sexual orientation.” Another student described how it is “difficult to talk to faculty about needs related to my health condition because of fear of judgment.”

In addition to not disclosing a part of their identity, 70% of the student survey respondents reported experiencing at least one instance of feeling less included because of their identity. In general, 53.7% of student survey respondents reported feeling included in their OT programs almost always or always (75% or 100% of the time), but 35.8% reported feeling included only sometimes (50% of the time) and 10.6% reported feeling included almost never or never (25% or 0% of the time). Most student participants reported experiencing microaggressions (statement, action, or incident regarded as an instance of indirect, unintentional discrimination), implicit biases (the automatic categorization of people based on cultural stereotypes), overt exclusion (explicitly leaving someone out), and a limited sense of belonging within their OT programs. These experiences involved interactions with other students, faculty, and university administrators.

Common examples of microaggressions and biases experienced by the student participants were peers or faculty making ignorant or generalized comments or making assumptions about the experiences of students from historically marginalized groups.

Forty-five percent of students reported they felt they were expected to speak on behalf of all members of the historically marginalized group they belong to. One student stated, “There was a student who made the comment that the reason myself and other students who identify as ‘minorities’ were called first with our acceptance was because our program had to meet its ‘diversity quotient.’” Another student shared, “Also, a student expressed that we are ‘dumb’ and generalized that Black people are lazy.” In addition to experiencing these types of comments, students often reported that faculty and peers were unaware of these microaggressions, or unaware of their own privileges: “Much of my schooling here I did not experience any LGBTQIA+ case studies or inclusiveness, and some outward exclusivity has been present commonly due to heteronormativity and unawareness of faculty and students about hurtful comments.” Other examples of students experiencing biases or exclusion include not feeling valued or being excluded from group situations. Several students reported times when they felt their perspectives or ideas were not valued by their peers or faculty. One student described,

I am one of only two Hispanic females in my cohort with low socioeconomic status. All the other 46 students in my cohort are White and primarily come from high socioeconomic status. The professors and faculty favor students of high socioeconomic status because they can relate to their lifestyles. They do not take time to talk with me in the same personable manner.

Another student, who identified as an immigrant, shared, “My peers are not receptive of my experience. I feel like I always have to start from scratch every time. My experience in my country is not valued whatsoever.” In addition to feeling less valued, students also reported feeling excluded from group situations; over 40% of participants reported feeling isolated or left out when working in required groups. A student participant explained: “I am one of the three Black students in our cohort and the only openly African immigrant. The students don’t know how to relate to us; they always look uncomfortable when we are forced to work in groups. So, we tend to work among ourselves.” In addition to curricular group exclusion, students also reported feeling exclusion from social groups. One student explained, “...my program has a ‘Christmas Party’ every year with activities that are Christmas themed. I am an Orthodox Jew and feel uncomfortable participating in activities geared around this subject.” Another student described:

Yes, I sometimes feel less included because of my sexual orientation. I have some classmates that are straight who will do a lot of double dates with each other and their significant others and hang out... and I feel that my girlfriend and I are not included in that because we are not straight.

Some students reported they did not experience overt exclusion from their peers or faculty, but rather they experienced difficulty relating to them based on underrepresentation and differences in experiences, values, and cultures. When participants were asked how diverse they felt their program was, 4.7% of students reported their program to be ‘very diverse’ 22% ‘somewhat diverse’, 49.6% ‘very little diverse’, and 23.6% ‘not at all diverse’. Eleven percent of faculty reported their program to be ‘very diverse’, 40% ‘somewhat diverse’, 40% ‘very little diverse’, and 8.6% ‘not at

all diverse'. This lack of representation within OT programs results in students lacking a sense of belonging. For example, one student reported "I have felt less included socially because I am the only Asian American of my age range in my cohort. I feel like I don't really belong anywhere within my cohort, and it is partially because of this." Many students from lower socioeconomic status shared difficulties connecting with their peers due to missing out on social gatherings because of work commitments or inability to afford the gatherings.

People from backgrounds with more social and financial resources and physical abilities have more opportunities to engage in additional educational activities, which is celebrated and held as an ideal. I feel like I have less of a chance for scholarships, grants, and additional professional development.

Other students described experiencing difficulties "fitting in" due to differences in lifestyle choices or values. One student described:

...there was a toast for accepted students, and I had to request a non-alcoholic beverage while everyone else had champagne. It seems as though every social event related to the program is surrounded around alcohol and it is often mentioned casually during classes. I feel somewhat singled out since I'm probably the only one who doesn't drink. It further excludes me from the social environment because I never feel comfortable participating in events outside of class.

Theme 4: Many OT Programs Have Good Intentions to Promote Diversity and Inclusion Through Various Efforts

Despite student reports of exclusion, a majority of faculty/staff and student participants identified various ways in which their OT programs are making efforts to support diversity and inclusion. With a few exceptions, a majority of survey respondents agreed or strongly agreed to various survey statements indicating support for inclusion and diversity from administrators, faculty, and within the curriculum (see Table 4). However, it is important to note that anywhere from 10 to 25% of student survey respondents disagreed with these statements.

Table 4*Student and Faculty Agreement or Disagreement with Survey Statements about Inclusion Within Their OT Programs*

Survey Statement	Student Responses (N=126)		Faculty/Staff Responses (N=31)	
	Strongly Agree or Agree % (n)	Strongly Disagree or Disagree % (n)	Strongly Agree or Agree % (n)	Strongly Disagree or Disagree % (n)
My OT program has visible leadership from the president and other administrators to foster accessibility, inclusion, and diversity	54.8% (69)	23.0% (29)	74.1% (23)	12.9% (4)
My OT program administration, including program directors and dean, addresses conflicts regarding diversity and inclusion in an appropriate manner	38.9% (49)	23.8% (30)	74.1% (23)	3.2% (1)
My OT program administration, including program directors and dean, encourages students and faculty to engage in safe discussion about issues of diversity and inclusion	54.0% (68)	24.6% (31)	80.6% (25)	3.2% (1)
My OT program faculty promotes an inclusive and safe physical environment for all students to learn	69.8% (88)	11.9% (15)	90.3% (28)	0.0% (0)
My OT program faculty promotes an inclusive and safe social environment for all students to learn	54.8% (69)	15.1% (19)	77.4% (24)	6.5% (2)
My OT program faculty addresses conflicts regarding diversity and inclusion in an appropriate manner	38.1% (48)	10.3% (13)	67.7% (21)	12.9% (4)
People from different backgrounds are readily accepted and welcome at my OT program	50.0% (63)	22.2% (28)	83.9% (26)	0.0% (0)
My OT program curriculum incorporates educational content on client diversity	58.7% (74)	19.0% (24)	83.9% (26)	0.0% (0)
My OT program curriculum includes content that promotes inclusiveness of clients' cultures, customs, and values/beliefs.	62.7% (79)	18.3% (23)	90.3% (28)	0.0% (0)

The most common inclusion efforts that participants often reported their programs have already implemented include incorporating diversity and inclusion topics into their curricula, having supportive faculty or staff, facilitating discussions on difficult topics, and creating specific groups or programs to address diversity and inclusion. Common curricular efforts include lectures, guest speakers, case examples, group assignments, and self-assessments on topics related to clients from diverse backgrounds, culture and cultural humility, intersectionality, and stigma and biases. One student highlighted the importance of incorporating these topics into the curriculum:

During our last interprofessional event among the healthcare programs the topic was about LGBTQ concerns in the healthcare world. Asking questions and hearing about the lived experiences of individuals from the LGBTQ community and their interactions with healthcare workers in different settings. I was happy about this, identifying as a fluid or pan-sexual individual...

Many students acknowledged supportive individuals as an example of their programs being inclusive; one student reported that “faculty and staff are welcoming and approachable”. Students expressed being appreciative of faculty or staff who are non-judgmental, invite participation from diverse students, are open to sharing their own experiences, seek feedback from students, and openly address issues such as implicit bias. Students also mentioned feeling included by faculty who encouraged inclusive learning environments by using gender neutral language, using microphones during class sessions, and supporting the creation of gender-neutral restrooms. Additionally, faculty/staff participants who self-identified as belonging to historically marginalized groups reported being more understanding and having more empathy for students from historically marginalized groups. They reported that they were more likely to advocate for and implement programs that foster inclusion, develop committees, or be open to universal design for learning. Students also reported that it was beneficial to have a small group of peers and a few faculty members from other historically marginalized groups as social supports. One student participant explained, “I feel included with only a limited number of peers and faculty. If it weren't for these individuals, then I would almost never feel included.”

Many faculty/staff and student participants reported their programs or specific faculty facilitated open discussions about microaggressions, privileges, and implicit biases experienced inside and outside of the classroom. They reported that recognition of privilege and a common understanding of the impact of microaggressions helps to generate greater reflection and promote acts of inclusion. Programs have also established various programs, committees, and events to promote inclusion. Several faculty/staff and student participants indicated that their programs have created COTAD Chapters. A few faculty/staff and students also discussed their programs creating committees to address inclusion. One faculty participant described the creation of an inclusivity committee as a way to be proactive with promoting inclusion: “rather than reacting and waiting for someone to have a problem and waiting for someone to feel like they're not included, we're trying to head that off by making everything more inclusive in the first place.” Other students or faculty/staff reported their programs hosting various educational or celebratory events to promote awareness, such as “Diversity Week”,

recognizing holidays and traditions from various cultures, and inviting members within their programs to share more about their cultures or experiences. Finally, some students acknowledged their program's financial support of students by offering scholarships to students to support their academics or participation in extracurricular events such as professional conferences.

Theme 5: Some OT Program Efforts May Be Counterproductive, and More Actions Must Be Taken to Further Promote Inclusion and Address Barriers to Inclusion

Although programs are taking steps to promote diversity and inclusion, student participants reported that some classroom activities and efforts can sometimes be misinterpreted or poorly delivered, which can discourage students from historically marginalized groups from fully participating. For example, one student described their experience while participating in a 'privilege walk' classroom activity. A privilege walk is an activity in which a facilitator reads a list of statements and participants are asked to take a step forward or backward in response to those statements. The intent of the activity is to demonstrate the societal privileges experienced by some individuals over others. Participants who take more steps forward indicate more experienced societal privileges. The student described,

What bothered me was that I was sort of exposing myself... I felt very embarrassed, and I just started lying for the last couple of them so then I could at least be halfway and not be all the way in the back... that was one of the first experiences I had that really discouraged me to not say anything anymore and what started me staying more towards myself.

In other instances, students reported they questioned their programs' intention when asked to partake in opportunities or activities. They questioned if they were asked to do something based on their merit, skill, and experience or because they want to market the program as being inclusive and diverse. As one participant described,

Being asked to do something as a minority, I'm more than happy to take on opportunities and experiences... I'm happy because it means that there will be another face to something that's not a White female face. But at the same time, it's an internal battle... I would like [to be asked to do something as a minority] to be just based off of expertise or skills that I can bring to the table, and not just because the program wants to look good and put a non-White face out there.

Despite existing efforts, there is more that OT programs can do to address inclusion and diversity issues more effectively, especially from the perspectives of students. When survey participants were asked to rate how inclusive was their OT program, 30.7% of students reported their program was very little inclusive, whereas only 2.9% of faculty/staff reported their program was very little inclusive. Faculty/staff survey respondents identified several supports that can be implemented to support inclusion including: increase scholarship programs (93%, n=27), enhance awareness of OT through active recruitment such as fairs for students from historically marginalized groups (83%, n=24), increase multicultural inclusion training to faculty (66%, n=19),

increase opportunities for inclusion and diversity education into OT curriculum (55%, n=16), implement alternate admissions processes and a weighted system (51%, n=15) and decrease tuition to allow equal opportunities to participate in higher education (51%, n=15).

Students also provided suggestions about how their programs could better address issues. Participants reported there should be more educational standards to implement diversity and inclusion topics in OT curricula and diversity and inclusion training for students and faculty. One student suggested,

More faculty training about creating an inclusive learning environment as well as resources for faculty within all institutions. Perhaps training for faculty and students regarding emotional intelligence. We cannot overlook how each individual student's views and opinions contribute to an overall cohort and the learning environment.

One student participant suggested that all students and faculty, including those from historically marginalized groups and those who are not, could contribute to developing a centralized resource center to learn more about different topics on diversity, inclusion, and different cultures. Another suggestion was to increase opportunities for students to interact with faculty, guest lecturers, and fieldwork educators who also identify as belonging to historically marginalized groups. For example, one student reported:

I really appreciated my fieldwork sites. They ended up putting me with a therapist who is also part of [an historically marginalized] group and that helped me sort of gauge that there are health professionals who understand my culture... and that I can see myself being in this career.

Opportunities for students to observe and collaborate with people from the same historically marginalized groups fostered more positive experiences and feelings of inclusion. Another suggestion was to increase opportunities for open discussions on diversity and inclusion topics. Students proposed that inclusion and diversity topics should not just be discussed in one class, or one class session, but rather continuously integrated into the OT curriculum. One student explained:

Do not just educate on the extremes. Be conscious of the power dynamics...there is subtle superiority that they don't realize they carry and an ignorance they have no idea comes from their privilege. Educate on discrimination, White privilege, and blatant ignorance that shows up in subtle ways between peers. Tackle issues and conflicts that arise with severity.

Students also expressed the importance of OT's political involvement to addressing the limited representation of historically marginalized groups in overall OT education. As one participant explained:

I like to see our profession get a little bit political and address... the systemic issues like access to education at a younger age, because if people aren't able to graduate high school, they're definitely not going to go to college and they're definitely not applying to a higher level [of] education.

Students suggested by advocating for policy change and addressing institutional and systemic barriers, it may bring awareness and develop solutions to the social inequalities experienced by historically marginalized groups, specifically in higher education.

In addition to doing more to proactively promote inclusion, OT programs need to do more to effectively address issues when they arise. While 66% of faculty/staff participants agreed that their programs address conflicts regarding diversity and inclusion in an appropriate manner, only 5% of students identified reporting conflicts to the university and 18% of students reported speaking to a faculty member about concerns. Students reported difficulty addressing issues with their faculty when they felt less included, had a conflict or disagreement with faculty or classmates, or when wanting to address culturally insensitive classroom content. Students reported they typically did not report conflicts because they did not want to make a fuss (34%), felt like it was not a big deal (26%), thought that nothing could be done (24%), were concerned that it might make things worse (21%), or did not know who to approach (17%). One student shared, "I didn't speak to anyone about it because I didn't know how to advocate for myself yet or I never really thought that faculty cared". Other students described the difficulty in bringing up conflicts to faculty due to the student/faculty power dynamic. Students described they feared that if conflicts were brought up to faculty, they would face negative consequences by being treated differently or experience a negative impact on their grades or academic standing.

When students did report addressing the conflict, they described that faculty or administration demonstrated unawareness, disbelief, or did not effectively address the conflict. As one student explained:

A group of my classmates and I went to professors and administrators to voice our concerns because we all experienced racism multiple times from certain students. It was not handled well enough. We learned not to bother bringing up such conflicts to our professors and administrators if that's how it would be taken care of.

Although OT programs strive to address these issues accordingly, oftentimes the conflicts were not brought up again, or there was a lack of follow through to make effective changes or solutions. Students also suggested allowing for more opportunities to provide faculty with anonymous feedback to self-advocate or address conflicts. For example, participants recommended sending out weekly anonymous feedback surveys, or creating a suggestion box in the classroom. This would eliminate the student-faculty power dynamics and may encourage students to self-advocate when they may disagree with classroom content or experience inclusion conflicts.

According to faculty/staff participants, there is also limited support from university administration. One faculty participant reported:

Our university doesn't really recognize all the social factors that create those different opportunities for people in the first place. And when we try to institute new policies or measures within the program, we are met with resistance.

The lack of changes in the practices of administration has posed a great barrier to establishing or implementing inclusive strategies and policies in admissions and within the programs. The unwillingness to change processes or be open-minded to ensuring equity is very limited and often demonstrated by administration, and sometimes by program directors, admissions directors, and faculty. More actions need to be taken to ensure inclusion for all students.

Discussion

The current study explored the experiences of students from historically marginalized groups throughout their OT educational experiences and sought to understand the perspectives of OT faculty and staff on inclusion within OT education. The intent was to identify the supports and barriers to inclusion within OT education. The study's cumulative findings are consistent with and build upon previous research related to career exploration and admissions processes, promoting inclusion with current students, and within the profession as a whole.

OT Career Exploration

Results from this study indicate that lack of awareness of OT as a profession and the lack of representation of OT practitioners from historically marginalized groups act as barriers to exploring OT as a potential career. Although the lack of awareness of OT functions as a barrier to all individuals, it is amplified among historically marginalized groups. As indicated within Theme 1, student participants who self-identified as ethnic minorities explained that the profession of OT was not truly known in their culture. Oftentimes, their families and peers would encourage them to pursue other well-known careers. Students who identified as racial or ethnic minorities also described the uncertainties of pursuing OT as a career due to not seeing many other OT practitioners who look like them. These barriers have been identified in previous studies and suggest that the limited knowledge of OT or limited representation may deter students from historically marginalized groups from applying to OT school (Banks, 2022; Colaianni et al., 2022; Collins & Carr, 2018; Kitchens et al., 2022). This study also identified that opportunities to observe OT practitioners greatly influenced the student participants to ultimately choose to pursue OT as a career. Therefore, it is imperative to continue to work on enhancing the awareness and knowledge of the OT profession and creating more opportunities for observing OT practitioners in action. This can be done through various outreach, pipeline, and mentoring programs beginning during primary school education (Stephenson-Hunter et al., 2021; Zayas & McGuigan, 2006). Increased exposure of OT services to younger generations may help foster interest in pursuing OT as a career.

OT Admissions

Results related to Theme 2 indicated that the application process to OT school is difficult to navigate, hard to accomplish, and very time consuming. According to participants, the lack of knowledge or guidance on how to apply to OT schools was deemed as a barrier to the admissions process. Without social support and mentorship to navigate the various components of the complex application process, participants suggested that this may prevent students from historically marginalized groups from

applying to OT school. Students who had social supports (e.g., family, friends, and peers) were more likely to overcome those barriers and had more opportunities to engage in higher education, which is consistent with past research (Bajwa et al., 2017; Elliott et al., 2013; Maton et al., 2011). Faculty/staff participants also reported that students from historically marginalized groups generally did not meet the minimum GPA or GRE requirements, thus limiting their opportunities to be admitted. Existing literature suggests that students from historically marginalized groups have more frequent experiences with inadequate preparation for high collegiate demands and examinations, and poor academic resources throughout their high school and collegiate careers. These experiences may result in lower GPAs, lower academic performance, and decreased academic preparedness. With limited academic preparation and access to sufficient resources, students may struggle to meet admission requirements for higher education programs (Opkatka & Lapidot, 2012; Sahay et al., 2016; Zayas & McGuigan, 2006). Student participants reported that in addition to not meeting the admissions requirements, they also had difficulty finding opportunities to fulfill other OT admissions requirements, such as obtaining leadership positions, logging volunteer/observation hours, and participating in extracurricular activities. These barriers may discourage students from applying to OT programs, therefore limiting their chances of being admitted. However, faculty/staff participants suggested that by implementing a value-based admissions process, they experienced a slight increase in representation from students from historically marginalized groups in OT programs. Past research suggests that by taking on a more holistic approach to admissions, and looking beyond GPA and GRE requirements, there was an increased admittance of students from historically marginalized groups in higher education (Deas et al., 2012; Patel et al., 2017; Simone et al., 2018).

Theme 2 also suggested that the limited financial resources to complete the application process and limited financial support from OT programs prevented students from applying to certain programs, therefore limiting the opportunities for admissions. Other studies have found that financial barriers limited some Black and Hispanic students from matriculating into some OT programs (Banks, 2022; Kitchens et al., 2022). The financial inequalities experienced by historically marginalized groups may hinder students from applying to higher education programs, which then persists throughout the workforce (U.S. Department of Education, 2016). Availability of scholarships and clear information about financial aid may support students who experience financial barriers.

OT Program

According to results within Themes 3, 4, and 5, students from historically marginalized groups experience different barriers in their OT program that decrease their sense of inclusion. Although OT programs have good intentions and efforts to be inclusive, students reported experiencing various degrees of discrimination and exclusion by both faculty and peers, from microaggressions and culturally insensitive behaviors to overt racism. Other students reported that although they do not experience explicit exclusivity from their peers or faculty, they still felt less included due to their inability to relate to their peers' values and experiences. Some students reported feeling left out of social gatherings due to differences in their religious beliefs or their limited participation in OT

conferences or student OT association events because of financial and work obligations. These experiences align with previous accounts of various negative, insensitive, or racialized classroom incidents experienced by undergraduate and graduate students from historically marginalized groups within and outside OT (Colaianni et al., 2022; Curtis-Boles et al., 2020; Elliott et al., 2013; Kitchens et al., 2022; Salvant et al., 2021).

Students also reported having difficulty addressing inclusion conflicts with faculty and administration due to their concerns about making the situation worse or the situation not being fully addressed. When issues were brought up to faculty or administration, some student participants reported that nothing changed. Participants suggested that there should be more opportunities to provide faculty feedback in an anonymous way. Most participants reported that when OT faculty and administration were more open minded to change and feedback from students, it helped foster more feelings of inclusion and belonging. Participants also suggested that when conflicts do arise, there should be more emphasis on the follow through to ensure the conflict is resolved.

These diverse experiences of discrimination, inclusion, and conflict indicate that OT programs need to further develop or alter their inclusion efforts to ensure every person feels more included. Programs could consider implementing a program to better support and retain students from historically marginalized groups, such as one based on the Facilitating Occupational Performance on Campus: Uplifting Underrepresented Students (FOCUUS) Model (Clifton & Taff, 2021). In addition to this type of programming, various recommendations to promote inclusion and antiracism within OT educational programs exist, and could be utilized within OT programs (e.g., Jaegers et al., 2020; Johnson et al., 2022; Salvant et al., 2021; Sterman et al., 2022). In addition to larger programmatic efforts, participants in this study also suggested that diversity and inclusion topics should be incorporated across courses in a curriculum, not be designated to one lecture or course. They highlighted the need for these topics to be integrated in all classroom activities, reflections, case studies, discussions, and exam questions. These suggestions are consistent with the research that indicates that inclusion efforts need to be more intentional (Bolding et al., 2020; Newfield et al., 2019; Trentham et al., 2020).

Implications for Occupational Therapy Education

Based on these findings, the authors propose various strategies to enhance inclusion in OT education. These strategies include efforts at the systemic, program, and individual levels, as indicated in Table 5.

Table 5

Strategies to Enhance Inclusion in OT

Level	Strategies
Systemic	<p>Increase representation of people from historically marginalized groups in professional and academic leadership positions</p> <p>Enhance advocacy for legislation and regulation to address systemic barriers to higher education and access to healthcare professions</p> <p>Increase funding for scholarships and development of pre-OT programs for students from historically marginalized groups</p> <p>Improve marketing efforts to enhance awareness of OT as a profession</p>
OT Program	<p>Increase representation of people from historically marginalized groups among faculty and guest lecturers</p> <p>Implement holistic admissions processes</p> <p>Enhance use of diverse representation in classroom activities, case studies, lectures, and exams</p> <p>Hold regular and more open discussions and educational events on topics related to diversity and inclusion</p> <p>Provide opportunities for students to provide anonymous feedback</p> <p>Increase outreach programs to historically marginalized communities</p> <p>Establish diversity and inclusion programs such as COTAD</p> <p>Create welcoming spaces through the use of practices and objects that demonstrate acceptance and support of diverse backgrounds (e.g., use of gender-neutral pronouns, acknowledge less common religious holidays, display a LGBTQ+ flag)</p>
Individual	<p>Avoid making assumptions and generalizations about people from historically marginalized groups</p> <p>Practice cultural humility in all interactions with others</p> <p>Become an active learner and engage in critical thinking and reflection</p> <p>Embrace and advocate for occupational justice and equity</p>

Limitations and Implications for Future Research

Findings from the study should be interpreted in the contexts of its limitations. The sample size limits external validity. Additionally, the use of convenience sampling may have resulted in self-selection bias and response bias. It may be that students from historically marginalized groups and OT faculty/staff voluntarily completed the survey or participated in the interview due to their interests in diversity and inclusion topics. Another limitation is that this study was conducted in early 2020 before the onset of major sociopolitical events that drew a major focus on diversity and inclusion. This could result in results that do not accurately reflect current experiences and perspectives. Finally, the first author identifies as a member of a historically marginalized group, which could have biased their interpretations of the results. We minimized this by thorough review of results by the second author and coming to a consensus on the final themes.

Overall findings indicate several areas for further investigation. Further analyses could be conducted to identify differences in experiences and perspectives between students from different historically marginalized groups. Another area would be to explore the differences in perspectives between OT and OTA students from historically marginalized groups. Given the differences in program duration and cost, it would be beneficial to explore the supports and barriers in different program types. It may also be beneficial to seek the perspectives of OT students who don't self-identify as members of historically marginalized groups. Researchers could also determine the efficacy of inclusion and diversity programs in OT education to expand on their efforts.

Conclusion

The objective of this study was to explore the experiences of OT students from historically marginalized groups and OT faculty/staff to identify the supports and barriers to inclusion in OT education. Findings from this study indicate that, despite various supports, there are still innumerable barriers experienced by students from historically marginalized groups that inhibit inclusion in OT education. The authors suggest that future studies utilize the identified barriers to further develop inclusion and equity programs and initiatives, and to promote cultural humility and awareness. Future researchers may use the current findings to provide a foundation to support OT efforts in enhancing inclusion within OT education and the profession. The authors hope that this project provided a platform for the voices of students from historically marginalized groups to not only be listened to, but actively heard.

References

- Allied Health Workforce Diversity Act of 2021, S.1679/H.R. 3320, 117th Cong. (2021). <https://www.congress.gov/bill/117th-congress/house-bill/3320>
- American Occupational Therapy Association. (n.d.). *Mission and vision*. <https://www.aota.org/about/mission-vision>
- American Occupational Therapy Association. (2020a). 2019 workforce & salary survey. <https://library.aota.org/AOTA-Workforce-Salary-Survey-2019/>
- American Occupational Therapy Association. (2020b). Occupational therapy code of ethics. *American Journal of Occupational Therapy*, 74(Suppl. 3), 7413410005p1–7413410005p13. <https://doi.org/10.5014/ajot.2020.74S3006>
- American Occupational Therapy Association. (2020c). Occupational therapy's commitment to diversity, equity, and inclusion. *American Journal of Occupational Therapy*, 74(Suppl. 3), 7413410030. <https://doi.org/10.5014/ajot.2020.74S3002>
- American Occupational Therapy Association. (2021). AOTA diversity, equity, and inclusion strategic plan report. <https://www.aota.org/-/media/corporate/files/aboutaota/dei-strategic-plan-report.pdf>
- American Occupational Therapy Association. (2022). Academic programs annual data report: Academic year 2020–2021. <https://www.aota.org/-/media/corporate/files/educationcareers/educators/2020-2021-annual-data-report.pdf>
- Bajwa, J. K., Couto, S., Kidd, S., Markoulakis, R., Abai, M., & McKenzie, K. (2017). Refugees, higher education, and informational barriers. *Refugee*, 33(2), 56-65. <https://doi.org/10.7202/1043063ar>

- Banks, T. M. (2022). Leading the OT profession toward diversity, equity, and inclusion: Let's talk academia. [2022 Conference Abstract]. *American Journal of Occupational Therapy*, 76(Suppl. 1), 7610505071p1. <https://doi.org/10.5014/ajot.2022.76S1-PO71>
- Barfield, J. P., Cobler, D. C., Lam, E. T. C., Zhang, J., & Chitiyo, G. (2012). Differences between African-American and Caucasian students on enrollment influences and barriers in kinesiology-based allied health education programs. *Advances in Physiology Education*, 36(2), 164-169. <https://doi.org/10.1152/advan.00129.2011>
- Beagan, B. L., & Chacala, A. (2012). Culture and diversity among occupational therapists in Ireland: When the therapist is the 'diverse' one. *The British Journal of Occupational Therapy*, 75(3), 144-151. <https://doi.org/10.4276/030802212X13311219571828>
- Bolding, D. J., Rodriguez, V., Nguyen, H., & Drabble, L. A. (2020). Survey of occupational therapy students' attitudes, knowledge and preparedness for treating LGBT clients. *Journal of Occupational Therapy Education*, 4(2). <https://doi.org/10.26681/jote.2020.040203>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. <http://dx.doi.org/10.1191/1478088706qp063oa>
- Bryman, A. (2006). Integrating quantitative and qualitative research: How is it done? *Qualitative Research*, 6(1), 97-113. <https://doi.org/10.1177/1468794106058877>
- Brown, K., Lamont, A., Do, A., & Schoessow, K. (2021). The Issue Is—Increasing racial and ethnic diversity in occupational therapy education: The Role of Accreditation Council for Occupational Therapy Education (ACOTE®) Standards. *American Journal of Occupational Therapy*, 75, 7503347020. <https://doi.org/10.5014/ajot.2021.047746>
- Clark, F. (2013). As viewed from above: Connectivity and diversity in fulfilling occupational therapy's centennial vision. *American Journal of Occupational Therapy*, 67(6), 624-632. <https://doi.org/10.5014/ajot.2013.676003>
- Clifton, M., & Taff, S. D. (2021). The FOCUUS Model—Facilitating occupational performance on campus: Uplifting underrepresented students. *Journal of Occupational Therapy Education*, 5(3). <https://doi.org/10.26681/jote.2021.050314>
- Centers for Disease Control and Prevention. (2013). CDC health disparities and inequalities report. *MMWR*, 62(3), (Suppl). <https://www.cdc.gov/mmwr/pdf/other/su6203.pdf>
- Coalition of Occupational Therapy Advocates for Diversity. (n.d.). *Our mission*. <https://www.cotad.org/about>
- Colaianne, D., Tovar, G., Wilson, D., & Zapanta, H. (2022). Factors influencing the diversity of occupational therapy students. *Journal of Occupational Therapy Education*, 6(1). <https://doi.org/10.26681/jote.2022.060102>
- Collins, P. M., & Carr, C. (2018). Exposure to, knowledge of, and interest in occupational therapy and physical therapy as career options. *The Open Journal of Occupational Therapy*, 6(2). <https://doi.org/10.15453/2168-6408.1357>

- Curtis-Boles, H., Chupina, A. G., & Okubo, Y. (2020). Social justice challenges: Students of color and critical incidents in the graduate classroom. *Training and Education in Professional Psychology, 14*(2), 100-108.
<https://doi.org/10.1037/tep0000293>
- Deas, D., Pisano, E. D., Mainous, A. G., Johnson, N. G., Singleton, M. H., Gordon, L., Taylor, W., Hazen-Martin, D., Burnham, W. S., & Reves, J. G. (2012). Improving diversity through strategic planning: A 10-Year (2002-2012) experience at the Medical University of South Carolina. *Academic Medicine, 87*(11), 1548-1555.
<https://doi.org/10.1097/ACM.0b013e31826d63e0>
- Elliott, C. M., Stransky, O., Negron, R., Bowlby, M., Lickiss, J., Dutt, D., Dasgupta, N., & Barbosa, P. (2013). Institutional barriers to diversity change work in higher education. *SAGE Open, 3*(2), 215824401348968.
<https://doi.org/10.1177/2158244013489686>
- Guerrero, A. D., Holmes, F. J., Inkelas, M., Perez, V. H., Verdugo, B., & Kuo, A. A. (2015). Evaluation of the pathways for students into health professions: The training of under-represented minority students to pursue maternal and child health professions. *Maternal and Child Health Journal, 19*(2), 265-270.
<https://doi.org/10.1007/s10995-014-1620-y>
- Govender, P., Mpanza, D. M., Carey, T., Jiyane, K., Andrews, B., & Mashele, S. (2017). Exploring cultural competence amongst OT students. *Occupational Therapy International, 2017*, 2179781-8. <https://doi.org/10.1155/2017/2179781>
- Hammell, K. R. W. (2013). Occupation, well-being, and culture: Theory and cultural humility. *Canadian Journal of Occupational Therapy, 80*(4), 224-234.
<https://doi.org/10.1177/0008417413500465>
- Harris, P. A., Taylor, R., Minor, B. L., Elliott, V., Fernandez, M., O'Neal, L., McLeod, L., Delacqua, G., Delacqua, F., Kirby, J., & Duda, S. N. (2019). The REDCap consortium: Building an international community of software partners. *Journal of Biomedical Informatics, 94*, 103208. <https://doi.org/10.1016/j.jbi.2019.103208>
- Harris, P. A., Taylor, R., Thielke, R., Payne, J., Gonzalez, N., & Conde, J. G. (2009). Research electronic data capture (REDCap) – A metadata-driven methodology and workflow process for providing translational research informatics support. *Journal of Biomedical Informatics, 42*(2), 377-81.
<https://doi.org/10.1016/j.jbi.2008.08.010>
- Jaegers, L. A., Muñoz, J., Washington, S., Rogers, S., Skinner, E., Dieleman, C., White, J. A., Haworth, C., Shea, C.-K., Connors, B., Millsap, M., Young, C., West-Bruce, S., Hennessy, A., Nelson, M., Dillon, M. B., Daaleman, C., & Barney, K. F. (2020, June 16). Justice-based occupational therapy response to occupational therapy statements on justice and racism. *Justice-Based Occupational Therapy, 2*(2).
<https://www.slu.edu/mission-identity/initiatives/transformative-justice/pdfs-images/jbot-newsletter-vol2-issue2.pdf>
- Johnson, K. R., Kirby, A., Washington, S., Lavalley, R., & Faison, T. (2022). The Issue Is—Linking antiracist action from the classroom to practice. *American Journal of Occupational Therapy, 76*, 7605347010.
<https://doi.org/10.5014/ajot.2022.050054>

- Johnson, K. R., & Lavalley, R. (2021). From racialized think-pieces toward anti-racist praxis in our science, education, and practice. *Journal of Occupational Science*, 28(3), 404-409. <https://doi.org/10.1080/14427591.2020.1847598>
- Jury, M., Smeding, A., Stephens, N. M., Nelson, J. E., Aelenei, C., & Darnon, C. (2017). The experience of low-SES students in higher education: Psychological barriers to success and interventions to reduce social-class inequality. *Journal of Social Issues*, 73(1), 23-41. <https://doi.org/10.1111/josi.12202>
- Kitchens, R. F., Armstead, A. B., Mani, K., Ghulmi, L., & Collins, D. M. (2022). Exploring the experiences of Black/African American students in entry level occupational therapy and occupational therapy assistant programs: A survey study. *Journal of Occupational Therapy Education*, 6(2). <https://doi.org/10.26681/jote.2022.060202>
- Kirsh, B., Trentham, B., & Cole, S. (2006). Diversity in occupational therapy: Experiences of consumers who identify themselves as minority group members. *Australian Occupational Therapy Journal*, 53(4), 302-313. <https://doi.org/10.1111/j.1440-1630.2006.00576.x>
- Lavalley R., & Johnson K. R. (2022). Occupation, injustice, and anti-Black racism in the United States of America. *Journal of Occupational Science*, 29(4), 487-499. <https://doi.org/10.1080/14427591.2020.1810111>
- Maton, K. I., Wimms, H. E., Grant, S. K., Wittig, M. A., Rogers, M. R., & Vasquez, M. J. T. (2011). Experiences and perspectives of African American, Latina/o, Asian American, and European American psychology graduate students: A national study. *Cultural Diversity and Ethnic Minority Psychology*, 17(1), 68–78. <https://doi.org/10.1037/a0021668>
- Megivern, D., Pellerito, S., & Mowbray, C. (2003). Barriers to higher education for individuals with psychiatric disabilities. *Psychiatric Rehabilitation Journal*, 26(3), 217-231. <https://doi.org/10.2975/26.2003.217.231>
- Morse, J. M. (2015). Critical analysis of strategies for determining rigor in qualitative inquiry. *Qualitative Health Research*, 25(9), 1212-22. <https://doi.org/10.1177/1049732315588501>
- Newfield, N., Bartlett, L., Murray, E., Park, T., Chambers, K., Hameed, F., & Cockburn, L. (2019). Perceptions of low income by Canadian student occupational therapists. *Journal of Occupational Therapy Education*, 3(2). <https://doi.org/10.26681/jote.2019.030203>
- Oplatka, I., & Lapidot, O. (2012). Muslim women in graduate studies: Some insights into the accessibility of higher education for minority women students. *Studies in Higher Education*, 37(3), 327-344. <https://doi.org/10.1080/03075079.2010.514899>
- Patel, A., Knox, R. J., Logan, A., & Summerville, K. (2017). Area health education center (AHEC) programs for rural and underrepresented minority students in the Alabama black belt. *Archives of Public Health*, 75(1), 32-10. <https://doi.org/10.1186/s13690-017-0200-1>
- Ryder, A. J., Reason, R. D., Mitchell, J. J., Gillon, K., & Hemer, K. M. (2016). Climate for learning and students' openness to diversity and challenge: A critical role for faculty. *Journal of Diversity in Higher Education*, 9(4), 339-352. <https://doi.org/10.1037/a0039766>

- Sahay, K. M., Thatcher, K., Núñez, C., & Lightfoot, A. (2016). "It's like we are legally, illegal": Latino/a youth emphasize barriers to higher education using photovoice. *The High School Journal*, 100(1), 45-65. <https://doi.org/10.1353/hsj.2016.0020>
- Salvant, S., Kleine, E. A., & Gibbs, V. D. (2021). The Issue Is . . . Be heard—we're listening: Emerging issues and potential solutions from the voices of BIPOC occupational therapy students, practitioners, and educators. *American Journal of Occupational Therapy*, 75, 7506347010. <https://doi.org/10.5014/ajot.2021.048306>
- Schoonenboom, J., & Johnson, R. B. (2017). How to construct a mixed methods research design. *KZfSS Kölner Zeitschrift für Soziologie und Sozialpsychologie*, 69(Suppl 2), 107-131. <https://doi.org/10.1007/s11577-017-0454-1>
- Simone, K., Ahmed, R. A., Konkin, J., Campbell, S., Hartling, L., & Oswald, A. E. (2018). What are the features of targeted or system-wide initiatives that affect diversity in health professions trainees? A BEME systematic review: BEME guide no. 50. *Medical Teacher*, 40(8), 762-780. <https://doi.org/10.1080/0142159X.2018.1473562>
- Stephenson-Hunter, C., Strelnick, A. H., Rodriguez, N., Stumpf, L. A., Spano, H., & Gonzalez, C. M. (2021). Dreams realized: A long-term program evaluation of three summer diversity pipeline programs. *Health Equity*, 5(1), 512–520. <https://doi.org/10.1089/heq.2020.0126>
- Sterman, J., Njelesani, J., & Carr, S. (2022). Anti-racism and occupational therapy education: Beyond diversity and inclusion. *Journal of Occupational Therapy Education*, 6(1). <https://doi.org/10.26681/jote.2022.060103>
- Taff, S. D., & Blash, D. (2017). Diversity and inclusion in occupational therapy: Where we are, where we must go. *Occupational Therapy in Healthcare*, 31(1), 72-83. <https://doi.org/10.1080/07380577.2016.1270479>
- Trentham, B. L., Langlois, S., Sangrar, R., Stier, J., Cockburn, L., Cameron, D., Renwick, R., & DSouza, C. (2020). Student engagement in peer dialogue about diversity and inclusion. *Journal of Occupational Therapy Education*, 4(3). <https://doi.org/10.26681/jote.2020.040304>
- U.S. Department of Education. (2016). Advancing diversity and inclusion in higher education. <https://www2.ed.gov/rschstat/research/pubs/advancing-diversity-inclusion.pdf>
- Williams, D. A., Berger, J. B., & McClendon, S. A. (2005). Towards a model of inclusive excellence and change in higher education. Association of American Colleges and Universities. <https://operations.du.edu/sites/default/files/2020-04/model-of-inclusive-excellence.pdf>
- Wilson, M. A., DePass, A. L., & Bean, A. J. (2018). Institutional interventions that remove barriers to recruit and retain diverse biomedical PhD students. *CBE Life Sciences Education*, 17(2), ar27. <https://doi.org/10.1187/cbe.17-09-0210>
- Zayas, L. E., & McGuigan, D. (2006). Experiences promoting healthcare career interest among high-school students from underserved communities. *Journal of the National Medical Association*, 98(9), 1523