## By age 6, children think boys are better in

# computer science, engineering, and physics.

But mathematics is a different story.



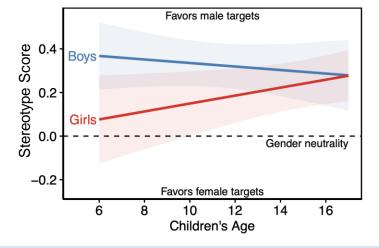


#1920401: The Development of Gender Stereotypes About STEM Abilities: A Meta-Analysis

## CS, Engineering, Physics



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



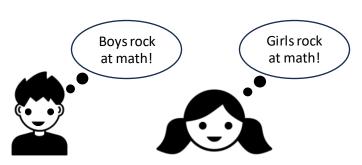
#### **Methods**

Systematic review

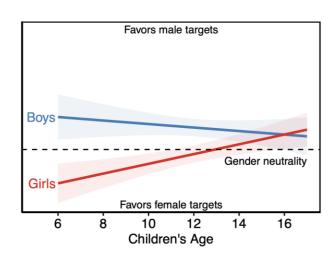
Meta-analysis

- 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?









