

Female students just as successful as males in math and science, Asian Americans outperform all

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While compared to men, women continue to be underrepresented in math and science courses and careers, is this disparity a true reflection of male and female student ability? According to a study to be released tomorrow in *Psychology of Women Quarterly*, a SAGE journal, male and female students earn similar grades in math and science while Asian American students of both genders outperform all other races.

Researchers Nicole Else-Quest, Concetta Mineo and Ashley Higgins studied 367 White, African American, Latino/Latina, and Asian American 10th grade male and female students in math and science. The study results indicated that while male and [female adolescents](#) earned similar grades in math and science, Asian American students outperformed all other ethnic groups, with Asian American males in particular receiving the highest scores. Furthermore, the researchers found that Latino and African American [male students](#) received the lowest scores in math and science.

"Asian American male adolescents consistently demonstrated the highest achievement compared to other adolescents, mirroring the 'model minority' stereotype," the researchers wrote. "In contrast, the underachievement of Latino and [African American males](#) is a persistent and troubling trend."

The researchers also studied the students' perceptions of their abilities in

math and science. Male students reported a greater perception of their own ability in math as well as higher expectations of success, while female students reported greater value of science than their male counterparts. These findings did not vary across ethnicities.

The researchers also took into account the effects of family income and education on [school achievement](#). Still, self-concept, task value, and expectations of success were strong predictors of student achievement in math and science.

"Despite gender similarities in math and science achievement, female adolescents tend to believe their science, technology, engineering, and mathematics (STEM) abilities are just not as strong as those of their male classmates," says Professor Else-Quest, a lead author and developmental psychologist at the University of Maryland, Baltimore County. "We believe these attitudes are important in students' choices about persevering in math and science and pursuing STEM careers. Moreover, we need to expand our approach to this issue and study affective variables such as anxiety, boredom or apathy, enjoyment, and pride, given prior findings of the importance of these emotions in academic achievement contexts."

More information: "Math and Science Attitudes and Achievement at the Intersection of Gender and Ethnicity," in *Psychology of Women Quarterly*, 2013.

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