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Perspective Taking in Virtual Reality: Addressing Gender Bias in STEM

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Abstract

Altering an individual's identity during virtual tasks, such that it is incongruent with their own identity, can reduce unconscious biases and increase empathy and prosocial behavior. While such virtual embodiment has been investigated for race, age, and socioeconomic status, the question remains whether immersive perspective taking reduces implicit gender bias. Accordingly, we investigated the effect of gendered embodiment on gender bias related to the underrepresentation of women in science, technology, engineering, and math fields. Undergraduate students (N=65) undertook a simulated virtual interview task, which included the rating and selection of male and female candidates. Females were significantly more empathetic than males. Greater empathy predicted higher candidate ratings, except for competence of the female candidate. Preliminary findings establish foundations for future comparative studies and contribute to elucidating the nature of empathy during and after virtual perspective taking, such that it may have a greater impact on males for modulating gender bias.