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The field of Computer Science (CS) has long struggled with diversity, and Black, Latinx, Native American and female scientists are critically underrepresented (Larson, 2014). This underrepresentation is partially due to negative stereotypes that can impede the overall performance of women and certain minority groups (Steele et al., 1997). When a member of an underrepresented group (URG) in CS feels inferior to the majority due to prevalent stereotypes about their abilities, they experience a situational circumstance known as stereotype threat, in which intellectual performance is hindered by one's concerns about reinforcing stereotypes associated with their minority group (Inzlicht & Ben-Zeev, 2000). These stereotypes may also feed into the way others within the field perceive individuals from URGs (Ben-Zeev et al., 2017). The present study examines stereotype threat in two CS programs at a diverse, urban university: a traditional CS major program, and a novel CS minor program created specifically to advance computer literacy while diversifying minority representation within CS.

Data was obtained by distributing a link to a Qualtrics questionnaire to students enrolled in introductory CS classes. The questionnaire contained basic demographic questions and items assessing stereotype threat from a measure created by Ben-Zeev and colleagues (2017) and derived from Shapiro (2011). A total of 92 participants completed the survey.

A significant difference was found between the self-reported experience of stereotype threat for men and women in the sample ($t(91) = 2.72, p = .008$) with women ($M = 8.94, SD = 5.68$) reporting a higher level of stereotype threat than men ($M = 6.06, SD = 4.41$) across all students. However, no significant difference was found between the experience of stereotype threat for students in the CS major courses (primarily Asian and White males; $M = 6.69, SD = 4.81$) and students in the minor program (exclusively women and/or Black, Latinx, or Native American students; $M = 8.28, SD = 5.69$), suggesting that the minor program may serve a protective function against stereotype threat for students from URGs. No significant difference was found between stereotype threat for women in the minor program and women in the CS major, although the power for this analysis was low due to sample size.

Previous research has demonstrated that stereotype threat arising from inequalities or representation within an academic context can lead to poor academic outcomes for URGs (Steele et al., 1997). Research has also shown that awareness of affirming stereotypes associated with one's minority group can result in impaired academic performance, as well (Inzlicht & Ben-Zeev, 2000). The results from the current study highlight issues surrounding the continued underrepresentation of URGs within traditional CS programs, as well as the potential of programs aimed at supported URG students to cultivate an educational environment that can help reduce stereotype threat and support the academic success of URGs. Aspects of future research could potentially involve inquiry into inequalities within CS when considering socioeconomic and generational disparities among minority groups. Expanded discussion, limitations, and implications for educational practice will be presented.