

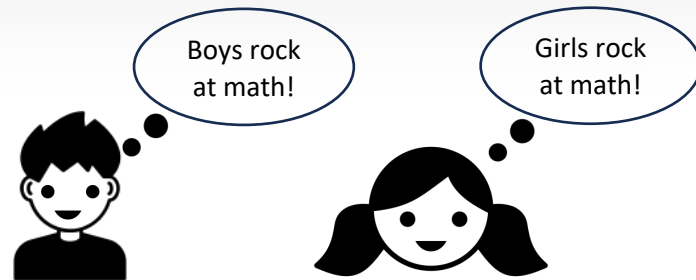
# By age 6, children think boys are better in **computer science, engineering, and physics.**

But **mathematics** is a different story.

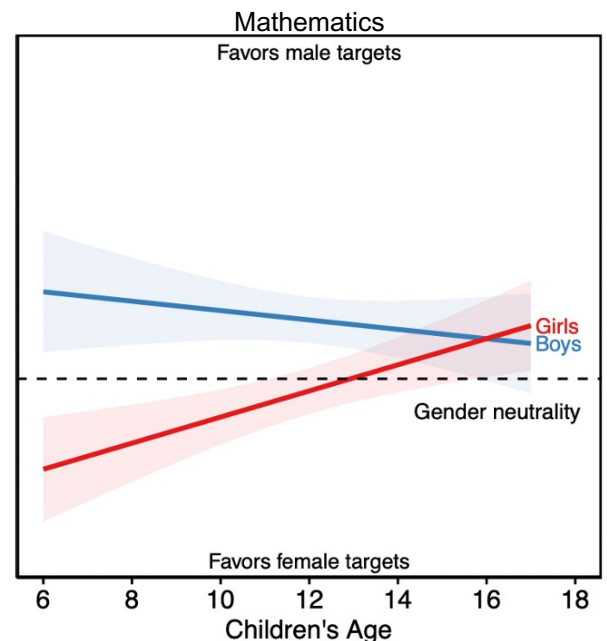
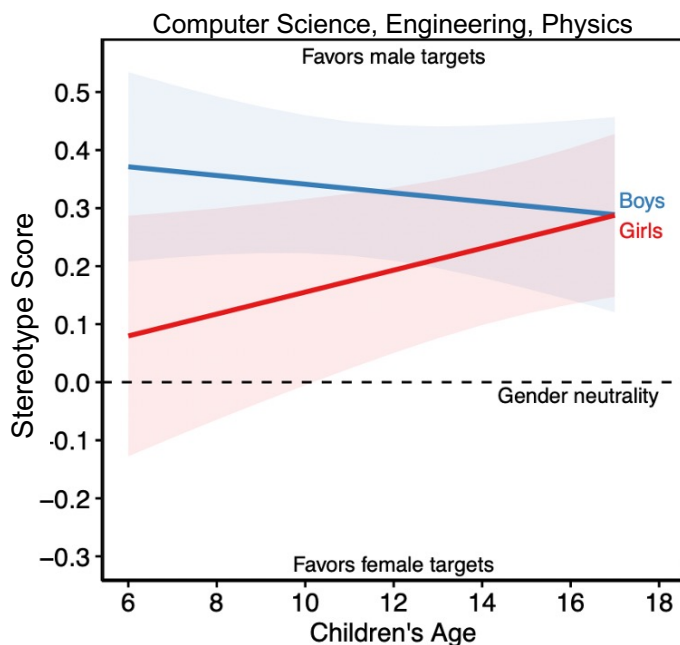
 [#1920401: The Development of Children's Gender Stereotypes About STEM Abilities: A Meta-Analysis](#)



**Result 1:** By age 6, both boys and girls strongly believe in **male superiority** in computer science, engineering, and physics ability.



**Result 2:** But for math ability, children only show **in-group bias** at age 6. These beliefs shift across age but still only **weakly** favor male ability at age 16.



## Methods

Systematic review

Meta-analysis

- Registered hypotheses and analysis plan on OSF.
- Screened more than 18,000 citations for eligibility.
- Found 98 eligible studies representing 145,000+ children.
- Spans four decades of data (1977–2020) and 31 nations.
- Up-to-date meta-analysis methods (e.g., robust variance estimation).

## Challenge Area

Dissemination

What are innovative but feasible ways to disseminate to (a) applied researchers interested in building on the findings or (b) STEM outreach organizations with gender-based programming?

David Miller, Courtney Tanenbaum, Jillian Lauer

←  [Preprint: bit.ly/45tY7Aq](https://bit.ly/45tY7Aq)

 [dimiller@air.org](mailto:dimiller@air.org)

 @davidimiller

