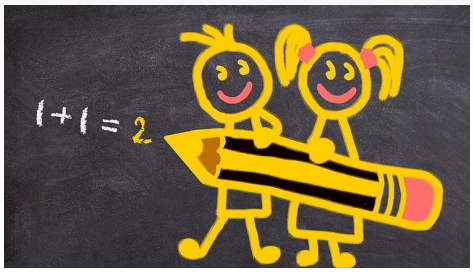
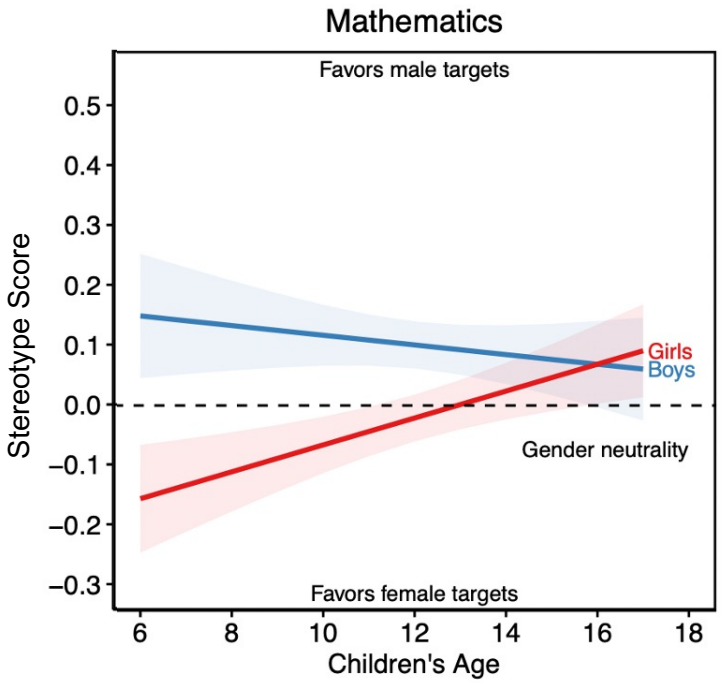
Children's Gender Stereotypes About Math Ability Are Weak on Average. But **Computer Science, Engineering, and Physics** Tell a Different Story.

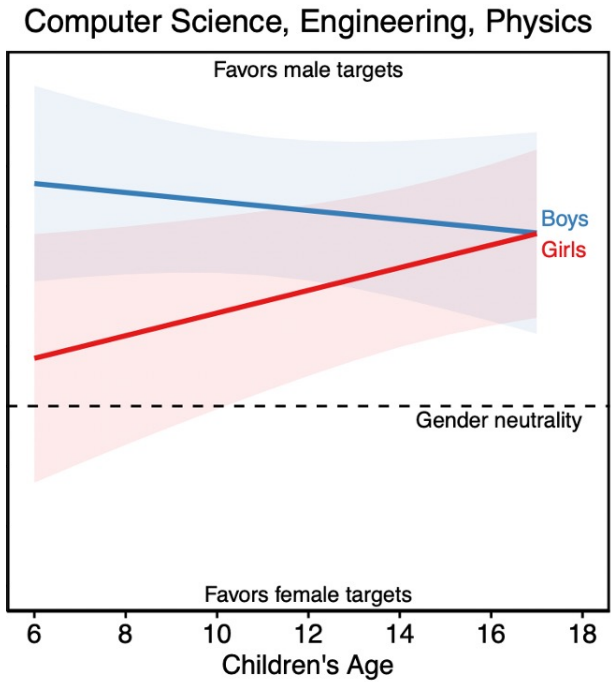
#1920401: The Development of Children's Gender Stereotypes About STEM Abilities: A Meta-Analysis



Result 1: For math stereotypes, young children show **in-group bias** at age 6. These beliefs shift across age but still only **weakly** favor male ability at age 16.

Result 2: But for computer science, engineering, and physics, both boys and girls strongly believe in **male superiority**, even at age 6.





Methods

Systematic review | Meta-analysis

- Pregistered hypotheses and analysis plan on Open Science Framework.
- 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.
- Used latest meta-analysis methods (e.g., robust variance estimation).

Current Challenge

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?

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