By age 6, children think boys are better in

computer science, engineering, and physics.

But mathematics is a different story.

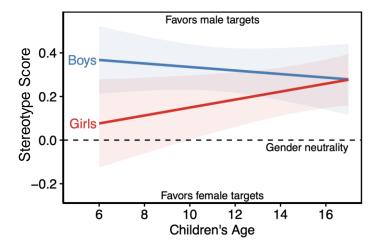


#1920401: The Development of Children's Gender Stereotypes About STEM Abilities: A Meta-Analysis

CS, Engineering, Physics



After age 6, girls **increasingly** believe with age in male superiority in computer science (CS), engineering, and physics ability.



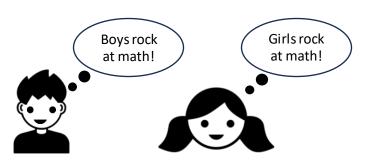
Methods

Systematic review

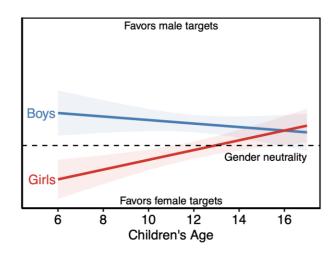
Meta-analysis

- Pregistered 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.
- · Latest meta-analysis methods (e.g., robust variance estimation).

Mathematics



For math, children just show in-group bias at age 6. These beliefs shift with age but still only weakly favor male ability at age 16.



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?











