

Same-ethnicity mentors boost students' commitment to STEM careers

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Youths from African American, Native American, and Latino backgrounds are underrepresented in the fields of science, technology, engineering, and math (known as STEM subjects). Although having a mentor of the same ethnicity is widely seen as one way to engage these youths in STEM subjects, no study has asked these young people if they consider having a mentor who shares their background to be important. Now a new study of African American and Latino youths has found that having a "matched" mentor does matter, but only if having such a mentor is considered important by the adolescent.

The short-term [longitudinal study](#) was carried out by researchers at the University of Minnesota and the University of California, Santa Cruz. It appears in the journal *Child Development*.

Ethnic-minority teens' ability to imagine themselves in STEM careers could be hindered by the comparatively small number of ethnic-minority teachers and professors in these fields. This study sought to answer the question of whether having a matched-background mentor would help overcome that perceived barrier.

The researchers surveyed 265 [high school students](#) who were attending a four-week summer residential science camp in California called COSMOS—the California State Summer School for Mathematics and Sciences. The teens were ethnically diverse and very high achieving—most had GPAs at or above 4.0; about a quarter were from underrepresented minorities (African American and Latino).

Students filled out surveys at the start and end of camp, answering questions about their prior contact with [mentors](#) of the same background, their desire to have a mentor who shared their ethnicity, and their feelings about being a science student. Teens had contact with mentors from a variety of ethnic backgrounds throughout the course of the camp.

The study's results revealed a lot of variability in adolescents' contact with same-ethnicity mentors and how important it is to them to have such mentors. About 65 percent of underrepresented students said they had such a preference, compared with 45 percent of White students. While the study confirmed the assumption that ethnic minorities prefer to have mentors who share their background, it also suggested that there are individual differences in students' desires.

Further, taking preference into account mattered. Among those students who said having a shared-background mentor was important who had contact with such a mentor during the camp, feelings of belonging as science students increased.

"Seeing and interacting with successful figures enables adolescents to envision themselves in similar roles, thereby strengthening their identities," explains Moin Syed, assistant professor of psychology at the University of Minnesota, who led the study. "Having a strong sense of identity as a science student may be particularly important for underrepresented minority students, given the immense barriers they experience to pursuing careers in STEM fields."

Mentoring programs that assign mentors on the basis of race and [ethnicity](#) should be sure to ask students about their preferences and matches should be made accordingly, suggests Syed. "Doing so may help maintain underrepresented students' interests in STEM fields."

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