Do working memory deficits cause social problems in ADHD?

Crowdsourcing our experiment!
Executive functioning and social problems in ADHD

- **Overall EF**
  - Mixed evidence: Predicts some social variables but not others (Huang-Pollock et al., 2009)

- **Inhibitory control**
  - Mixed evidence: Predicts social problems in some studies (Bunford et al., 2014) but not others (Kofler et al., 2017; Tseng & Gau, 2013)

- **Set shifting**
  - No evidence (to our knowledge)

- **Working memory**
  - Consistent evidence: Predicts parent/teacher social skills ratings (Bunford et al., 2014; Kofler et al., 2011, 2016, 2017; Tseng & Gau, 2013)
  - BUT, correlational!
    - Causal? Epiphenomenal? Third variable explanations?

Miyake & Friedman (2012)
Testing for causality

- Experimental manipulations have been successful for demonstrating potential causal links between working memory deficits and inattentive behavior, hyperactivity, and reading problems in ADHD

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Testing for causality

• BUT, manipulating working memory load during computerized tasks not conducive to examining effects on DVs like social problems
Goals

• Develop dyadic social/cooperative tasks that are identical except for systematic differences in working memory demands

• Identify behavioral coding scheme to capture changes in prosocial and problematic social behavior across tasks
Crowdsourcing our experiment

Goals
- Manipulate WM demands
- Observe effects on social behavior

Questions
- Ideas for tasks?
- Coding scheme?
- Key considerations?