Discussion: Finding Female Inventions and Inventors

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Gender bias in innovation

Society loses out on promising inventions due to bias against...

- *Female* innovators
  - Taste-based gender discrimination
- *Female-oriented* innovations
  - Familiarity bias among (mostly male) evaluators
  - Lack of experience among (mostly male) commercializers

Supply-side intervention

Existing literature:

- Document bias
- Attempt to reduce bias

This study:

- **Encourage innovation by/for women**

Underlying mechanism

Why do we lack female(-oriented) innovations?

1. Women *underestimate* their innovation potential
   - Gender stereotypes
   - Lack of confidence
2. Women *correctly perceive* existence of bias against female(-oriented) inventions

→ Role models/featured examples address (1)
→ Are they effective re: (2)?

Addressing systemic causes

Possible interventions **more directly addressing bias:**

- EO or AA statement; *prioritize* female-specific topics
- Signal "women-friendly" evaluators

Current language ("looking for *unusual*, creative, and *overlooked* ideas") may dampen female-oriented treatment's effect

Is it welfare-improving?

- Women in RFP sample more likely to engage in commercialization activities outside experiment... *but their attempts may be unsuccessful*
- Female(-oriented) innovations yield patents... *but do not necessarily benefit innovators financially*

Identification challenges

Selection into treatment: those interested in commercialization more likely to open message

- If subject line/sender name same across treatments: those most responsive may never read subtle message inside
- If different subject/sender: cannot compare behavior conditional on opening across treatments

Spillovers via social media: make message individual-specific ("*you have been invited*") to limit sharing?

Sample selection

- Differential selection into owning a patent/business prior to intervention, by gender
- Definition of "high innovation potential" may reflect existing biases

$\rightarrow$ No threat to identification, but **may limit generalizability**

Statistical power concerns

- Primary outcome measure binary
- Relatively low expected effect size
- Uncertain e-mail opening rates
  - May be particularly low among women!
- Multiple comparisons:
  - Multiple outcomes of interest
  - Four treatment arms
  - Subgroup analysis

How to increase power?

- Drop role model or interaction treatment?
- Focus on women only?