

High school math teachers may not make the grade when it comes to gender bias

22 March 2012

Do some high school teachers think math is harder for girls than boys? The authors of a new study say yes.

Researchers looked at student grades, [test scores](#) and how teachers rated their students' abilities. They found that while on average teachers rate [minority students](#) lower than their white male counterparts, these differences disappear once grades are taken into account. (Those findings are consistent with decades of research on the minority gap in [math achievement](#).) The new research, however, found bias against white girls that can't be explained by their [academic performance](#).

"This speaks to the presence of a subtle yet omnipresent [stereotype](#) in high [school classrooms](#): That math, comparatively speaking, is just easier for white males than it is for white females," says Catherine Rieggle-Crumb, a professor at the University of Texas at Austin and co-author of the study "Exploring Bias in Math Teachers' Perception of Students' Ability by Gender and Race/Ethnicity." The paper will appear in the April issue of *Gender & Society*.

Rieggle-Crumb and her co-author Melissa Humphries say they aren't dismissing the possibility that bias against minority students exists in high school math classrooms, but the patterns they found indicate a consistent bias in teacher ratings for white girls versus white boys. "Even with the same grades and the same test scores, the teachers are still ranking the girls as less good at math than the boys," says Rieggle-Crumb.

One reason for this may be that gender bias is so socially ingrained teachers may find it "hard to grasp and, therefore, hard to resist." Rieggle-Crumb says the misconception that white girls can't handle math persists "because the idea that men and women are different in this regard is considered natural, and not discriminatory." At the

same time, teachers may be more aware of race and ethnicity - and the problems of racial discrimination - than they are when it comes to gender.

"It is very likely that teachers are unaware of holding any kind of gender bias, and they are not consciously thinking about gender when assigning student ratings," says Rieggle-Crumb, who is working on a multi-year National Science Foundation grant studying how academic preparation in high school predicts students' entry into science, technology, engineering, and mathematics (STEM). "Yet the implicit nature of this bias suggests that it may be insidious and difficult to confront."

The research was drawn from the Education Longitudinal Study of 2002 (National Center of Education Statistics), which followed 15,000 U.S. students from their sophomore year of high school, into college and the work force. Earlier research on math bias has been very limited, with only a few elementary schools studied; it left virtually untouched the question of bias at the high school level - a time when students often make decisions about their future fields of study.

Bias against girls likely has ripple effects well beyond [high school](#). "If we continue to send young women the message that they aren't as good at math it's unlikely we'll be able to increase the number of women working in STEM fields," says Rieggle-Crumb.

Provided by Sociologists for Women in Society

APA citation: High school math teachers may not make the grade when it comes to gender bias (2012, March 22) retrieved 22 October 2019 from <https://phys.org/news/2012-03-high-school-math-teachers-grade.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.