

Examining Diversity and Inclusion in Occupational Therapy Textbooks: A Critical Analysis of Race, Gender, and Disability Representation



Taylor Choi, OTS; Gabrielle Hershowitz, OTS; Alisa Salbert, OTS; Anna Todd, OTS; Madeline Tawil, OTS Efekona Nuwere, Ed.D, MPH, OTR/L, Karrianna L. Iseminger, PhD, OTD, OTR/L, CHT

Objective

To what extent is race, gender, and disability represented in primary textbooks in occupational therapy education?

Introduction

The lack of racial, ethnic, gender, and disability representation in textbooks and journals used to train future medical, nursing, biomedical, and allied health professionals is well-documented (Massie et al., 2021; Pusey-Reid et al., 2023; Becker & Nilsson, 2021; Mosleh & Gibson, 2022). Occupational therapy textbooks disseminate the official knowledge of the profession and communicate its values. Textbooks frequently serve as students' first exposure to conditions that impact occupational performance, laying the groundwork for understanding - and biases that can shape future client interactions.

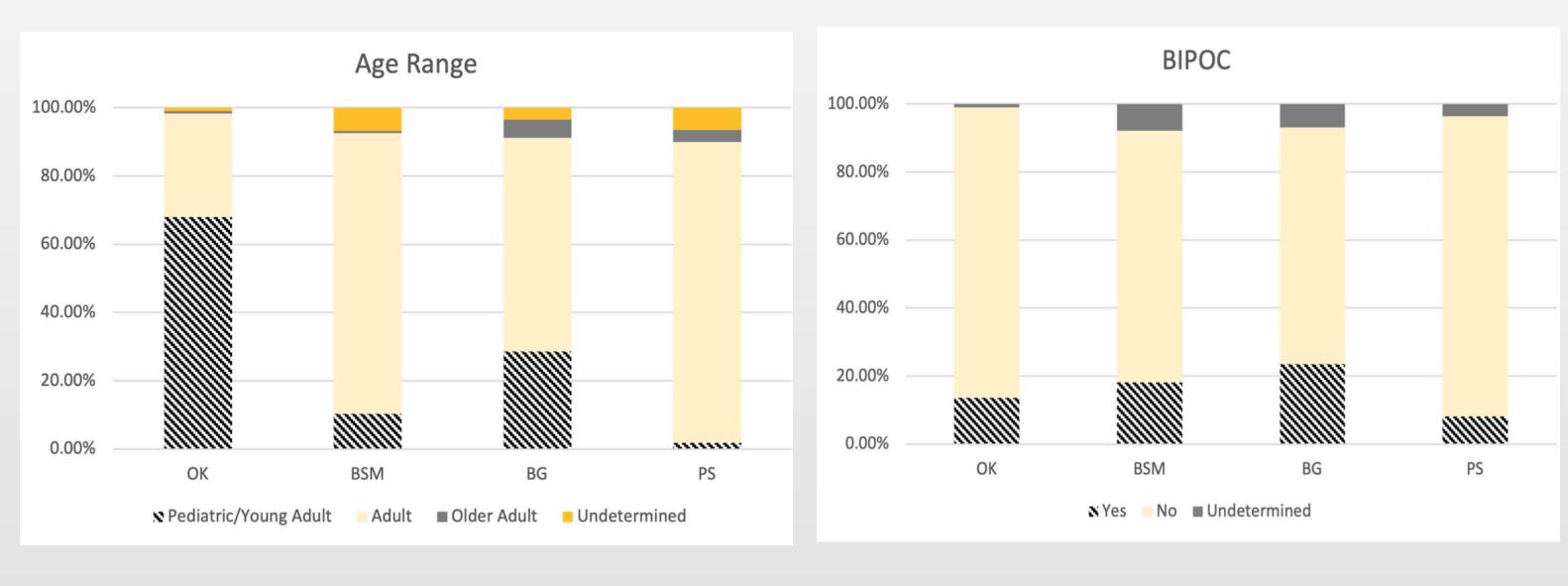
Underrepresented and essentialized depictions of minoritized groups can perpetuate implicit and explicit biases among future providers learning from these textbooks. To foster understanding and reduce bias, textbooks and other educational materials should feature images that represent the diverse range of clients we serve in the multicultural settings we encounter them in. These images should also reflect the social and environmental factors that support or hinder occupational engagement.

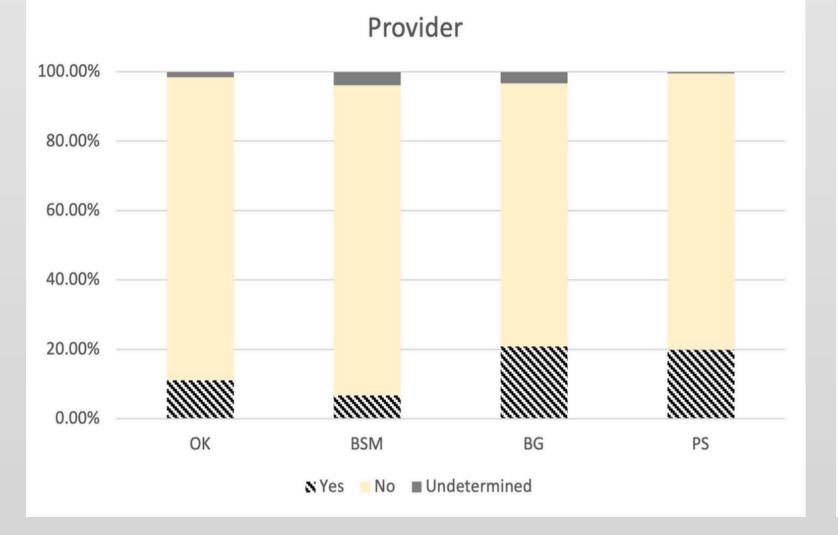
Methodology

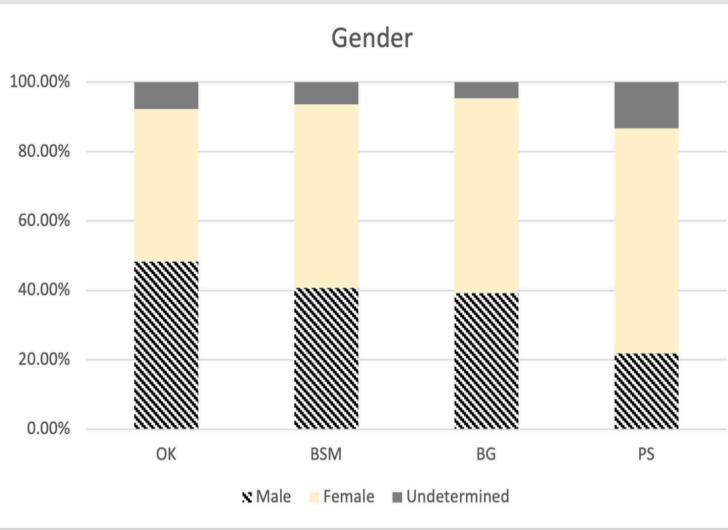
Extending on Cena, McGruder, & Tomlin's (2002) examination of representations of race, ethnicity, and class AJOT articles, a preliminary quantitative content analysis critically examined images imbued with racialized, gendered, and disability identities in four textbooks. These textbooks were among the most referenced by NBCOT OTR item writers (NBCOT, 2020), highlighting their centrality in occupational therapy education. A total of 1148 images containing 2429 individuals were descriptively analyzed for markers of race, gender, disability, age, and provider status.

Results

We identified the distribution of 5 demographic characteristics in the textbooks and found that, on average, 82.17% of individuals were not providers, 81.47% were not BIPOC individuals, 55.21% were female, 64.31% were adults, and 79.25% had no observable disability or mobility impairment. Undetermined, which accounted for 24.13% of the individuals, was a variable because of the ambiguity in observable characteristics or quality of the image made the assessment unclear. A textbooklevel analysis reveals the distributions of the demographic characteristics in the charts below.

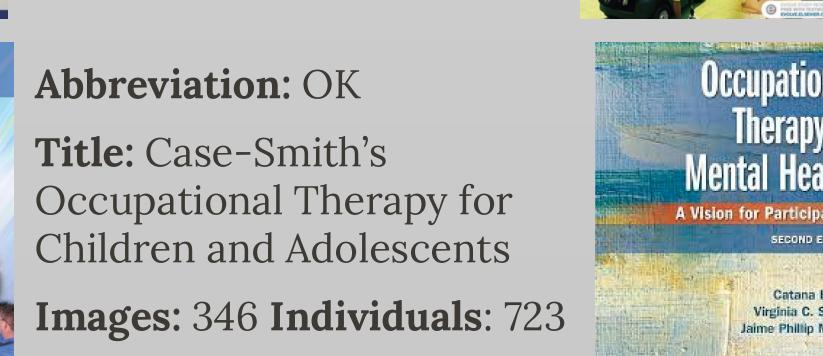






Abbreviation: BG Title: Willard & Spackman's Occupational Therapy

Images: 182 Individuals: 571



Abbreviation: BSM

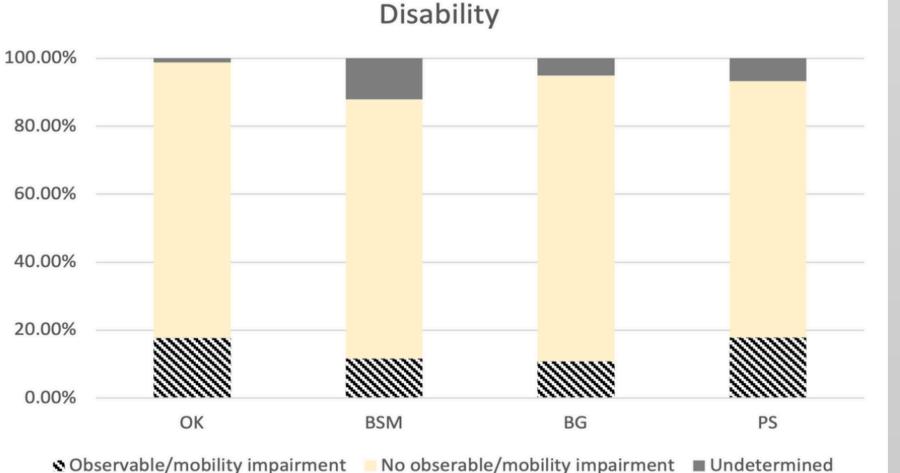
Title: Occupational Therapy in Mental Health: A vision for Participation

Images: 88 **Individuals**: 282

Abbreviation: PS

Title: Pedretti's Occupational Therapy: Practice Skills for Physical Dysfunction

Images: 532 **Individuals**: 853



Inter-rater reliability was high overall (ICC = 0.904), with age, race/ethnicity, and gender being the most reliably rated categories, while provider status and disability showed more variation. The study also found that images without faces or featuring anatomical drawings were more challenging to categorize.

Discussion

Across all textbooks sampled, 69.7% - 88.39% of individuals depicted in images were coded as white, while Black, Indigenous, and other persons of color (BIPOC) were represented 8.09% - 23.47% of the time. This finding aligns with previous U.S. studies documenting the underrepresentation of minoritized groups in medical, nursing, biomedical, and allied health textbooks (Massie et al., 2021; Pusey-Ried et al., 2023; Becker & Nilsson, 2021; Mosleh & Gibson, 2022). On average, more females were represented in the textbooks than males (43.98% -64.83% vs. 21.92% - 48.27%), which is inconsistent with similar studies that indicate predominantly male representation of gender in textbook images (Kalantari et al., 2022; Parker et al., 2017). One explanation to this finding could be because OT is a female dominated profession, however, on average most of the individuals represented were not providers (75.83% - 89.36%).

Implications

The underrepresentation of BIPOC groups within textbooks used to educate future occupational therapists raises concerns about the possible downstream influences on client interactions and patient care. The findings demonstrate the majority of images are of white females, which is reflective of the profession, but not of the heterogeneous clients served. Failure to portray the full diversity of the U.S. population is one of many factors that may contribute to the inadequate preparation of students for the range of people they are likely to encounter in fieldwork and practice. Whether the proportion of images of racialized groups should be representative of the general population or otherwise distributed can be debated. However, the U.S. population continues to racially and ethnically diversify toward a majority-minority nation. In preparing students for future practice, occupational therapy programs must consider the extent to which educational materials reflect the realities of practice and the espoused values of the profession.

References

Massie, J. P., Cho, D. Y., Kneib, C. J., Sousa, J. D., Morrison, S. D., & Friedrich, J. B. (2021). A picture of modern medicine: Race and visual representation in medical literature. Journal of the National Medical Association, 113(1), 88-94. https://doi.org/10.1016/j.jnma.2020.07.013 Pusey-Reid, E., Quinn, L. W., Wong, J., & Wucherpfennig, A. (2023). Representation of dark skin tones in foundational nursing textbooks: An image

analysis. Nurse Education Today, 130, 105927. Becker, M. L., & Nilsson, M. R. (2021). College chemistry textbooks fail on gender representation. Journal of Chemical Education, 98(4), 1146-1151.

https://doi.org/10.1021/acs.jchemed.0c01037 Mosleh, D., & Gibson, B. E. (2022). Abnormal-becoming- normal: Conceptualizations of childhood disability in children's rehabilitation textbooks.

Scandinavian Journal of Disability Research, 24(1). https://doi.org/10.16993/sjdr.877 Cena, L., McGruder, J., & Tomlin, G. (2002). Representations of race, ethnicity, and social class in case examples in The American Journal of Occupational Therapy. The American Journal of Occupational Therapy:

Official Publication of the American Occupational Therapy Association, 56(2), 130–139. https://doi.org/10.5014/ajot.56.2.130

Curriculum Textbook and Peer-Reviewed Journal https://www.nbcot.org/-/media/PDFs/2020_Textbook_Report_OTR.pdf

Shivega, W. G., McLawhorn, M. M., Tejiram, S., Travis, T. E., Shupp, J. W., & Johnson, L. S. (2021). Representation matters: An assessment of diversity in current major textbooks on burn care. Journal of Burn Care & Research: Official Publication of the American Burn Association, 42(4), 617–620. https://doi.org/10.1093/jbcr/irab066

Kalantari, A., Alvarez, A., Battaglioli, N., Chung, A., Cooney, R., Boehmer, S. J., Nwabueze, A., & Gottlieb, M. (2022). Sex and race visual representation in emergency medicine textbooks and the hidden curriculum. AEM Education and Training, 6(3), e10743. https://doi.org/10.1002/aet2.10743 Parker, R., Larkin, T., & Cockburn, J. (2017). A visual analysis of gender bias in contemporary anatomy textbooks. Social Science & Medicine, 180, 106-113. https://doi.org/10.1016/j.socscimed.2017.03.032

