The Impact of Racism and Ethnic Discrimination on Students' Educational Experiences

Melissa Luong
Loma Linda University

Julie D. Kugel
Loma Linda University

Sharon Pavlovich

Liane Hewitt
Loma Linda University

Lida Gharibvand
Loma Linda University

The Impact of Racism and Ethnic Discrimination on Students' Educational Experiences

Abstract

This study explored how occupational therapy students' perceptions of racism and ethnic discrimination impacted their educational experiences. Participants included 226 students ages 18-60 years old enrolled in occupational therapy entry-level, post-professional, or assistant programs throughout the United States. Students completed an anonymous web-based survey that included a demographic questionnaire, the Brief Perceived Ethnic Discrimination Questionnaire-Community Version (PEDQ-CV), and open-ended survey questions. Results found that students' educational performance were negatively impacted by their experiences with racism and ethnic discrimination. While students reported to have experienced racism or ethnic discrimination within the classroom and fieldwork settings, classroom conversations and content related to topics on diversity, equity, and inclusion (DEI) and anti-racism were limited. Based on the study's findings, schools are encouraged to increase these conversations and implement supportive resources for students who have experienced racism and ethnic discrimination. Implications for improved occupational therapy educational experiences for students included recommendations to: a) acquire additional education in DEI-related subjects; b) continue to incorporate more conversations related to topics of DEI, racism, and ethnic discrimination in the classroom and fieldwork settings; c) provide simulated or real-life hands-on opportunities and experiences to work with people of color within the community; d) teach students how to appropriately behave and respond to racism and ethnic discriminatory situations; e) create program curriculums that focus on DEI and anti-racism content; f) host support groups with diverse people to encourage mentorship between students, practitioners, and community members; and g) diversify course content to include images, perspectives, and stories of people of color.

Keywords

Occupational therapy students, academia, race-related trauma, racism, ethnic discrimination

Creative Commons License

Acknowledgements

The Impact of Racism and Ethnic Discrimination
on Students' Educational Experiences

Melissa Luong, OTD, OTR/L; Julie Kugel, OTD, OTR/L;

Sharon Pavlovich, EdD, MAM, COTA/L; Liane Hewitt, DrPH, CHES, OTR/L;

Lida Gharibvand, MS, Ph.D

Loma Linda University

United States

ABSTRACT

This study explored how occupational therapy students' perceptions of racism and ethnic discrimination impacted their educational experiences. Participants included 226 students ages 18-60 years old enrolled in occupational therapy entry-level, post-professional, or assistant programs throughout the United States. Students completed an anonymous web-based survey that included a demographic questionnaire, the Brief Perceived Ethnic Discrimination Questionnaire-Community Version (PEDQ-CV), and open-ended survey questions. Results found that students' educational performance were negatively impacted by their experiences with racism and ethnic discrimination. While students reported to have experienced racism or ethnic discrimination within the classroom and fieldwork settings, classroom conversations and content related to topics on diversity, equity, and inclusion (DEI) and anti-racism were limited. Based on the study's findings, schools are encouraged to increase these conversations and implement supportive resources for students who have experienced racism and ethnic discrimination. Implications for improved occupational therapy educational experiences for students included recommendations to: a) acquire additional education in DEI-related subjects; b) continue to incorporate more conversations related to topics of DEI, racism, and ethnic discrimination in the classroom and fieldwork settings; c) provide simulated or real-life hands-on opportunities and experiences to work with people of color within the community; d) teach students how to appropriately behave and respond to racism and ethnic discriminatory situations; e) create program curriculums that focus on DEI and anti-racism content; f) host support groups with diverse people to encourage mentorship between students, practitioners, and community members; and g) diversify course content to include images, perspectives, and stories of people of color.

Introduction

Recent worldwide events have made racial bias visible with increased hate crimes and awareness of race-related trauma. In March 2020, the World Health Organization (WHO) declared the outbreak of the novel SARS-CoV-2 a pandemic widely known as COVID-19 (World Health Organization, 2020). The mislabeling of the coronavirus as the "Chinese Virus" by a former president led to a rise in sinophobic attitudes and hate crimes against Asian Americans (Hswen et al., 2021; Kurtzman, 2021; Wen et al., 2020). Sinophobia is the fear or dislike of Chinese culture, people, and the country (Cambridge University Press, 2022). Over 9,000 anti-Asian incidents were reported across the United States between March 19, 2020, and June 30, 2021 (Yellow Horse et al., 2021). One in five Asian Americans who have encountered racism are also impacted by race-related trauma (Saw et al., 2021). Race-related trauma is the emotional, psychological, and physical reactions elicited by painful personal experiences with racism, such as racial harassment and discrimination (Carter, 2007; Evans et al., 2015; Hemmings & Evans, 2018). Within the same year, the death of George Floyd brought national attention to the ongoing issue of systemic racism which then led to the Black Lives Matter movement receiving extensive support from many Americans (Parker et al., 2020). During 2020, 8,263 hate crimes were reported in the United States, the highest since 2008 (Federal Bureau of Investigation, 2020). Of the hate crimes reported, 64% were related to biases against race, ethnicity, or ancestry (Hernandez, 2021).

Definitions

Although racism and ethnic discrimination are commonly used interchangeably, their definitions and effects on people differ because these terms are highly subjective. Racism refers to unintentional or intentional attitudes, stereotypes, views of superiority or inferiority, and the categorization of peoples' characteristics based on genetic factors, culture, and language (Hammell, 2013; Lavalley & Johnson, 2020). Racism may appear invisible to those who are unaffected. On the other hand, racism may affect others on a larger scale in structural and systemic ways, including political disempowerment, segregation, and environmental injustices (Braveman et al., 2022). As a result, acts of ethnic discrimination may emerge. Ethnic discrimination is the unfair or differential treatment motivated by bias against one's racial or ethnic origin (Contrada et al., 2000). Barriers and experiences of racism and ethnic discrimination may occur in different environments, including educational settings (Beagan & Etowa, 2009).

Impact of Racism and Ethnic Discrimination on Education

Approximately 47.5 percent of college students reported experiencing bias or hatred based on their race or ethnicity throughout their lifetime (Shah et al., 2021). Specifically, students of color tend to experience racism and ethnic discrimination at a higher level compared to students who are White and attending White majority institutions (Blume et al., 2012). Studies have found that students who identified with a race other than White were more likely to experience microaggressions (Ogunyemi et al., 2020), racial discrimination (Del Toro & Hughes, 2020), racism (Williams et al., 2021), race-related stress (Hargons et al., 2021), internalized inferiority (Brown et al., 2017), academic oppression (St. Mary et al., 2018), and poor perceptions of academic achievement

(Hope et al., 2015). The presence of ethnic discriminatory experiences was a predictor of poor academic performances in students at various grade levels (English et al., 2016; Neblett et al., 2006; Stevens et al., 2018). Trauma was also found to impact students' educational performance. Common symptoms of trauma reported by students were difficulties with concentration, poor memory, sleep challenges, and decreased motivation to complete tasks (Wells et al., 2021). When racism is associated with traumatic experiences, students reportedly feel resigned and undervalued while facing pressure from others to represent their entire race (Hughes et al., 2021).

Race-Talk in Classrooms
Dialogues related to race are often discouraged in classrooms due to the fear of evoking strong emotions that may lead to heated discussions (Pasque et al., 2013; Sue, 2013; Sue et al., 2011). Factors that may further contribute to students' race-related experiences in the classroom include educators' lack of confidence and competency to address racial issues, operating through a White normative lens, upholding a view of color-blindness, and silencing students' experiences with racism as a form of response (Yared et al., 2020). Therefore, students who experienced silencing may feel that they are unable to respond, react, or report race-related events (Wong et al., 2020). As a result, silencing may lead to normalizing racist and microaggression behaviors (Wong et al., 2020). Although classroom conversations related to race are necessary, they may cause antagonism, misunderstanding, and learning barriers for students when poorly addressed. Improvement in education, communication, understanding of ethnic backgrounds (Pasque et al., 2013), and developing a critical-racial consciousness (Chávez-Moreno, 2022) are benefits of having well-informed conversations related to race. Critical-racial consciousness is "an antiracist lens that identifies racist inequities and resists hegemonic ideas and practices" (Chávez-Moreno, 2022, p. 485). Despite the significant presence of racism within schools and limited conversations related to race, studies on the impact of racism and ethnic discrimination on students' experiences within the academic setting through an occupational therapy lens are limited.

Purpose Statement
There is limited published research regarding the experiences, needs, and support for students who have experienced racism or ethnic discrimination attending occupational therapy programs within the United States. Previous research has extensively investigated the psychological, emotional, and mental impact on people of color within the realm of psychology (Carter et al., 2020), sociology (Kwate & Goodman, 2015), and counseling (Hemmings & Evans, 2018). Hughes et al. (2021) stated that their study was the first to explore physical therapy students' experiences with racism within their academic programs and profession in Canada. The researchers found that participants commonly perceived hopelessness regarding the unchanging institutionalized racism within their profession, which includes White fragility and the idea that Whiteness is preferred in social structures (Hughes et al., 2021). White fragility is referred to as the feelings of discomfort and defensiveness from White people when they are confronted with information about racial injustice and inequality (DiAngelo, 2011). There are many cultural competency training or single multicultural education courses within the educational system where the instructors do not directly address racism or White

privilege due to various reasons, including pressure from administrators to ensure content presented is comfortable to White people (DiAngelo, 2011). Anger, guilt, cognitive dissonance, withdrawal, and emotional incapacitation are examples of responses received when racism and White privilege were directly discussed in depth within educational programs (DiAngelo, 2011). Content related to racism typically also includes using racially coded language which contributes to the continuation of institutionalized racism (DiAngelo, 2011). Due to the limited research and understanding of occupational therapy students' experiences with racism and ethnic discrimination, educators and academic staff may be limited in providing appropriate resources and support for this population. This study explored the perceptions of racism and ethnic discrimination and how these impact occupational therapy students' educational experiences.

Methods

Study Design

A mixed-method survey design was used to explore the impact of race-related experiences on occupational therapy students' education. Creswell and Creswell (2018) described the mixed method survey design process as collecting and utilizing questionnaires and qualitative open-ended survey questions to further understand and help explain results from the quantitative data. The trauma-informed care approach (TIC) was implemented to help guide research and inform the development of assessments and questionnaires to address the research question. The university's Institutional Review Board (IRB) reviewed and approved the research study. All participants indicated consent to participate in the study before completing the survey.

Philosophical Foundation

Trauma-informed care is an approach that assumes a likelihood that an individual has a history of trauma (Substance Abuse and Mental Health Services Administration [SAMHSA], 2014). This approach emphasizes understanding the prevalence of trauma, recognizing the effects of trauma, training staff on the appropriate response in providing support to those who experienced trauma, integrating knowledge, and avoiding re-traumatization (SAMHSA, 2014). It involves both organizational and clinical levels to shift the focus from "What's wrong with you?" to "What happened to you?" (Trauma-Informed Care Implementation Resource Center, 2021). Six guiding principles fundamental to TIC are 1) safety, 2) trustworthiness and transparency, 3) peer support, 4) collaboration and mutuality, 5) empowerment and choice, and 6) cultural, historical, and gender issues (SAMHSA, 2014). All research materials were carefully selected and designed to reflect the characteristics of the TIC approach to support participants experiencing trauma symptoms by creating a safer environment to share their stories.

Participants
Participants were recruited to complete an online survey through convenience and snowball sampling (Creswell & Creswell, 2018). Using contact information on the American Occupational Therapy Association (AOTA) website, a total of 426 entry-level occupational therapy (OTR), occupational therapy assistant (OTA), and post-professional occupational therapy doctorate (OTD) programs were contacted via email. Inclusion criteria included current students between 18-60 years old enrolled in occupational therapy entry-level, post-professional, or assistant programs.

Instruments and Data Collection
This study collected information via a demographic questionnaire, the Brief Perceived Ethnic Discrimination Questionnaire-Community Version (PEDQ-CV), and open-ended survey questions in Qualtrics online survey software. The Brief PEDQ-CV, a 17-item quantitative measure with one additional open-ended question, was used to assess students' perception of racism and ethnic discrimination. This assessment can be used among various ethnic groups for those ages 18 or older and assessed the five dimensions of racism, which included the degree of 1) having overall lifetime exposure to racial injustices (lifetime exposure), 2) being excluded, ignored, or isolated (exclusion/rejection), 3) being stigmatized or demeaned (stigmatization/devaluation), 4) being treated unfairly at work or school (discrimination at work/school), and 5) having their belongings or personally experienced being threatened or harmed (threat/aggression) due to their race or ethnicity (Brondolo et al., 2005). These five dimensions were calculated by taking the mean of the students' responses on specific questions, such as averaging the responses of all 17 questions for lifetime exposure, questions 8, 11, 12, and 13 for exclusion/rejection, questions 10, 15, 16, and 17 for stigmatization/devaluation, questions 1, 2, 9, and 14 for discrimination at work/school, and questions 3, 4, 6, and 7 for threat/aggression. To determine students' experiences with unfair treatment from police, only question 5 was utilized. A higher score indicates the student has a higher perception of racism and ethnic discrimination (Brondolo et al., 2005). The validity of the four subscales of this assessment for the student population consisted of lifetime exposure (0.88), exclusion/rejection (0.69), stigmatization/devaluation (0.78), discrimination at work/school (0.65), and threat/aggression (0.88). Based on a full group, community, and student sample, the internal consistency ranged from 0.65 to 0.88 (Brondolo et al., 2005). This assessment took approximately five minutes to complete.

Opened-ended qualitative survey questions were used to further explore students' experiences and the impact of racism and ethnic discrimination on their education. The open-ended questionnaire contained five items related to the participants' experiences with racism and ethnic discrimination as well as perceived needs for support or resources. This questionnaire was developed based on the current literature and reviewed by the research team.

Data Analysis

Mean ± standard deviation was computed for quantitative variables and frequency (percentage) for ordinal variables. The normality of quantitative variables was assessed using the Shapiro-Wilk test and box plots. Pearson's correlation analysis was also performed on the participants' responses to the Brief PEDQ-CV. Data were analyzed using SPSS Statistics Software (IBM, Version 28). All analyses were performed at an alpha level of .05.

The qualitative survey data consisted of the five-item open-ended questions created by the researcher team and one free response question from the Brief PEDQ-CV that were coded, categorized, and analyzed for commonalities using Dedoose, a data analysis software platform (Dedoose, 2022). To demonstrate the relationship between the most frequent codes, a concept map was created using Lucidchart (DeAngelis, 2007). Lucidchart is a web-based diagramming program that promotes the visual collaboration of diagrams and charts (Lucidchart, 2022). Frequent codes as indicated by the concept map were categorized and formed four major themes that summarized the participants' experiences. The research team met regularly via Zoom and discussed the code categories to establish intercoder agreement.

Results

The online survey was open for responses from March 2022 until August 2022; with a total of 252 students. However, the total number of survey responses that were analyzed was 226 after removing 25 incomplete survey responses and one survey response from a student who did not meet the inclusion criteria (see Table 1). Most of the students were female (90.7%) between the ages 21 to 30 years (82.4%), originating from the United States (90.3%), and identifying as ethnically White (59.9%).

Table 1

Demographics of Students at Baseline (n = 226)

Characteristics	Frequency (%)
Gender	
Male	17 (7.5)
Female	206 (90.7)
Other (Non-Binary)	2 (0.9)
Prefer not to answer	1 (0.4)
Age*	
18 – 20	10 (4.4)
21 – 30	187 (82.4)
31 – 40	22 (9.7)
41 – 50	5 (2.2)
51 – 60	1 (0.4)

Origin	
United States	205 (90.3)
Mexico	5 (2.2)
China	1 (0.4)
Other	15 (6.6)
United States Region Location*	
Northeast	70 (30.8)
Midwest	59 (26.0)
Southeast	37 (16.3)
Southwest	26 (11.5)
West	33 (14.5)
Type of School*	
Private	42 (18.5)
Public	100 (44.1)
Religious	8 (3.5)
Private & Non-Religious	25 (11.0)
Private & Religious	26 (11.5)
Public & Non-Religious	23 (10.1)
Public & Religious	1 (0.4)
Type of Program	
Occupational Therapy Assistant	38 (16.7)
Master of Occupational Therapy	105 (46.3)
Entry-Level Doctor of Occupational Therapy	73 (32.2)
Post-Professional Master of Occupational Therapy	2 (0.9)
Post-Professional Doctor of Occupational Therapy	7 (3.1)
Other (Ph.D. in OT)	1 (0.4)
Year in Program	
First Year	102 (44.9)
Second Year	94 (41.4)
Third Year	26 (11.5)
Other	4 (1.8)
Ethnicity/Race*	
White	136 (59.9)
Latino or Hispanic	31 (13.7)
Asian and Pacific Islander	33 (14.5)
Black or African American	21 (9.3)
Other (Multiracial)	4 (1.8)

* Total percentage may not add up to 100% due to missing data.

Brief PEDQ-CV
A descriptive statistical analysis of the brief PEDQ-CV questionnaire is provided in Table 2. The lowest value students may rate their perception of racism is 1.00 which indicates "never happened," while the highest rating was a value of 5.00, indicating "happened very often" (Brondolo et al., 2005). Students perceived threat aggression to

be the lowest at 3.00 ("sometimes") and exclusion/rejection as the highest at 5.00 ("happened very often"). The overall average responses for all elements were scored low, with values ranging from 1.15 to 2.00 ("never happened").

Table 2

Descriptive Statistics for Brief PEDQ-CV Questionnaire

	N	Minimum	Maximum	Mean	Standard Deviation
Lifetime Exposure	225	1.00	3.47	1.49	.542
Exclusion/Rejection	224	1.00	5.00	2.00	.970
Stigmatization/Devaluation	224	1.00	4.50	1.27	.582
Discrimination at Work/School	225	1.00	4.50	1.59	.777
Threat Aggression	223	1.00	3.00	1.15	.398

Pearson correlation coefficient, a two-tailed test, showed statistically significant correlations for all elements in the Brief PEDQ-CV questionnaire: lifetime exposure, exclusion/rejection, stigmatization/devaluation, discrimination at work/school, and threat aggression (see Table 3). Lifetime exposure had a strong positive statistically significant correlation with exclusion/rejection, stigmatization/devaluation, discrimination at work/school, and threat aggression ($P<.001$ for all). Also, exclusion/rejection and discrimination at work/school were strongly correlated ($P<.001$).

Table 3

Pearson Correlation Coefficient and P values for Brief PEDQ-CV

	Lifetime Exposure	Exclusion/ Rejection	Stigmatization/ Devaluation	Discrimination at Work/School	Threat Aggression
Lifetime Exposure	1	.916 (P<.001)	.763 (P<.001)	.864 (P<.001)	.443 (P<.001)
Exclusion/ Rejection	.916 (P<.001)	1	.580 (P<.001)	.744 (P<.001)	.307 (P<.001)
Stigmatization/ Devaluation	.763 (P<.001)	.580 (P<.001)	1	.549 (P<.001)	.187 (P=.005)
Discrimination at Work/School	.864 (P<.001)	.744 (P<.001)	.549 (P<.001)	1	.207 (P=.002)
Threat Aggression	.443 (P<.001)	.307 (P<.001)	.187 (P=.005)	.207 (P=.002)	1

Qualitative Survey Data

Qualitative survey data consisted of one open-ended question from the Brief PEDQ-CV and five open-ended questions developed by the research team. A total of 82 students responded to the open-ended question from the Brief PEDQ-CV, while 119 students responded to at least one of the five open-ended questions. Four themes emerged from the analysis: 1) Impact on Education, 2) OT/OTA Student Experiences, 3) Classroom Discussions and 4) Resources (see Table 4).

Table 4

Qualitative Themes and Representative Quotes

Theme	Quote 1	Quote 2	Quote 3
Impact on Education	"I've always felt like no matter what setting I'm in whether it's school or work, I've had to work twice as hard to get half the recognition for my work. I've always felt that my hard work was often overlooked because of my skin color."	"I don't know if it's because of where I'm from and my accent, many time others are already assumed I can and cannot do before they see my performance."	"There have been many microaggressions and lack of understanding from my classmates. I always feel like I have to prove myself which leads me doing more work than others."
OT/OTA Student Experiences	"I was placed at a hospital for my first ever level two fieldwork experience. During my first week, I enter a new patient's room…She looks at me and tells me her husband is basically racist and if he comes into the room, be prepared for some unkind words. She acted as if she was being nice for warning me, and mentioned to ignore him if he comes in."	"As a student thinking about what setting I would like to work in, I want to work with older adults but at the same time, I am hesitant because most of my experiences regarding racism were with older adults who called me racial slurs. As a student, it can be stressful because I would hate to graduate and work in a setting where I experience racism."	"Shadowing, I realized that occupational therapy is mostly White females. In the nearby big city I shadowed, I met no bilingual OTs or OTAs. They would always ask nurses to translate, and I decided I wanted to be the change to my community and help fill the language barrier gap."
Classroom Discussions	"It's been hinted at with blanket statements, but it	"It's been discussed in historical contexts but not in the current	"Race, racism, and ethnic discrimination have hardly been

	hasn't fully been addressed. My professors will say things like 'it will differ for POCs' or 'you have to consider how occupations vary across different cultures,' but no real time has been spent exploring this."	climate. Everything that has been discussed has been due to group projects, sharing, or presentations."	discussed within my courses. If we do talk about these topics in class, it is because a student brings it up, not because it is included in course content or because the instructor believes it is relevant to our discussion."
Resources	"To improve my educational experience with racial/ethnic issues, I would like to be able to get involved with the community and have students be put in different situations and the teachers teach them through real experiences or simulated."	"I would like if our program included topics and scenarios related to racial/ethnic issues during the curriculum. I went out on various fieldworks and was presented with situations related to this topic and truly did not know how to react or respond."	"At least one course on cultural differences/sensitivities and how to act/react in regard to them should exist. By only briefly mentioning this importance of recognition of our differences, we become aware of the issue without recourse for action."

Impact on Education

For the open-ended question on the Brief PEDQ-CV, students were asked to share their experiences and stories of discrimination. Forty-seven percent of the students indicated experiencing at least one race-related event within their lifetime. Many students shared experiences with racism and ethnic discrimination in their education setting. Students reported an impact on their educational performance, "I feel treated like I have nothing to offer at all. And knowing that affected my performance and likelihood of sharing even more." One student described their classroom experience: "I am often feeling less than and treated less smart among classmates." Bilingual students experienced additional challenges, "I have noticed that the program places Spanish speakers in programs/projects when it is convenient and beneficial for them but on other occasions, we are neglected." Classmates were commonly reported to contribute to students' ethnic discrimination experiences as one student shared, "I've also had my classmates make fun of my culture's food and experiences IN FRONT of me and when I expressed my discomfort, they brushed me off and told me they were joking." Some students reported challenges when working with other classmates. One student shared, "There have also been times when I was placed in a group with some White classmates who deliberately ignored me asking for help for our group project." Another student experienced a similar situation, "When I do share my culture-specific experiences with my group/classmates, they kind of half-heartedly listen and they'll move on to someone else. When a White classmate presents, they have comments, feedback, etc."

Students who shared that race-related experiences impacted their education stated that they have felt left out, disconnected, ignored, fearful, insecure, and uncomfortable. The feeling of being left out was the most reported emotional response as one of the students summarized, "I have felt discouraged and like an outsider to my peers," while another student explained, "I do not feel very included in my class of mostly White women as well in the OTD program..." Among these emotional responses, experiencing racism or ethnic discrimination within the education setting was described as "…daunting and draining, often lonely as well." To combat these race-related events, students shared strategies of how they responded to these events, such as ignoring and moving on, educating others on their behaviors, or speaking up for themselves.

On the other hand, 53 percent of the students reported they "…have not experienced any significant discrimination due to ethnicity…only gender and religion." Some students shared they felt they had an advantage over their peers. For instance, "As a cis-gendered White woman, I fit the majority demographic of occupational therapists. I have personally experienced very few barriers and a lot of support in my education." Some students acknowledged that their advantages came with challenges of understanding others from diverse backgrounds, "…because my ethnicity is the majority (Caucasian) in the USA, I only have a small understanding of discrimination." Even though some students acknowledged their lack of understanding of discrimination, others indicated they have used their advantages as an opportunity to advocate, act upon, and defend others from racism and ethnic discrimination, "When I have seen other people being marginalized, I have stepped in as an advocate to re-educate the offending party."

OT/OTA Student Experiences
Students elaborated that they have experienced racism or ethnic discrimination in other settings, such as external educational opportunities (e.g., school applications), program curriculum, on campus, and in fieldwork. Fieldwork was the most reported setting where students experienced racism or ethnic discrimination. One student indicated they were devastated because they "…failed of [their] Level II fieldwork without proper notice simply because of [their] religious identity." Other students faced challenges with being misperceived, "Patient and staff automatically feel that I am incapable of performing the job at hand. I feel like I have to go above and beyond on the normal things." Another student described how their racial identity influenced their fieldwork placement setting, "The few of us who speak Spanish were placed in a fieldwork setting that worked with clients whose primary language was Spanish (without us knowing we would be playing the dual role of OT students and a translator for our group)." Despite these race-related experiences in fieldwork, students reported that their race and ethnicity increased their awareness of other people's cultural backgrounds, which influenced their willingness to engage in Diversity, Equity, and Inclusion (DEI) efforts, be more understanding of others, and have an open mind. One student shared, "Because of my race and ethnicity, I strive to make inclusive environments because of the many times I have felt like an outsider," while another student added, "I felt out of place at times, but that's exactly why I want to be an OT so that others like me don't have to feel this way and in the future, students like me can have professors who look like them too."

Classroom Discussions

Most students shared that discussions related to race, racism, and ethnic discrimination were limited within the classroom. When the topic of racism and ethnic discrimination arises, students reported that these brief conversations were typically mentioned in a lecture, guest speakers, DEI events, or when the topic was brought up by students, "This topic has only been touched on in one course as a group discussion. Our class did not feel it was enough…" Topics of discussion were related to "…some cultural biases…," "…being cognizant of…own implicit biases," "…microaggressions and subconscious biases," "…be considerate of all cultures and ethnicities," and "…social determinants of health for our clients, not us." One student elaborated on their experience, "It has been discussed here and there in terms of when the topic comes up. However, there are still times where I hear comments made by the people in my own cohort that leave me surprised at how narrow their views are on the matter." Even though these discussions occasionally arise, students "…feel that it has not been discussed enough from the aspect of health and medicine. For example, what do scars look like overtime on different skin tones." Other students also felt that these brief discussions were not in-depth enough, "We cover these topics in one lecture but did not dive into how combat or to change." Another student expressed frustration with the lack of information on culture and diversity, "Only one person has addressed it in a 2-hour lecture. THAT IS ALL. NOT OK."

Resources

When students were asked to list the resources or support that their schools were offering, 47 percent of them expressed that they were unsure. "If there are any, there is no promotion on it. I am not aware" one student shared. Another student noted that their school did not offer any resources, "None within my program." Students reported that the following resources were available: mental health counselors, DEI organizations and supports, professors and staff members, and specialized school offices, such as the Office of Disabilities, Title IX office, and LGTBQ+ Center. Students expressed the desire to have courses focused on DEI efforts, diverse student and staff populations, opportunities for acquiring real-life experiences with patients of various ethnicities, and open conversations within a safe environment. One of the students suggested incorporating "…diverse case studies…," "…pictures of diverse people in textbooks and PowerPoints…," and discussing "…research [done by] diverse authors…" within course content. Other students requested "At least one course on cultural differences/sensitivities and how to act/react in regard to them," and "A whole class dedicated to this topic and how OTs can best handle situations where racial/ethnic issues are prevalent would be beneficial." Students also requested to see topics of DEI integrated as a requirement of the Accreditation Council for Occupational Therapy Education (ACOTE) standards. One student advocated, "Make it an ACOTE standard. Have the professors take a DEI course every year to make sure they are delivering up-to-date issues and research in what is being done to address this and what is out in the field."

Discussion

This study aimed to explore how occupational therapy students' personal perceptions of racism and ethnic discrimination impacted their educational experiences. Based on students' experiences, findings revealed an urgent need for promoting awareness and providing supportive resources to help students who have experienced racism and ethnic discrimination overcome barriers for improved educational experiences. This study focused on occupational therapy students because of the gap in the current Accreditation Council for Occupational Therapy Education (ACOTE) standards that require recruiting and retaining students from diverse racial and ethnic backgrounds (Brown et al., 2021) as well as the need to incorporate anti-racism practices within occupational therapy education (Sterman et al., 2022).

Brief PEDQ-CV

According to the 2019 AOTA workforce and salary survey, 84 percent of licensed occupational therapists within the United States identify as White, and 91 percent as female (AOTA, 2020a). The demographics of the students in this study were consistent with the demographics of licensed therapists within the field of occupational therapy, as a large percentage of students identified as White and female. All students' perceptions and experiences of racial discrimination were self-reported in this study; thus, these results cannot be completely assumed that the students in this study are experiencing racial and ethnic discrimination solely due to attending an OT or OTA program. The interpretation of what constitutes discrimination varied from person to person. For example, White participants' perceptions of discrimination were often based on their religious identity (Mayrl & Saperstein, 2013). Many students who identified as White in this study also shared that they were racially discriminated against based on their religion. Religious discrimination is just as important to address in educational settings as students can feel marginalized in order to fit in with their peers. There is a need for universities to consider religious pluralism and assess how attitudes and policies impact students' experiences (Bowman & Smedley, 2013).

Even though 59.9 percent of students were not considered racial or ethnic minorities, the results from the brief PEDQ-CV assessment indicated that a significant number of students have had race-related experiences throughout their lifetime (63.8%). The majority of students in this study reported significantly experiencing all five dimensions of racism. Students expanded on the five dimensions of racism through the open-ended question on the Brief PEDQ-CV by reflecting and acknowledging that their past race-related experiences influenced their present experiences with racism and ethnic discrimination. However, students indicated they perceived their encounters with racism or ethnic discrimination as low. It is a possibility that many of the students may have developed a level of tolerance to accept moderate racist or ethnic discriminatory behaviors as normal (Wong et al., 2020). Thus, moderate racist or ethnic discriminatory behaviors are normalized. It is not uncommon to see that racism is also normalized within the occupational therapy profession as many occupational therapists of color have reportedly experienced racism at all levels (Beagan et al., 2022). This level of

tolerance and acceptance may have influenced students' responses by minimizing their perceptions and experiences. Typically, the standard response was to remain silent and leave the situation when students encountered these race-related events (Wong et al., 2020) similar to the findings of this study.

Impact on Education
This study found that experiences of racism and ethnic discrimination negatively impacted students' educational performance and learning (AOTA, 2020b; Taff & Blash, 2017). Academic administrators need to provide a supportive and healthy educational environment for students of color (Franklin, 2016). Stress, trauma, and fatigue are common in students who have experienced racial discrimination from their peers, faculty, fieldwork educators, and clients (Salvant et al., 2021). When students encounter these negative experiences within their educational programs, they may also feel like an outsider (Ford et al., 2021), which aligns with the current findings of feeling left out.

OT/OTA Student Experiences
In addition to the impact racism and ethnic discrimination have on students within the classroom setting, racial experiences at fieldwork sites were the next commonly reported setting that impacted students' educational experiences. Experiencing racism from clients, staff, and fieldwork educators can be damaging and hurtful. Students' fieldwork placement and quality of learning in the field may also become negatively affected and perceived as painful experiences, especially when clinicians refuse to accept and mentor racialized students as fieldwork educators or take the time to listen to students' struggles with race-related experiences (Beagan et al., 2022). Currently, there is a lack of diversity and representation of students of color within occupational therapy educational programs and workplaces (Salvant et al., 2021), yet students are expected to serve communities with diverse clientele as clinicians. Even though racialized occupational therapists believe that their cultural differences are beneficial to serve the marginalized population (Beagan & Chacala, 2022), the lack of representation may deter prospective OT and OTA students of diverse ethnic backgrounds from pursuing the profession (Ford et al., 2021). This can lead to a decrease in diversity within the field (Colaianni et al., 2022). Due to the lack of diversity in the field, a few students in the current study indicated they aspired to become occupational therapists with the hopes of diversifying and contributing to the field as a person of color.

Classroom Discussions
Classroom discussions about education and health disparities, social inequities, and barriers to occupations for people of color are important for occupational therapy students. These dialogues help occupational therapy students develop a holistic perspective of their future clients' occupational performances, which allows them to design interventions, implement community programs, and create educational materials catered to people of color (Lucas & Washington, 2020). Previous research found that there is a need for classroom discussions related to anti-racism (Sterman et al., 2022), cultural competence (Grenier, 2020), awareness, humility, and dexterity (AOTA, 2020b) to be integrated within occupational therapy education. Yet, very few faculty within the higher educational settings have changed their classroom practices to address diversity

issues (Pasque et al., 2013). Barriers to change include the lack of incorporating anti-racist content taught by people of color into the curriculum (Johnson & Lavalley, 2021), establishing requirements to root diversity and inclusion within the institutions' practices (Brown et al., 2021), and promoting a shift of mindset from viewing diversity and inclusion as a benefit rather than as a threat to the profession (Taff & Blash, 2017). Educational systems may resolve these issues by encouraging students to educate themselves on the experiences of people of color and the various forms of racism, including at the individual, institutional, and systemic levels (Franklin et al., 2006). Classroom discussions related to racial topics should increase over time and continue without exhibiting behaviors of defensiveness, fear, and avoidance (Murray-García et al., 2014). School administrators and educators should also implement anti-racist policies that ensure that actions are taken to address racial issues (Johnson et al., 2022).

Resources
The reports of feeling uncomfortable sharing experiences with racism and ethnic discrimination were not uncommon among students of color in past research (Kitchens et al., 2022). Hosting support groups that consist of students, faculty, staff, and clinicians of color would help promote a support system and allows for mentorship between students and clinicians (Beagan et al., 2022). Many students in this study requested more discussions and a whole course dedicated to DEI and anti-racism efforts to be incorporated within the curriculum which also echoed the suggestions by AOTA (2020b). To provide relevant support for students at an individual level, research recommended incorporating active listening skills, conveying empathy, and understanding, advocating, intervening on the individuals' behalf, and validating lived experiences (Lowe et al., 2012) to address students' concerns of feeling unheard and uncomfortable with sharing.

Limitations and Future Research
The students in this study may not represent the general student population outside of OT or OTA programs; therefore, the survey findings may not be generalized to other settings or populations. The approximately 20-minute length of the survey may have also been a limitation. It is recommended for future research that surveys be shorter in length for improved quality of responses, to maintain respondent engagement, and reduce survey-taking fatigue (Braun et al., 2021). Another limitation was that the qualitative data were collected through a survey rather than semi-structured interviews or focus groups. Semi-structured interviews would allow participants to provide clarifications and elaborate meanings from their experiences through follow-up questions (Alamri, 2019). While focus groups, on the other hand, would allow for a group discussion that may gather information on participants' collective views and provides a deeper understanding of those experiences and beliefs (Gill et al., 2008). Lastly, it may be beneficial for a future study to focus only on students who identify as part of a minority racial or ethnic group. Future research could also explore and utilize standardized assessments that assess students' racial experiences specifically within the educational setting.

Implications for Occupational Therapy Education

The findings of this study are relevant to the occupational therapy profession as they contribute to the ongoing dialogue of addressing racial injustice and provide clinical applications to meet the needs of students from diverse ethnic backgrounds. One course, program, or policy change may only resolve short-term race-related issues to improve students' everyday lives within the educational setting. To improve students' educational experiences long-term, academic administrators need to take the initiative to incorporate anti-racism theoretical frameworks and implement several specific policies addressing racial issues (Franklin, 2016). These are large issues at the systemic level that need to be collaboratively and gradually addressed to promote diversity and inclusion in educational settings (Lucas & Washington, 2020). The following recommendations may be helpful for occupational therapy practitioners and academic faculty and staff:

- Acquire additional education in topics in race, racism, ethical and racial issues, and other DEI-related subjects to assist with developing a critical-racial consciousness
- Continue to incorporate more conversations related to topics of DEI, racism, and ethnic discrimination in the classroom and fieldwork settings
- Provide simulated or real-life hands-on opportunities and experiences to work with people of color within the community
- Teach students how to appropriately behave and respond to racism and ethnic discriminatory situations
- Create program curriculums that focus on DEI and anti-racism content
- Host support groups with diverse people to encourage mentorship between students, practitioners, and community members
- Diversify content to include images, perspectives, and stories of people of color

These suggested implications may help better prepare students to promote access to services and serve the community with respect, understanding, and empathy. Acquiring additional education and developing a critical-racial consciousness are the first steps for occupational therapy practitioners and academic faculty to take before providing appropriate evidence-based resources, support, and programming for students attending entry-level and post-professional occupational therapy programs.

Conclusion

This study highlighted the need for continued classroom conversations and courses dedicated to DEI and anti-racism with application and hands-on opportunities incorporated within the curriculum. Classroom discussions related to race, racism, and ethnic discrimination are the first step and essential to promote racial literacy within the profession. The findings of this study were based on students' self-reports of race-related experiences in educational settings throughout their lifetime that included their experiences in occupational therapy programs. It is important that policies, courses, and discussions regarding race, racism, and ethnic discrimination are incorporated while also ensuring that there are relevant supports for students who have experienced adverse race-related events. These continued dialogues and curriculum changes will provide personal and professional growth which ultimately will impact the effectiveness of providing OT services in diverse practice settings.

References

Alamri, W. A. (2019). Effectiveness of qualitative research methods: Interviews and diaries. *International Journal of English and Cultural Studies, 2*(1), 65-70. https://doi.org/10.11114/ijecs.v2i1.4302

American Occupational Therapy Association. (2020a). *2019 workforce & salary survey.* https://library.aota.org/AOTA-Workforce-Salary-Survey-2019-members/1

American Occupational Therapy Association. (2020b). Educator's guide for addressing cultural awareness, humility, and dexterity in occupational therapy curricula. *American Journal of Occupational Therapy, 74.* https://doi.org/10.5014/ajot.2020.74S3005

Beagan, B. L. & Chacala, A. (2022). Culture and diversity among occupational therapists in Ireland: When the therapist is the 'diverse' one. *British Journal of Occupational Therapy, 75*(3), 144-151. https://doi.org/10.4276/030802212X13311219571828

Beagan, B. L. & Etowa, J. (2009). The impact of everyday racism on the occupations of African Canadian women. *Canadian Journal of Occupational Therapy, 76*(4), 285-293. https://doi.org/10.1177/000841740907600407

Beagan, B. L., Sibbald, K. R., Bizzeth, S. R., & Pride, T. M. (2022). Systemic racism in Canadian occupational therapy: A qualitative study with therapists. *Canadian Journal of Occupational Therapy, 89*(1), 51-61. https://doi.org/10.1177/00084174211066676

Blume, A. W., Lovato, L. V., Thyken, B. N., & Denny, N. (2012). The relationship of microaggressions with alcohol use and anxiety among ethnic minority college students in a historically White institution. *Cultural Diversity and Ethnic Minority Psychology, 18*(1), 45–54. https://doi.org/10.1037/a0025457

Bowman, N. A., & Smedley, C. T. (2013). The forgotten minority: Examining religious affiliation and university satisfaction. *Higher Education, 65*, 745-760. http://dx.doi.org/10.1007/s10734-012-9574-8

Braun, V., Clarke, V., Boulton, E., Davey, L., & McEvoy, C. (2021). The online survey as a qualitative research tool. *International Journal of Social Research Methodology, 24*(6), 641-654. https://doi.org/10.1080/13645579.2020.1805550

Braveman, P. A., Arkin, E., Proctor, D., Kauh, T., & Holm, N. (2022). Systemic and structural racism: Definitions, examples, health damages, and approaches to dismantling. *Health Affairs, 41*(2), 171-178. https://doi.org/10.1377/hlthaff.2021.01394

Brondolo, E., Kelly, K. P., Coakley, V., Gordon, T., Thompson, S., Levy, E., Cassells, A., Tobin, J. N., Sweeney, M., & Contrada, R. J. (2005). The Perceived Ethnic Discrimination Questionnaire: Development and preliminary validation of a community version. *Journal of Applied Social Psychology, 35*(2), 335–365. https://doi.org/10.1111/j.1559-1816.2005.tb02124.x

Brown, D. L., Rosnick, C. B., & Segrist, D. J. (2017). Internalized racial oppression and higher education values: The mediational role of academic locus of control among college African American men and women. *Journal of Black Psychology, 43*(4), 358–380. https://doi.org/10.1177/0095798416641865

Brown, K., Lamont, A., Do, A., & Schoessow, K. (2021). The issue is increasing racial and ethnic diversity in occupational therapy education: Accreditation Council for Occupational Therapy Education (ACOTE®) standards. *American Journal of Occupational Therapy, 75*. https://doi.org/10.5014/ajot.2021.047746

Cambridge University Press. (2022). *Sinophobia.* Cambridge dictionary. https://dictionary.cambridge.org/us/dictionary/english/sinophobia

Carter, R. T. (2007). Racism and psychological and emotional injury: Recognizing and assessing race-based traumatic stress. *The Counseling Psychologist, 35*(1), 13-105. https://doi.org/10.1177/0011000006292033

Carter, R. T., Kirkinis, K., & Johnson, V. E. (2020). Relationships between trauma symptoms and race-based traumatic stress. *Traumatology, 26*(1), 11-18. https://doi.org/10.1037/trm0000217

Chávez-Moreno, L. C. (2022). Critiquing racial literacy: Presenting a continuum of racial literacies. *Educational Researcher, 51*(7), 481-488. https://doi.org/10.3102/0013189X221093365

Colaianni, 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

Contrada, R. J., Ashmore, R. D., Gary, M. L., Coups, E., Egeth, J. D., Sewell, A., Ewell, K., Goyal, T. M., & Chasse, V. (2000). Ethnicity-related sources of stress and their effects on well-being. *Current Directions in Psychological Science*, *9*(4), 136–139. https://doi.org/10.1111/1467-8721.00078

Creswell, J. W. & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage Publications.

DeAngelis, T. (2007). Concept mapping: Is a picture worth a thousand words? *Education Special Interest Section Quarterly, 17(*3), 1-4.

Dedoose. (2022). *What makes Dedoose different?* https://www.dedoose.com/

Del Toro, J., & Hughes, D. (2020). Trajectories of discrimination across the college years: Associations with academic, psychological, and physical adjustment outcomes. *Journal of Youth & Adolescence*, *49*(4), 772–789. https://doi.org/10.1007/s10964-019-01147-3

DiAngelo, R. (2011). White fragility. *International Journal of Critical Pedagogy, 3*(3), 54-70. https://libjournal.uncg.edu/ijcp/article/view/249

English, D., Lambert, S. F., & Ialongo, N. S. (2016). Adding to the education debt: Depressive symptoms mediate the association between racial discrimination and academic performance in African Americans. *Journal of School Psychology*, *57*, 29–40. https://doi.org/10.1016/j.jsp.2016.05.007

Evans, A. M., Hemmings, C., Burkhalter, C., & Lacy, V. (2015). Responding to race related trauma: Counseling and research recommendations to promote post-traumatic growth when counseling African American males. *Journal of Counselor Preparation and Supervision, 8*(1). https://doi.org/10.7729/81.1085

Federal Bureau of Investigation. (2020). *Crime data explorer.* Retrieved November 2, 2021, from https://crime-data-explorer.fr.cloud.gov/pages/explorer/crime/hate-crime

Ford, A. R., Smith, D. L., & Banister, G. E. (2021). Recruitment and retention of occupational therapy practitioners and students of color: A qualitative study. *American Journal of Occupational Therapy, 75*. https://doi.org/10.5014/ajot.2020.039446

Franklin, A. J., Boyd-Franklin, N., & Kelly, S. (2006). Racism and invisibility: Race-related stress, emotional abuse and psychological trauma for people of color. *Journal of Emotional Abuse, 6*(2/3), 9–30. https://doi.org/10.1300/J135v06n02_02

Franklin, J. (2016). Racial microaggression, racial battle fatigue, and racism-related stress in higher education. *Journal of Student Affairs at New York University, 12*(44), 44-55. https://www.jeremyfranklin.org/s/Franklin-J-Racial-Microaggressions-Racial-Battle-Fatigue-and-Racism-Related-Stress-in-Higher-Educati.pdf

Gill, P., Stewart, K., Treasure, E., & Chadwick, B. (2008). Methods of data collection in qualitative research: Interviews and focus groups. *British Dental Journal, 204*(6), 291-295. https://doi.org/10.1038/bdj.2008.192

Grenier, M-L. (2020). Cultural competency and the reproduction of white supremacy in occupational therapy education. *Health Education Journal, 79*(6), 633-644. https://doi.org/10.1177/0017896920902515

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

Hargons, C. N., Malone, N., Montique, C., Dogan, J., Stuck, J., Meiller, C., Sanchez, A., Sullivan, Q.-A., Bohmer, C., Curvey, R., Woods, I., Jr., Tyler, K., Oluokun, J., & Stevens-Watkins, D. (2021, July 22). "White people stress me out all the time": Black students define racial trauma. *Cultural Diversity and Ethnic Minority Psychology, 28*(1), 49-57. https://doi.org/10.1037/cdp0000351

Hemmings, C., & Evans, A. M. (2018). Identifying and treating race-based trauma in counseling. *Journal of Multicultural Counseling and Development, 46*(1), 20-39. https://doi.org/10.1002/jmcd.12090

Hernandez, J. (2021, September 1). *Hate crimes reach the highest level in more than a decade.* https://www.npr.org/2021/08/31/1032932257/hate-crimes-reach-the-highest-level-in-more-than-a-decade

Hope, E. C., Skoog, A. B., & Jagers, R. J. (2015). "It'll never be the White kids, It'll always be us": Black high school students' evolving critical analysis of racial discrimination and inequity in schools. *Journal of Adolescent Research, 30*(1), 83–112. https://doi.org/10.1177/0743558414550688

Hswen, Y., Xu, X., Hing, A., Hawkins, J. B., Brownstein, J. S., & Gee, G. C. (2021). Association of "#covid19" versus "#chinesevirus" with Anti-Asian sentiments on Twitter: March 9–23, 2020. *American Journal of Public Health, 111*(5), 956-964. https://doi.org/10.2105/AJPH.2021.306154

Hughes, N., Norville, S., Chan, R., Arunthavarajah, R., Armena, D., Hosseinpour, N., Smith, M., & Nixon, S. A. (2021). Exploring how racism structures Canadian physical therapy programs: Counter-stories from racialized students. *Journal of Humanities in Rehabilitation.* https://www.jhrehab.org/2019/11/14/exploring-how-racism-structures-canadian-physical-therapy-programs-counter-stories-from-racialized-students/

IBM Corp. (2021). IBM SPSS Statistics for Macintosh, Version 28.0. Armonk, NY: IBM Corp. [Computer software].

Johnson, K. R., & Lavalley, R. (2021). From racialized think-pieces towards 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

Johnson, K. R., Kirby, A., Washington, S., Lavalley, R., & Faison, T. (2022). Linking antiracist action from the classroom to practice. *American Journal of Occupational Therapy, 76*(5), 1–5. https://doi.org/10.5014/ajot.2022.050054

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

Kurtzman, L. (2021, March 18). *Trump's 'Chinese Virus' tweet linked to rise of anti-Asian hashtags on Twitter.* University of California, San Francisco. https://www.ucsf.edu/news/2021/03/420081/trumps-chinese-virus-tweet-linked-rise-anti-asian-hashtags-twitter

Kwate, N. O. A., & Goodman, M. S. (2015). Cross-sectional and longitudinal effects of racism on mental health among residents of Black neighborhoods in New York City. *American Journal of Public Health*, *105*(4), 711–718. https://doi.org/10.2105/AJPH.2014.302243

Lavalley, R., & Johnson K. R. (2020). 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

Lowe, S. M., Okubo, Y., & Reilly, M. F. (2012). A qualitative inquiry into racism, trauma, and coping: Implications for supporting victims of racism. *Professional Psychology: Research and Practice*, *43*(3), 190–198. https://doi.org/10.1037/a0026501

Lucas, C., & Washington, S. (2020). *Understanding systemic racism in the United States: Educating our students and ourselves.* American Occupational Therapy Association. https://www.aota.org/-/media/Corporate/Files/Publications/CE-Articles/CEA_October_2020.pdf

Lucidchart. (2022). *Where seeing becomes doing.* https://www.lucidchart.com/pages/

Mayrl, D. & Saperstein, A. (2013). When white people report racial discrimination: The role of region, religion, and politics. *Social Science Research, 42*(2), 742-754. https://doi.org/10.1016/j.ssresearch.2012.12.007

Murray-García, J. L., Harrell, S., García, J. A., Gizzi, E., & Simms-Mackey, P. (2014). Dialogue as skill: Training a health professions workforce that can talk about race and racism. *American Journal of Orthopsychiatry, 84*(5), 590–596. https://doi.org/10.1037/ort0000026

Neblett, E. W., Philip, C. L., Cogburn, C. D., & Sellers, R. M. (2006). African American adolescents' discrimination experiences and academic achievement: Racial socialization as a cultural compensatory and protective factor. *Journal of Black Psychology*, *32*(2), 199–218. https://doi.org/10.1177/0095798406287072

Ogunyemi, D., Clare, C., Astudillo, Y. M., Marseille, M., Manu, E., & Kim, S. (2020). Microaggressions in the learning environment: A systematic review. *Journal of Diversity in Higher Education, 13*(2), 97–119. https://doi.org/10.1037/dhe0000107

Parker, K., Horowitz, J. M., & Anderson, M. (2020, June 12). *Amid protests, majorities across racial and ethnic groups express support for the Black Lives Matter movement.* Pew Research Center. https://www.pewresearch.org/social-trends/2020/06/12/amid-protests-majorities-across-racial-and-ethnic-groups-express-support-for-the-black-lives-matter-movement/

Pasque, P. A., Chesler, M. A., Charbeneau, J., & Carlson, C. (2013). Pedagogical approaches to student racial conflict in the classroom. *Journal of Diversity in Higher Education*, *6*(1), 1–16. https://doi.org/10.1037/a0031695

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*. https://doi.org/10.5014/ajot.2021.048306

Saw, A., Yellow Horse, A. J., & Jeung, R. (2021). *Stop AAPI hate follow-up survey.* Stop AAPI Hate. https://stopaapihate.org/wp-content/uploads/2021/05/Stop-AAPI-Hate-Mental-Health-Report-210527.pdf

Shah, G. H., Rochani, H. D., Telfair, J., Ayangunna, E., & Skuraton, G. (2021). College students' experiences of race-related bias or hatred in their lifetimes and COVID-19 era. *Journal of Public Health Management & Practice*, *27*(3), 258–267. https://doi.org/10.1097/PHH.0000000000001351

St. Mary, J., Calhoun, M., Tejada, J., & Jenson, J. M. (2018). Perceptions of academic achievement and educational opportunities among Black and African American youth. *Child & Adolescent Social Work Journal*, *35*(5), 499–509. https://doi.org/10.1007/s10560-018-0538-4

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

Stevens, C., Liu, C. H., & Chen, J. A. (2018). Racial/ethnic disparities in U.S. college students' experience: Discrimination as an impediment to academic performance. *Journal of American College Health*, *66*(7), 665–673. https://doi.org/10.1080/07448481.2018.1452745

Substance Abuse and Mental Health Services Administration. (2014, July). *SAMHSA's concepts of trauma and guidance for a trauma-informed approach.* https://store.samhsa.gov/sites/default/files/d7/priv/sma14-4884.pdf

Sue, D. W. (2013). Race talk: The psychology of racial dialogues. *American Psychologist*, *68*(8), 663–672. https://0-doi-org.catalog.llu.edu/10.1037/a0033681

Sue, D. W., Rivera, D. P., Watkins, N. L., Kim, R. H., Kim, S., & Williams, C. D. (2011). Racial dialogues: Challenges faculty of color face in the classroom. *Cultural Diversity and Ethnic Minority Psychology*, *17*(3), 331–340. https://doi.org/10.1037/a0024190

Taff, D. S., & Blash, D. (2017). Diversity and inclusion in occupational therapy: Where we are, where we must go. *Occupational Therapy in Health Care, 31*(1), 72-83, https://doi.org/10.1080/07380577.2016.1270479

Trauma-Informed Care Implementation Resource Center. (2021). *What is trauma-informed care?* Center for Health Care Strategies. https://www.traumainformedcare.chcs.org/what-is-trauma-informed-care/

Wells, E., Adams, B., & Wheeler, L. G. (2021). The impact of trauma on graduate occupational therapy students: Trauma-informed implications for educators. *Journal of Occupational Therapy Education, 5*(4). https://doi.org/10.26681/jote.2021.050403

Wen, J., Aston, J., Liu, X., & Ying, T. (2020). Effects of misleading media coverage on public health crisis: A case of the 2019 novel coronavirus outbreak in China. *Anatolia: An International Journal of Tourism and Hospitality Research, 31*(2), 331-336. https://doi.org/10.1080/13032917.2020.1730621

Williams, T. R., Walker, T. L., & Wyatt, W. N. (2021). Conceptualizing racism through a systemic trauma lens: Impacts on Black college students. *Journal of Psychotherapy Integration, 32*(1), 49-63. https://doi.org/10.1037/int0000206

Wong, B., Elmorally, R., Copsey-Blake, M., Highwood, E., & Singarayer, J. (2020). Is race still relevant? Student perceptions and experiences of racism in higher education. *Cambridge Journal of Education, 51*(3), 359-375. https://doi.org/10.1080/0305764X.2020.1831441

World Health Organization. (2020, July 30). *Timeline: WHO's COVID-19 response.* https://www.who.int/emergencies/diseases/novel-coronavirus-2019/interactive-timeline

Yared, H., Grové, C., & Chapman, D. (2020). How does race play out in schools? A scoping review and thematic analysis of racial issues in Australian schools. *Social Psychology of Education: An International Journal*, *23*(6), 1505–1538. https://doi.org/10.1007/s11218-020-09589-5

Yellow Horse, A. J., Jeung, R., Lim, R., Tang, B., Im, M., Higashiyama, L., Schweng, L., & Chen, M. (2021, August 8). *Stop AAPI hate national report.* Stop AAPI Hate. https://stopaapihate.org/wp-content/uploads/2021/08/Stop-AAPI-Hate-National-Report-Final.pdf