

Gender in Economics

Lise Vesterlund
University of Pittsburgh and NBER



Pitt

'Gender' in (Behavioral) Economics
~~Gender in Economics~~

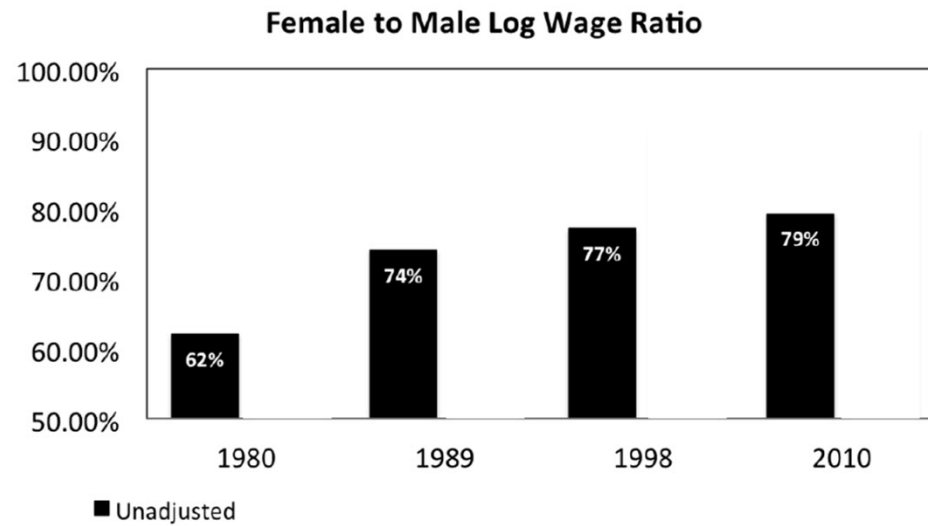
Lise Vesterlund
University of Pittsburgh and NBER



Pitt

'Gender' in economics

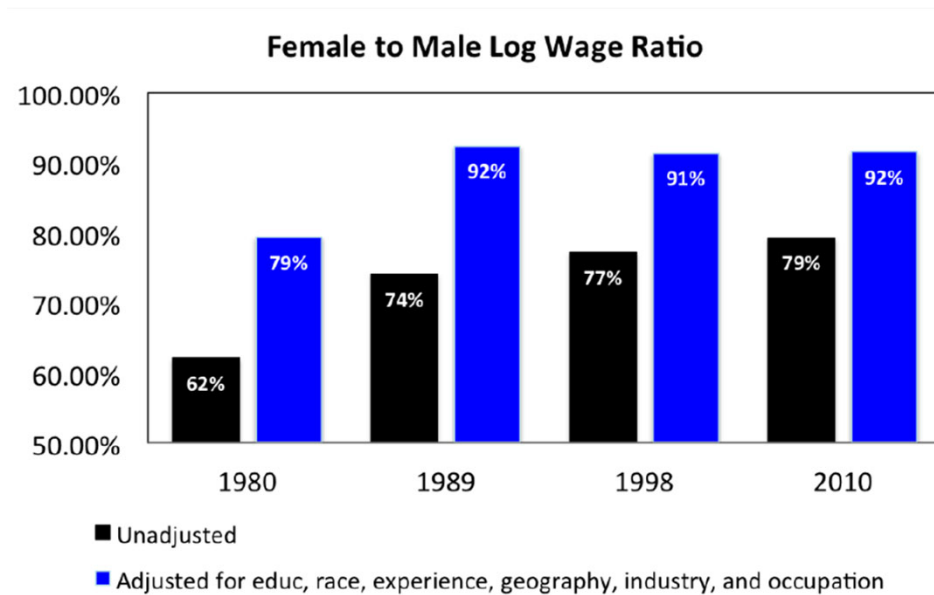
- 'econs': individual characteristics (gender, race, age, etc) predictive of differences in behavior and outcomes if correlated with certain skills, preferences, resources



Blau and Kahn (2016)

'Gender' in economics

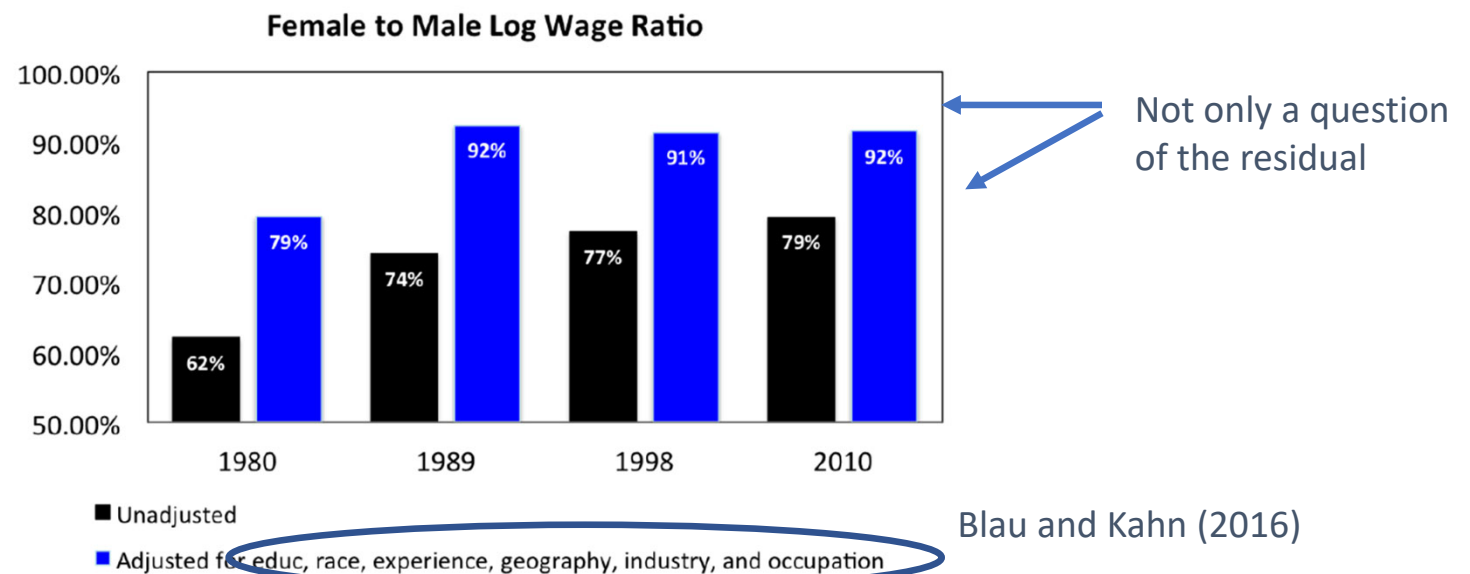
- 'econs': individual characteristics (gender, race, age, etc) predictive of differences in behavior and outcomes if correlated with certain skills, preferences, resources



Blau and Kahn (2016)

'Gender' in (Behavioral) Economics

- 'humans' interact. Individual characteristics (gender, race, age, etc) gives rise to different norms and expectations, affecting own beliefs, 'preferences', and outcomes
- Tight and loose culture (e.g. Bowles, Babcock and Lai, 2004; Bowles and Gelfand, 2010)



Frame lecture around gender differences in advancement

| | % Women on Board | % Women CEO |
|---------------------------|------------------|-------------|
| US (Fortune 500) | 19.9 | 5.8 |
| Europe (FTSEurofirst 300) | 23.3 | 5.1 |
| Australia (ASX 200) | 26.7 | 6.0 |
| Denmark | 19.0 | 5.9 |

← Skills, preferences, and discrimination

← **Culture and norms affect beliefs and preferences, and the response to incentives**

- College-educated employees working full-time, full year, same occupation (Bertrand, 2018)
 - 34% of women have earnings above the median of men
 - 10% of women have earnings in the top 20% of the men's earnings distribution



Task allocation



Promotability of a task: Degree to which task performance influences evaluation and promotion

Who is doing the non-promotable work?

The No Club



Linda Babcock



Brenda Peyser



Lise Vesterlund

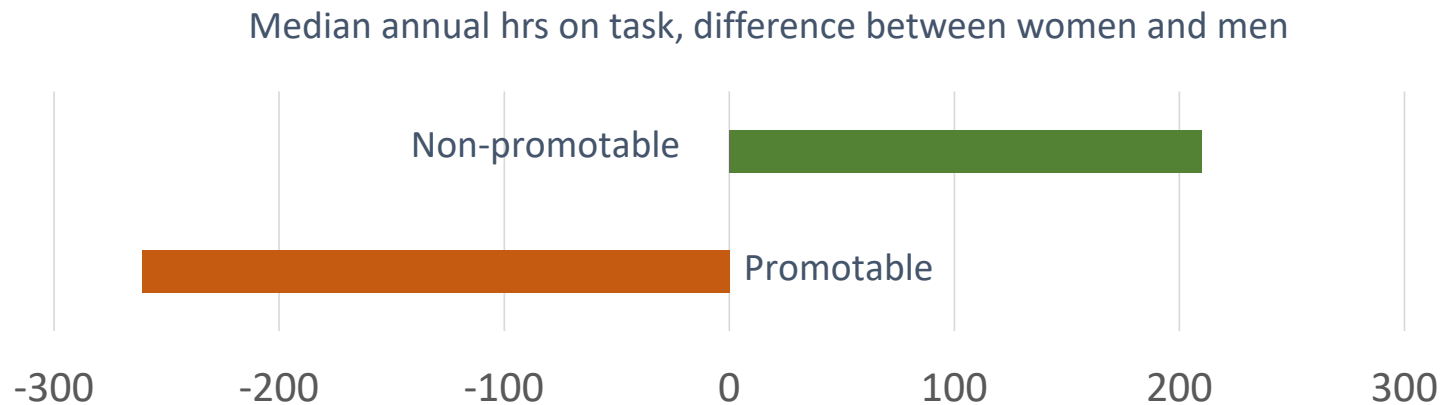


Laurie Weingart

Professional Service Firm

Men spend more time on revenue generating tasks.
Women spend more time on non-revenue generating tasks

- Employee time coded for billing purposes (e.g., work on specific client projects, mentoring others, leadership, and community service).
- Firm's leadership evaluated tasks on promotability—some tasks labeled very promotable and some non-promotable



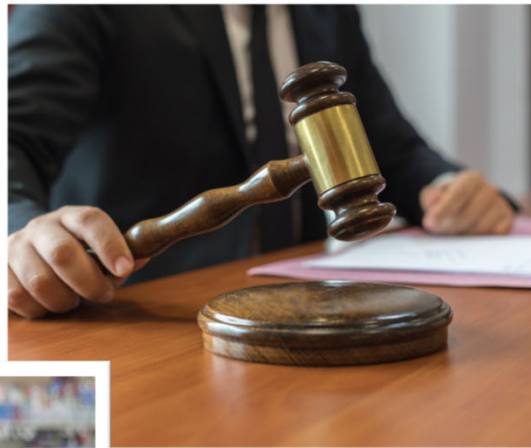
University Faculty

- Faculty asked to rank four tasks by how an assistant professor should best spend 50 additional hours over a semester to increase the likelihood of promotion.
 - four tasks:
 - working on a research paper
 - presenting research talks at conferences
 - serving on an undergraduate curriculum revision committee
 - serving on the faculty senate

University Faculty

- Faculty asked to rank four tasks by how an assistant professor should best spend 50 additional hours over a semester to increase the likelihood of promotion.
 - four tasks:
 - working on a research paper
 - presenting research talks at conferences
 - serving on an undergraduate curriculum revision committee
 - serving on the faculty senate

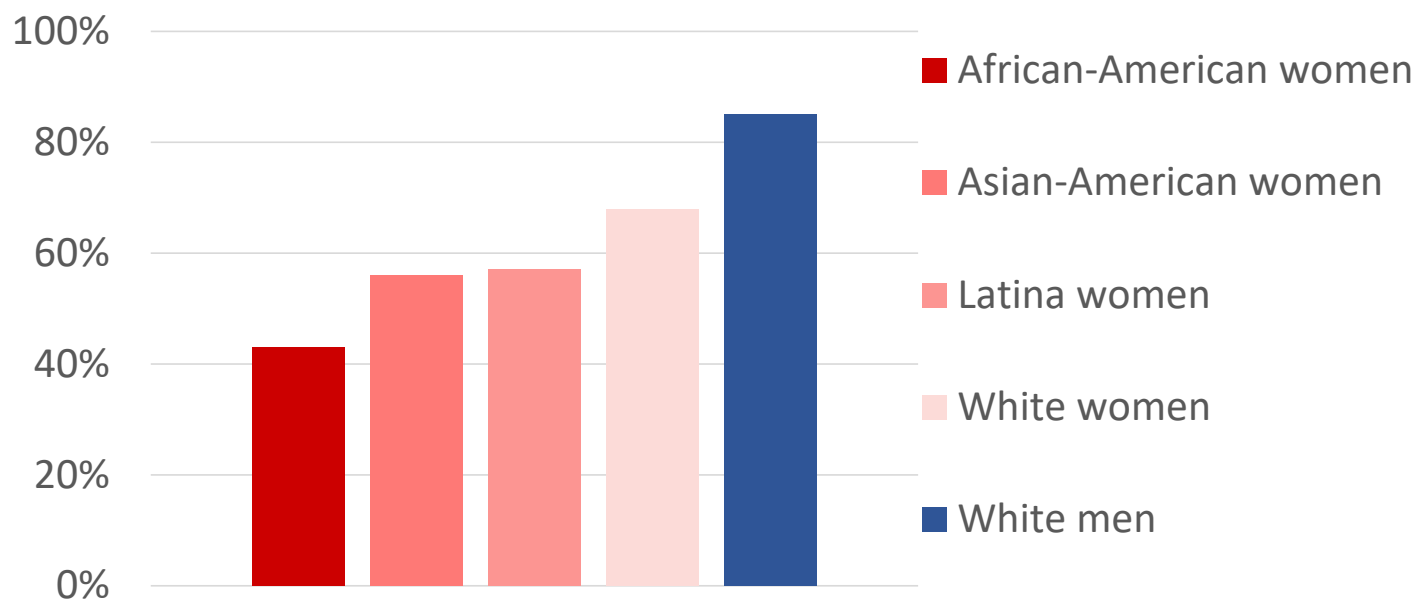
} 92% ranked research tasks highest



Lise Vesterlund, University of Pittsburgh

Evidence from 3000 Engineers

Compared to my colleagues with a comparable role, seniority, and experience I have the same access to desirable assignments



Williams, J.C., Li, S., Rincon, R., & Finn, P. (2016).
"Climate control: Gender and racial bias in engineering?"

Task allocation



Niederle and Vesterlund, QJE 2007

'Old Fashioned' Laboratory Study

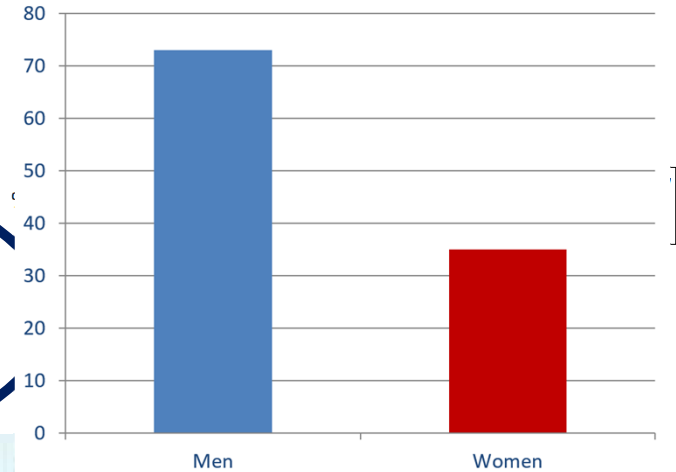


Competition

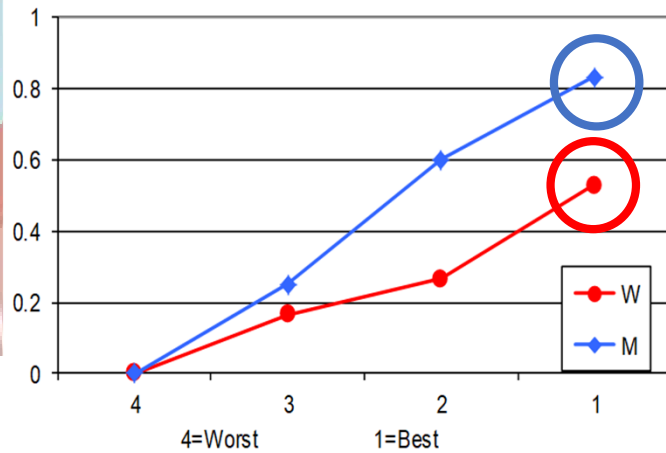
Design:

- 2 men and 2 women solve cross sums for 5 min
- T1: Piece rate: 50 cents per problem
- T2: Tournament: winner gets \$2 per problem
- T3: Choice: select piece rate or tournament

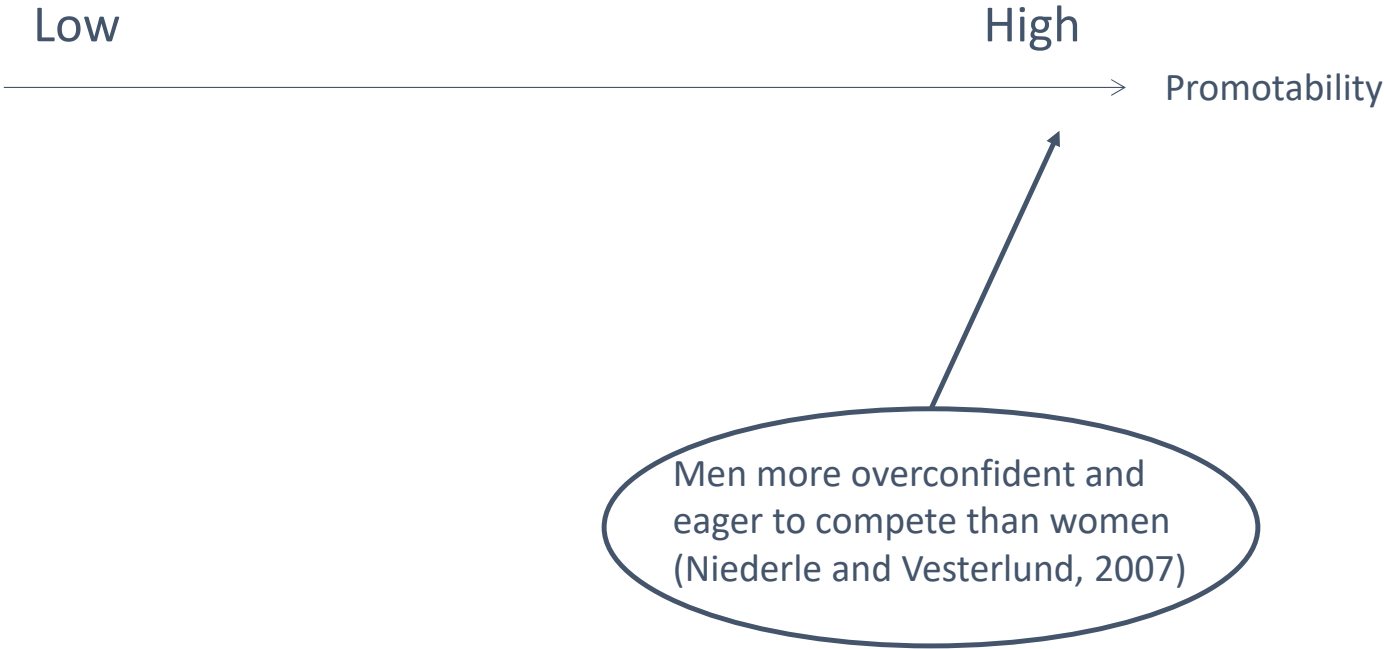
| | Men | Women |
|------|-------|-------|
| Rank | Guess | Guess |
| 1 | 75 | 42 |
| 2 | 12 | 38 |
| 3 | 10 | 15 |
| 4 | 3 | 5 |



Proportion entering tournament by guessed rank



Task allocation



Studies to follow up?

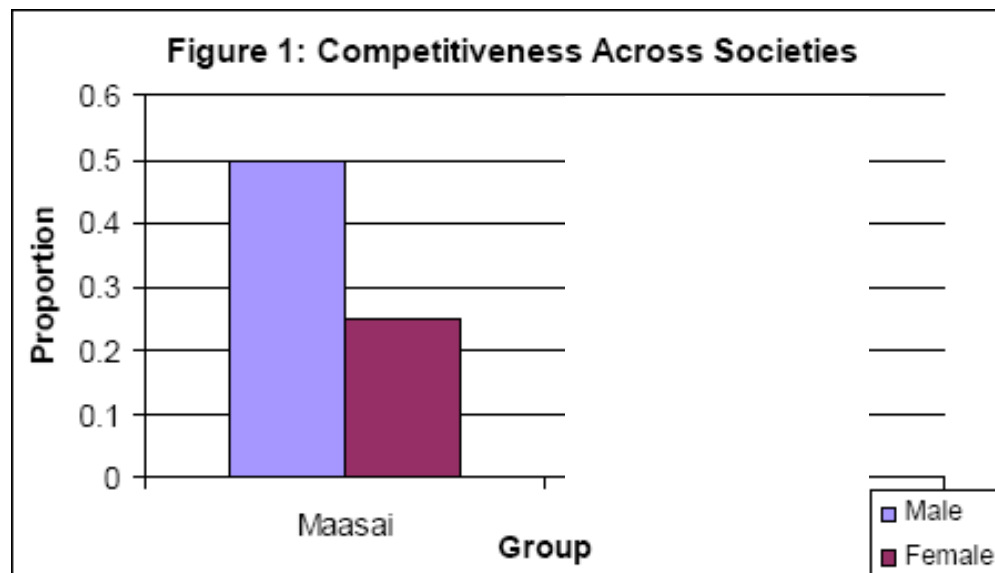
1. Replication ✓
2. Explaining the difference
 - i. Beliefs ←
 - ii. Risk preferences
 - iii. Other-regarding preferences
3. Reducing the gap
 - i. Nature vs. nurture ←
 - ii. Institutions
4. Elicitations
5. External validity ←
6. External relevance ←

Review: Niederle and Vesterlund (2011) Annual Review

Gender differences in competition: nature or nurture (norms)

- Gneezy, Leonard and List (Econometrica, 2009)
 - Explore gender differences competitive entry in two distinct societies: the Maasai in Tanzania and the Khasi in India.
 - Maasai is patriarchal, and Khasi is matrilineal
 - Quotes
 - “Men treat us like donkeys” --A Maasai woman (Hodgson, 2001)
 - “We are sick of playing the roles of breeding bulls and baby-sitters.” --A Khasi man (Ahmed, 1994)

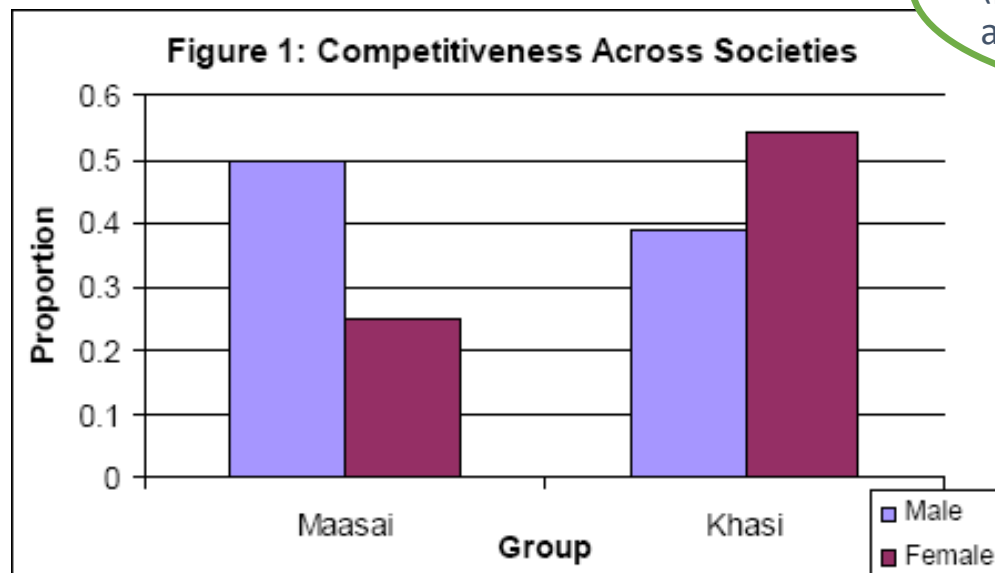
GLL-Results



Piece rate: X per successful shot of a tennis ball into a bucket

Tournament: 3X per successful shot if outperform a partner

GLL - Results



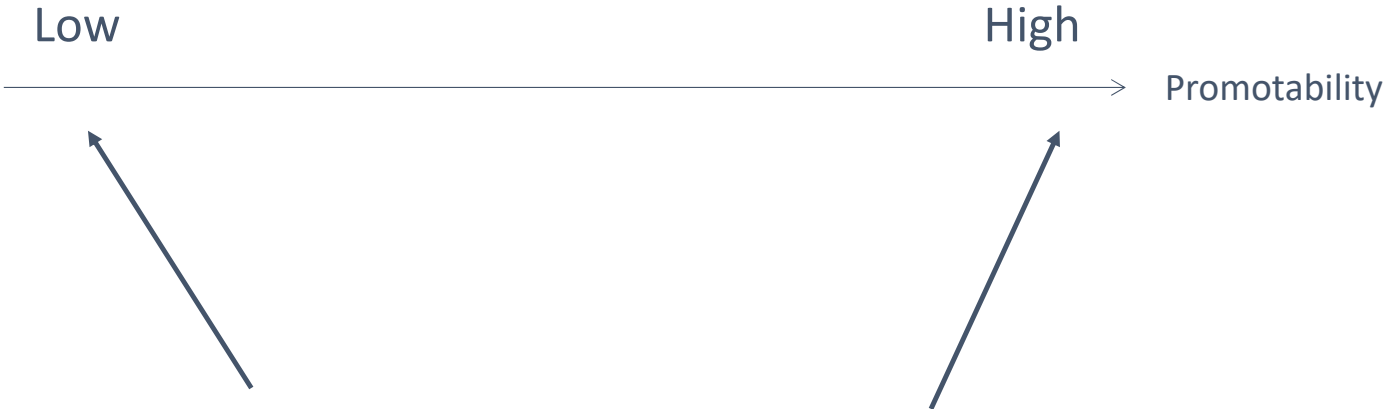
Gender gap in competition (preference and/or confidence) affected by nature/norms

Almås, et al. MS 2015. Father's SES predictive of son competitiveness

Booth and Nolen, EJ 2012 Girls from all-girl schools more willing to compete

Piece rate: X per successful shot of a tennis ball into a bucket
Tournament: 3X per successful shot if outperform a partner

Task allocation



Who volunteers?



Babcock, Recalde, Vesterlund, and Weingart (AER 2017)

Who volunteers?

- Field Study: 3,271 faculty at a large public university were sent email from Chair of the Faculty Senate requesting that they volunteer to serve on Faculty Senate committees

Who volunteers?

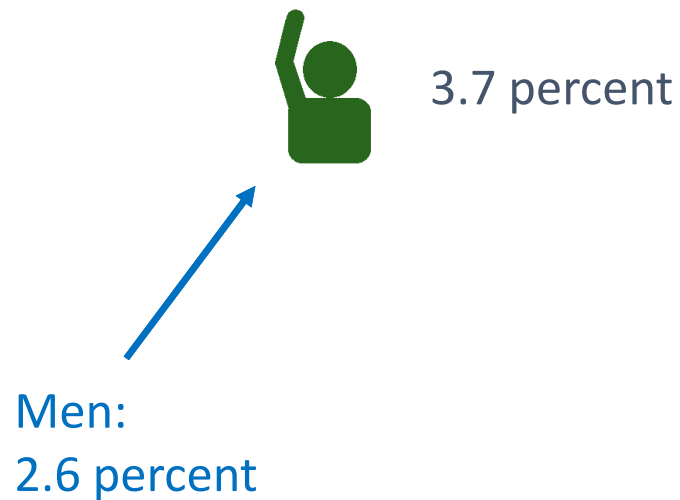
- Field Study: 3,271 faculty at a large public university were sent email from Chair of the Faculty Senate requesting that they volunteer to serve on Faculty Senate committees



3.7 percent

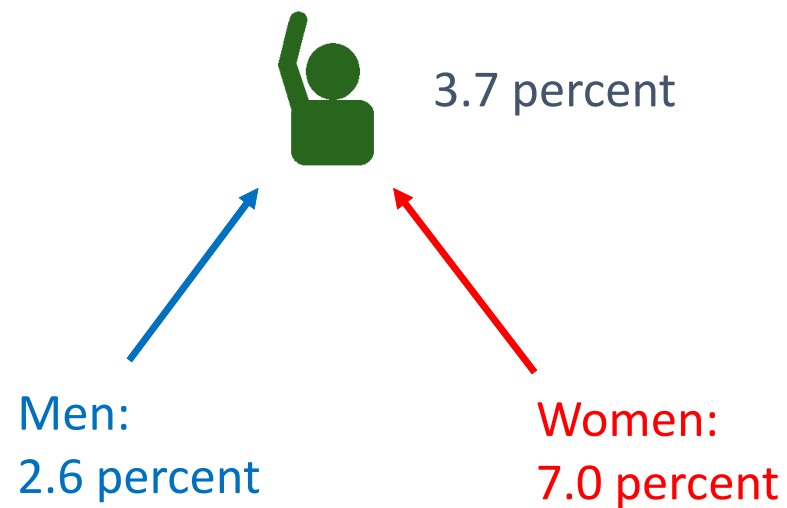
Who volunteers?

- Field Study: 3,271 faculty at a large public university were sent email from Chair of the Faculty Senate requesting that they volunteer to serve on Faculty Senate committees



Who volunteers?

- Field Study: 3,271 faculty at a large public university were sent email from Chair of the Faculty Senate requesting that they volunteer to serve on Faculty Senate committees



Who served on faculty senate committees?

- For AC 2012-2013 :

| Women share of faculty | |
|------------------------|----|
| Assistant Professor | 38 |
| Associate Professor | 38 |
| Full Professor | 23 |
| All | 25 |

Who served on faculty senate committees?

- For AC 2012-2013 :

| | Women share of faculty | Women share of faculty senate committee |
|---------------------|------------------------|---|
| Assistant Professor | 38 | 60 |
| Associate Professor | 38 | 50 |
| Full Professor | 23 | 33 |
| All | 25 | 38 |

Why are women volunteering more?



Example: Chairing promotion and tenure committee
Laboratory study on coordination

Experiment: Accepting implicit requests

- Experimental Design
 - Ten rounds paired in new group of three people each round
 - Individuals in group have 2 minutes to decide to 'click a button'
 - Round ends when someone clicks
 - \$1 if no one clicks; \$1.25 if you click; \$2 if someone else clicks

Remaining time [sec]: 119

Round: 1

Decision Stage

Click here if you want to invest.

INVEST

You have 120 seconds to decide whether you want to invest. If no member of your group invests then you will each make \$1. If a member of your group invests then that member will make \$1.25, and the other two group members will each make \$2.00.

Round: 1

Decision Stage

Click here if you want to invest.

INVEST



You have 120 seconds to decide whether you want to invest. If no member of your group invests then you will each make \$1. If a member of your group invests then that member will make \$1.25, and the other two group members will each make \$2.00.

Remaining time [sec]: 119

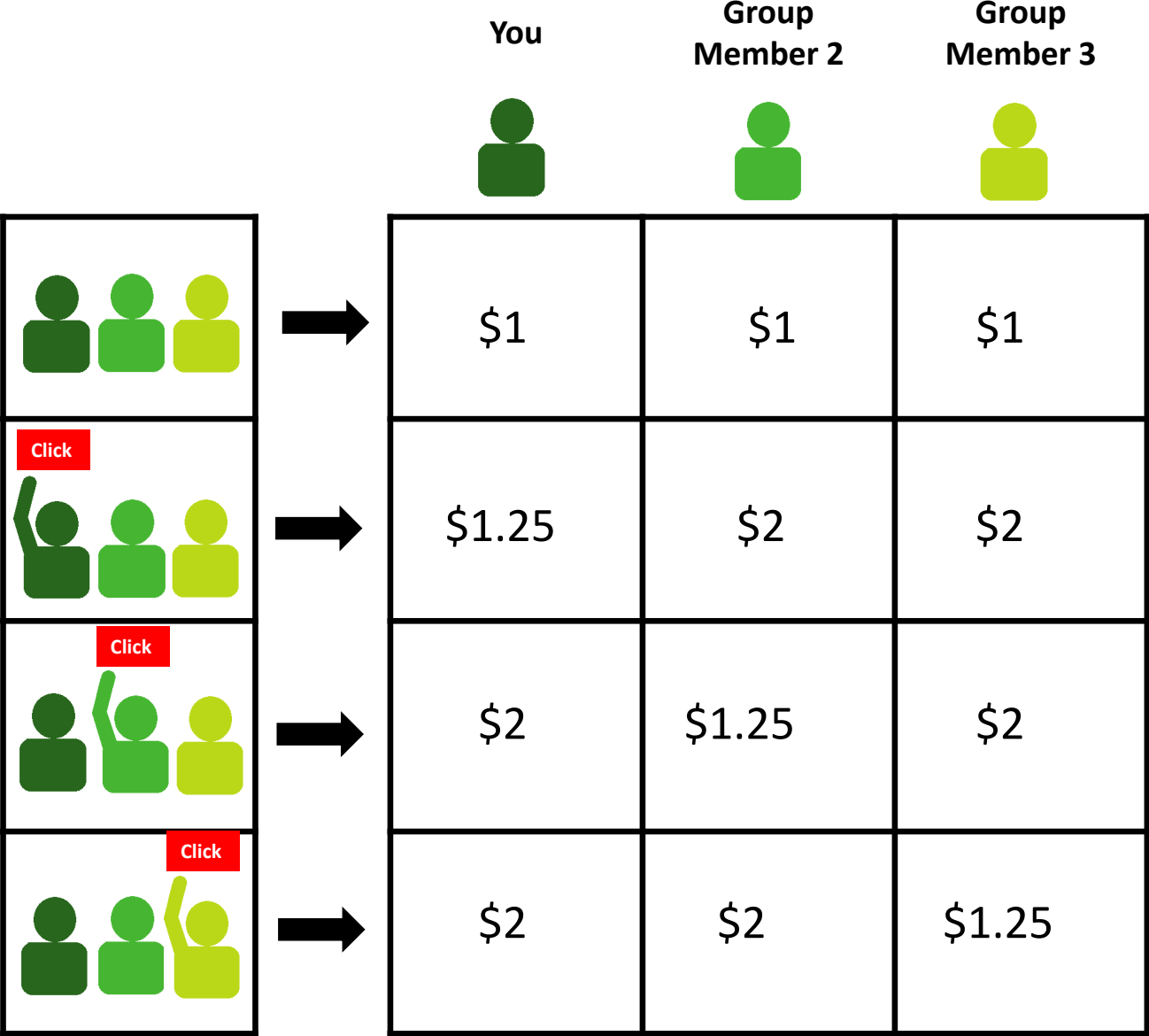
Round: 1

Decision Stage

Click here if you want to invest.

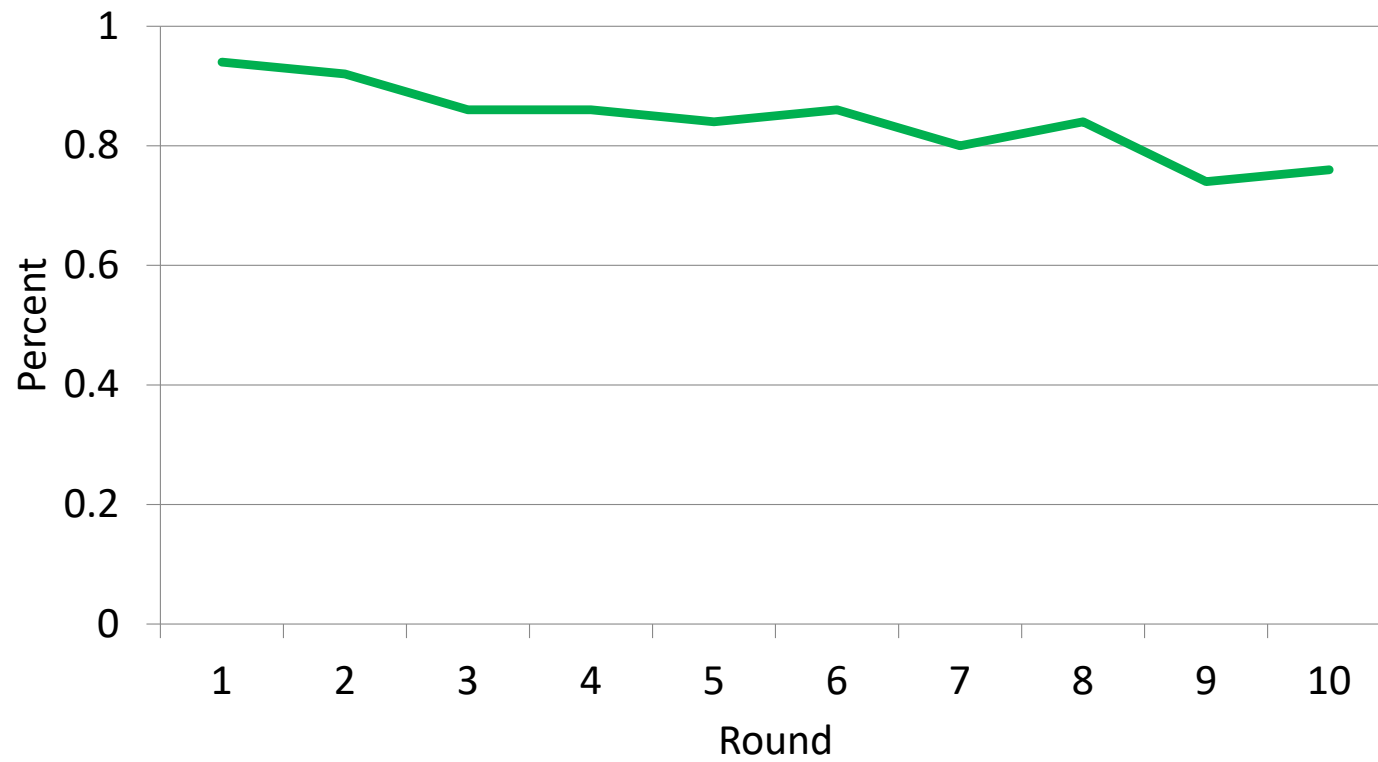
INVEST

You have 120 seconds to decide whether you want to invest. If no member of your group invests then you will each make \$1. If a member of your group invests then that member will make \$1.25, and the other two group members will each make \$2.00.

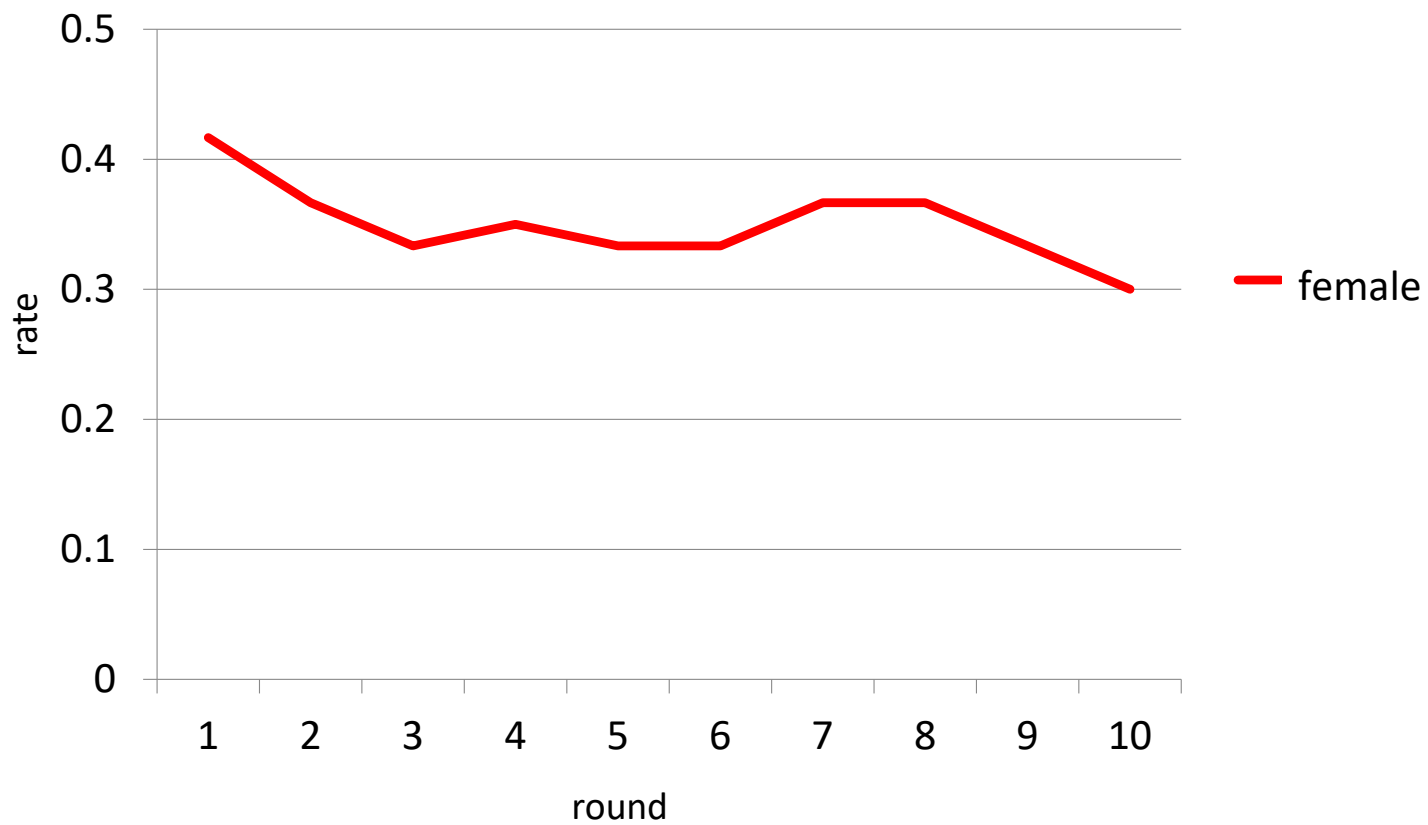


Results

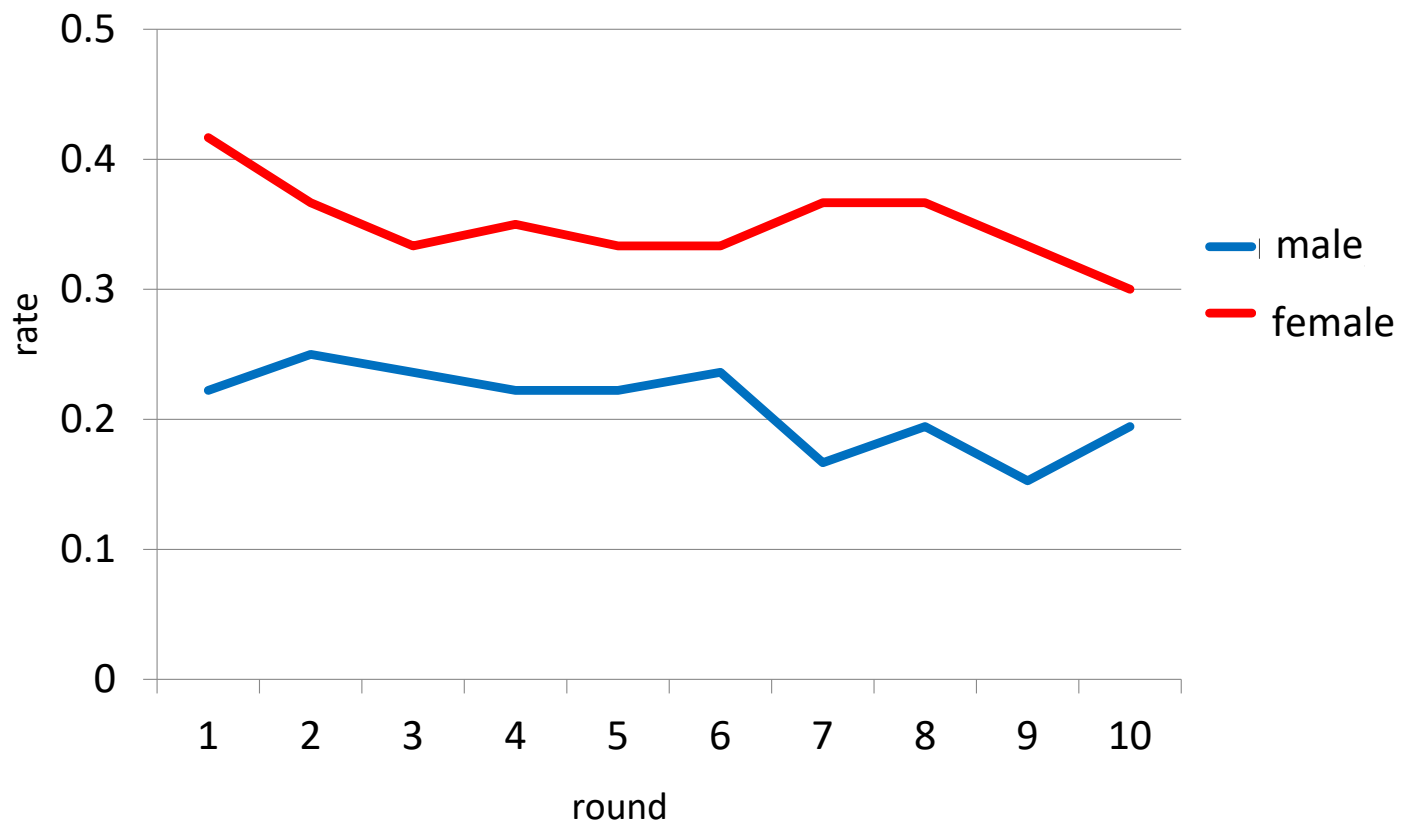
Probability someone volunteers



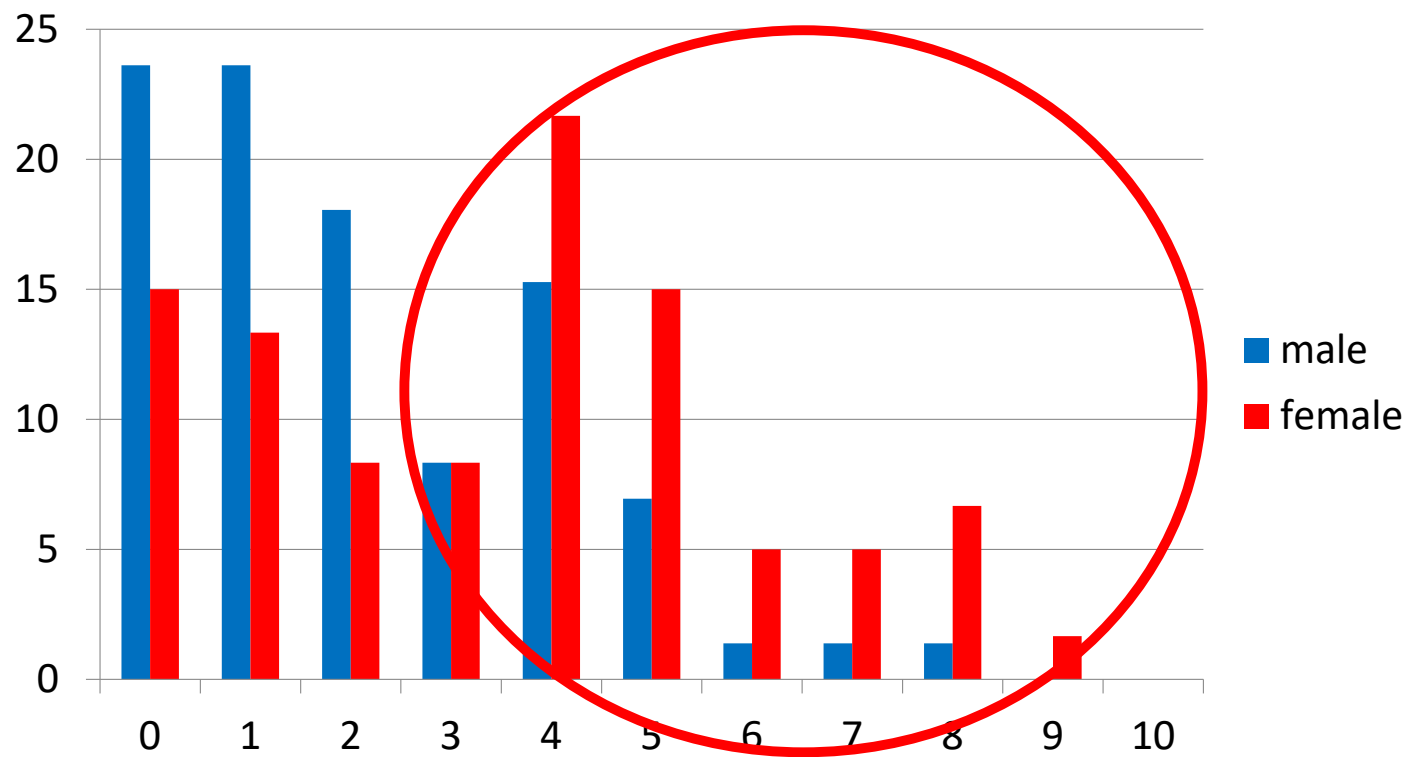
Chance a female or male volunteers



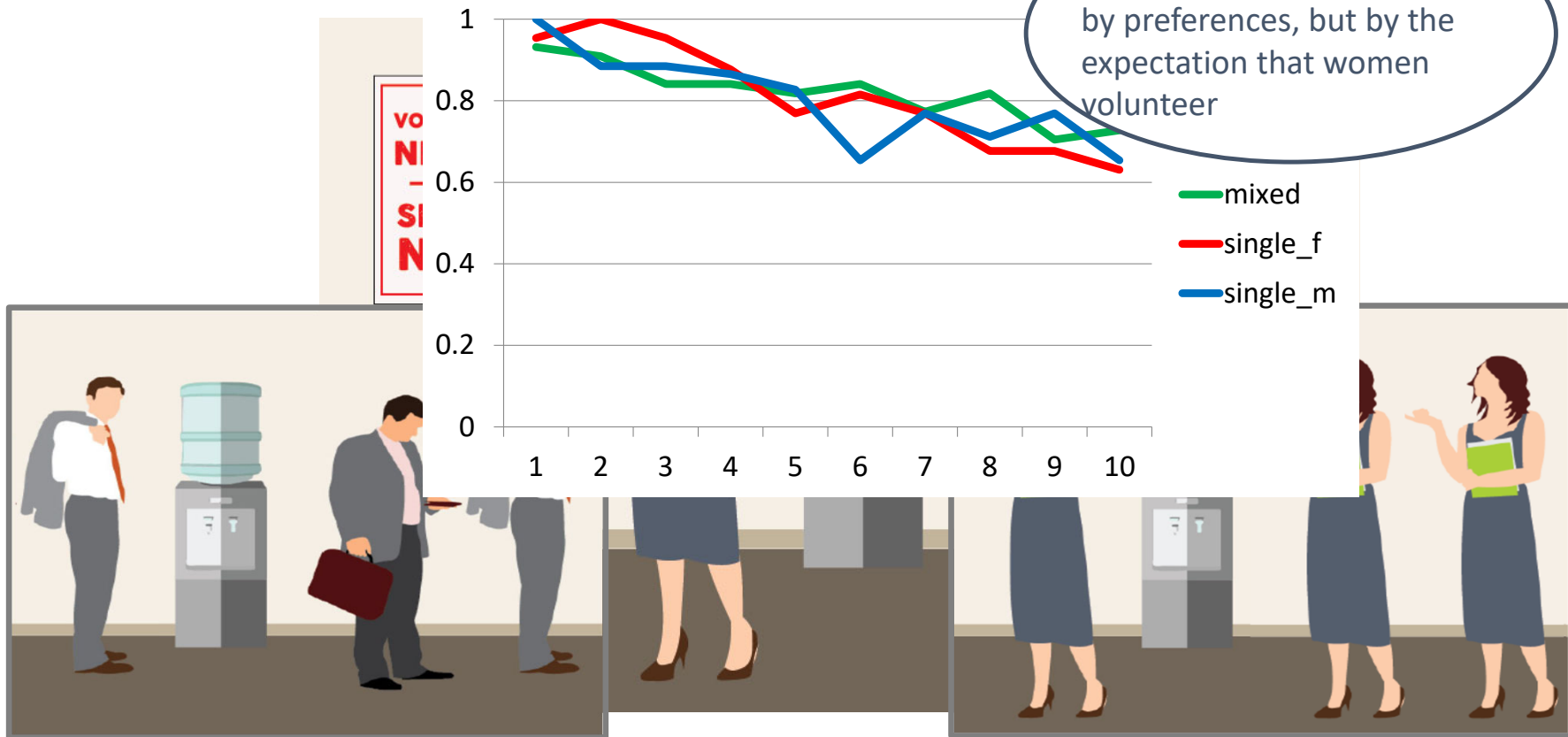
Chance a female or male volunteers



Number of times an individual volunteers



Why do women volunteer more?



Babcock, Recalde, Vesterlund, and Weingart (AER 2017)

Who is asked to 'volunteer'?



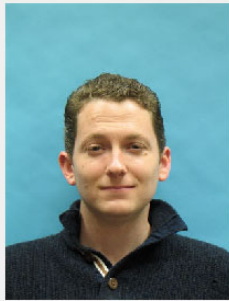
Who is asked to 'volunteer'?

- If you benefit from getting a task done (\$2 vs. \$1) – who would you ask?
- Photo-Ask Treatment
 - 4 people per group
 - 3 people can invest
 - 1 person unable to invest, asks one of the three to invest

Round: 1

Group Information Stage

The three other members of your group are shown below.
If you are selected to be the red player for this round, who would you like to ask to invest?
(mark your preferred option)

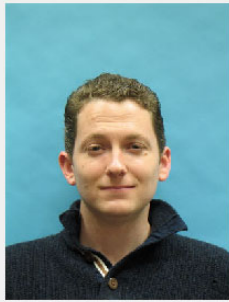


OK

Round: 1

Group Information Stage

The three other members of your group are shown below.
If you are selected to be the red player for this round, who would you like to ask to invest?
(mark your preferred option)



The red player asked
you to invest.

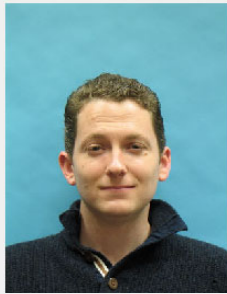


OK

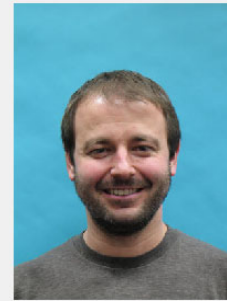
Round: 1

Group Information Stage

The three other members of your group are shown below.
If you are selected to be the red player for this round, who would you like to ask to invest?
(mark your preferred option)



The red player asked this group member to invest.



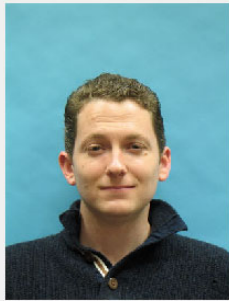
OK



Round: 1

Group Information Stage

The three other members of your group are shown below.
If you are selected to be the red player for this round, who would you like to ask to invest?
(mark your preferred option)

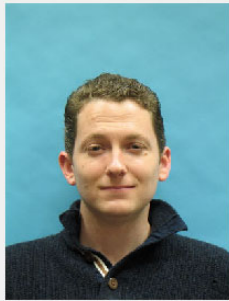


OK

Round: 1

Group Information Stage

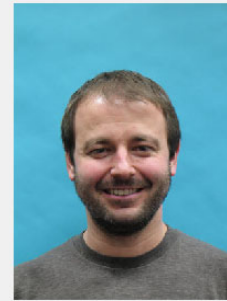
The three other members of your group are shown below.
If you are selected to be the red player for this round, who would you like to ask to invest?
(mark your preferred option)



30%



40%



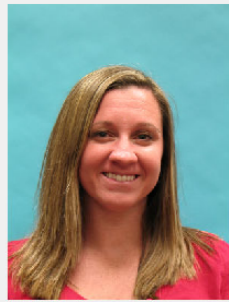
30%

OK

Round: 1

Group Information Stage

The three other members of your group are shown below.
If you are selected to be the red player for this round, who would you like to ask to invest?
(mark your preferred option)

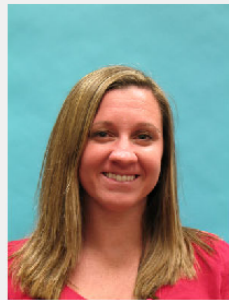


OK

Round: 1

Group Information Stage

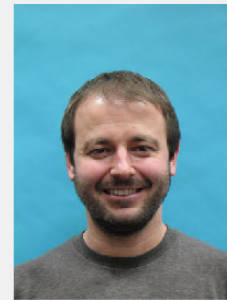
The three other members of your group are shown below.
If you are selected to be the red player for this round, who would you like to ask to invest?
(mark your preferred option)



37.5%



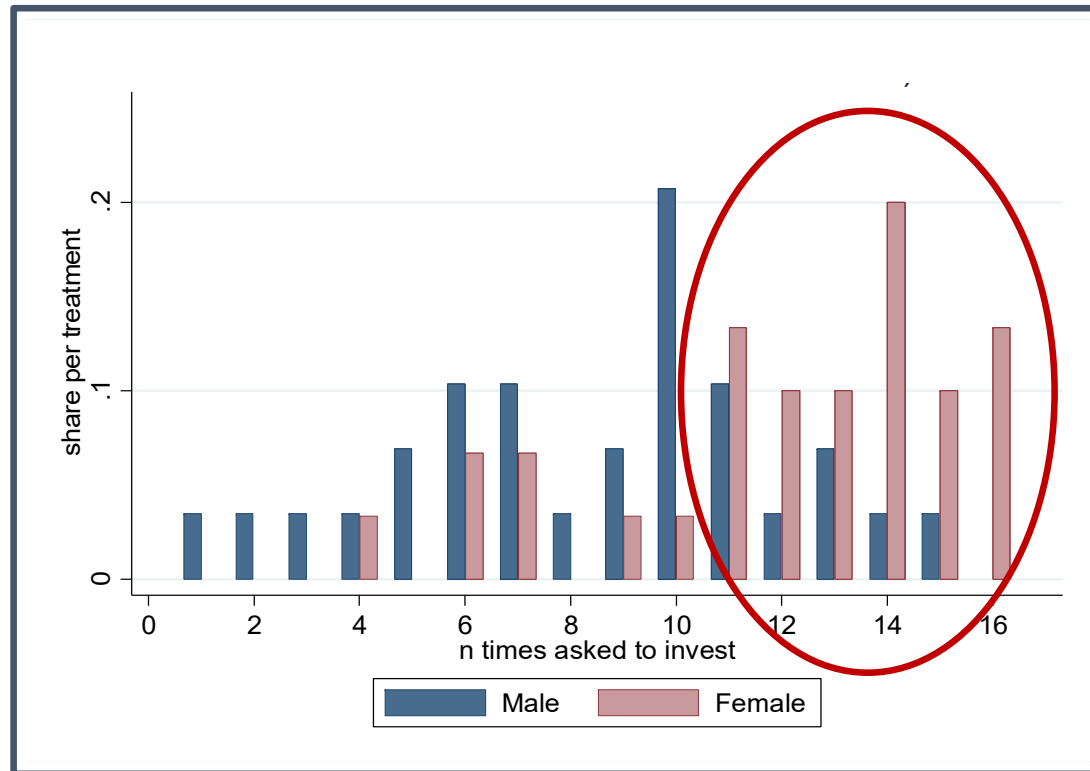
37.5%



25%

OK

Number of times a particular individual is asked



Women are asked 44% more than men (by men **and** women)

When asked – who accepts?

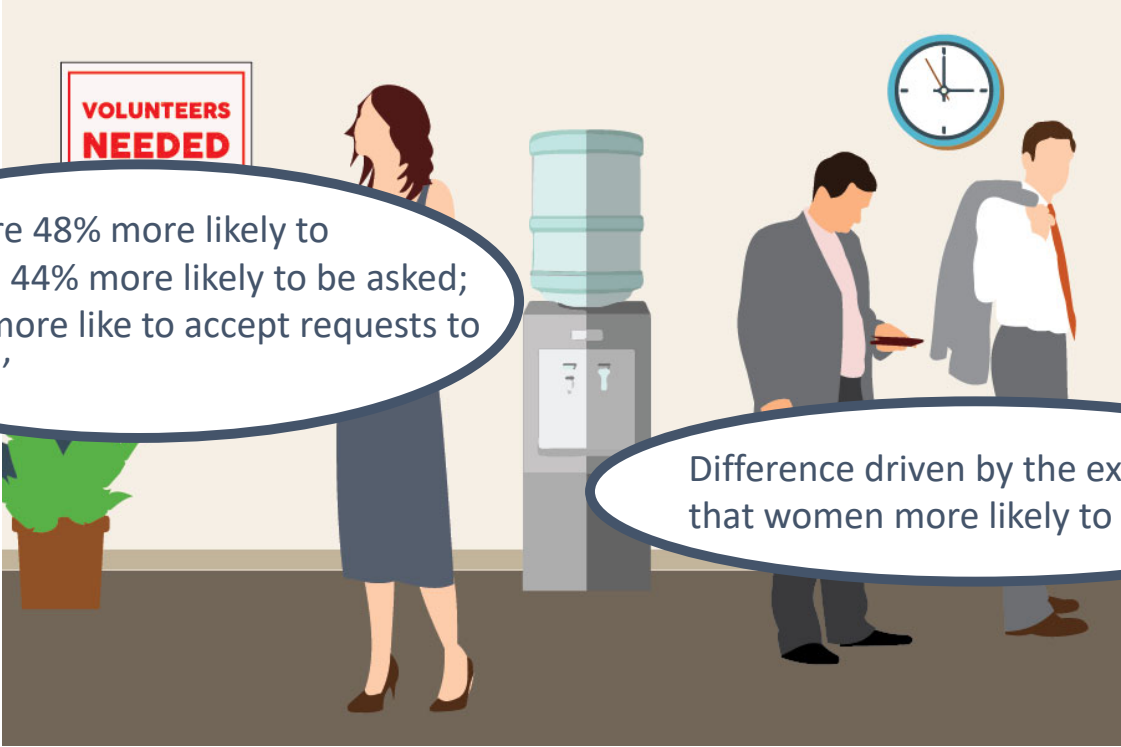


Men say yes 50% of the time



Women say yes 75% of the time

Cause for gendered work assignments



Women are 48% more likely to volunteer; 44% more likely to be asked; and 50% more likely to accept requests to 'volunteer'

Difference driven by the expectation that women more likely to say yes

Strong gender norms for women as helpers

Avengers: Endgame, the “Earth’s Mightiest Heroes” with access to artificial intelligence and every technology imaginable



Kirstjen Nielsen,
Former homeland
security secretary

Heilman and Chen (Journal of Applied Psychology, 2005)

Scenario A: No request



Scenario B: Request and yes



Scenario C: Request and no



Women are assessed the same under scenario A and B
Men assessed the same under scenario A and C

Consequence gendered task assignment

- Advancement and promotion
- Compensation and negotiation

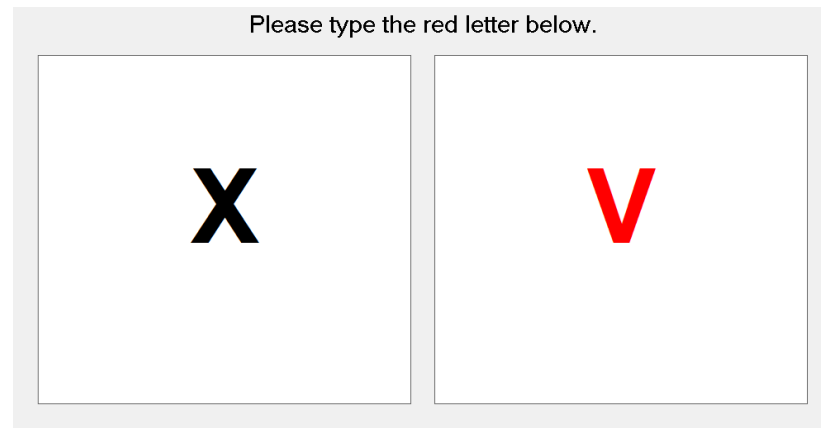
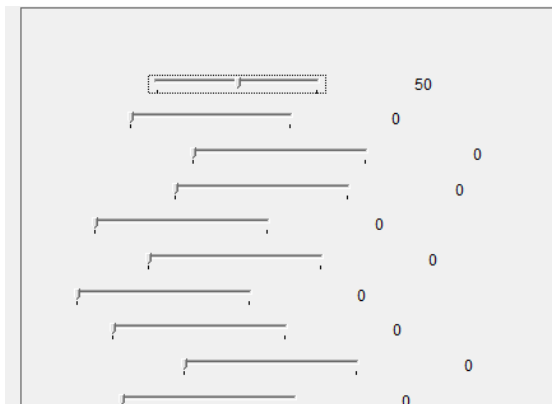
Effect of task on compensation and negotiation (w/ Gihleb and Landsman)

- Varying the productivity of the assigned task (randomly assigned)

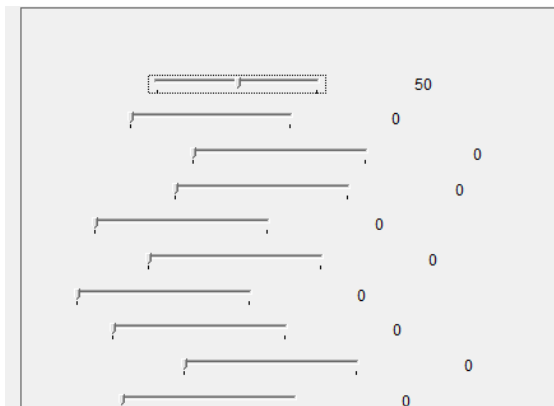
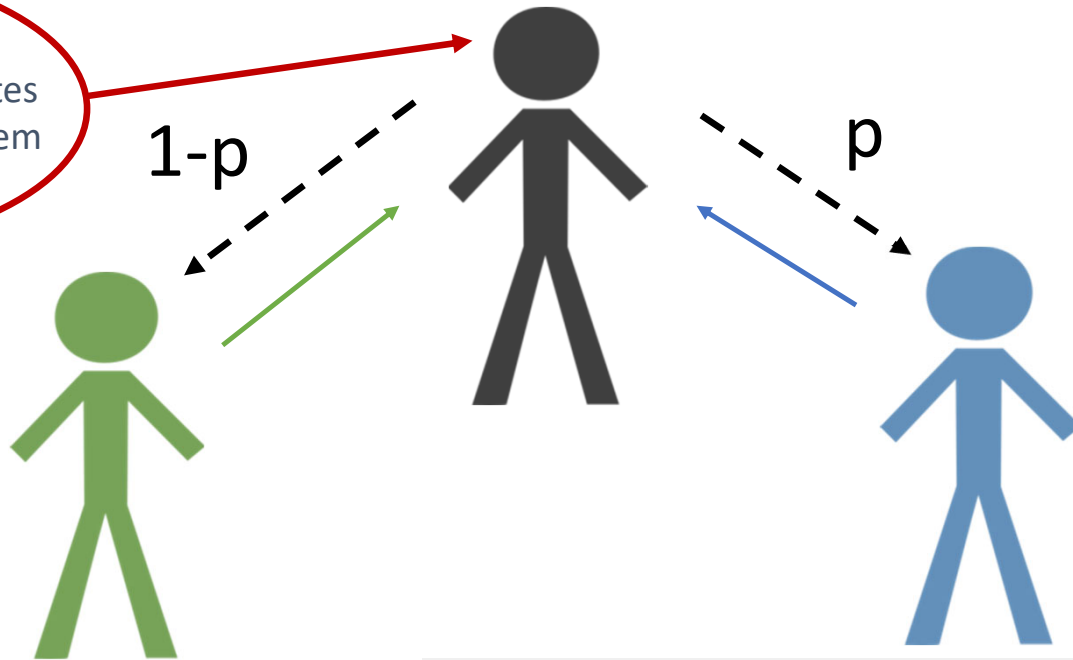
Low

High

→ Productivity



Manager earns 2.5 cents per problem solved, and distributes earnings of 5 cents per problem to the two workers



Please type the red letter below.

X

V

Round: 1

You are the Manager.

Payment-Selection Stage

Your task in this stage is to select what share P of the joint worker earnings should be paid to the Green worker; the remaining $(1-P)$ share will be paid to the Blue worker. Your earnings are not affected by your choice of P . You can use the payment selection bar below to select your preferred P and to determine how the selected P affects the earnings for the two workers. Please click submit when you have found your preferred P . The worker characteristics and production are listed below. A unit of production is worth \$0.05. Your manager earnings for this round are **\$2.60**. The joint worker earnings are **\$5.20**.

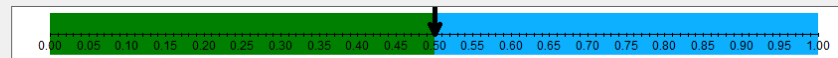
Sophomore
19
Female
Business or Social Sciences
Highschool not in PA

GREEN WORKER
Sliders Completed: 22

Freshman
18
Male
Natural Sciences or Engineering
Highschool in PA

BLUE WORKER
Letter Pairs Completed: 82

Payment Selection (click to start)



You Selected $P=0.50$

Green Worker Earnings: \$2.60

Blue Worker Earnings: \$2.60

SUBMIT

Two Treatments

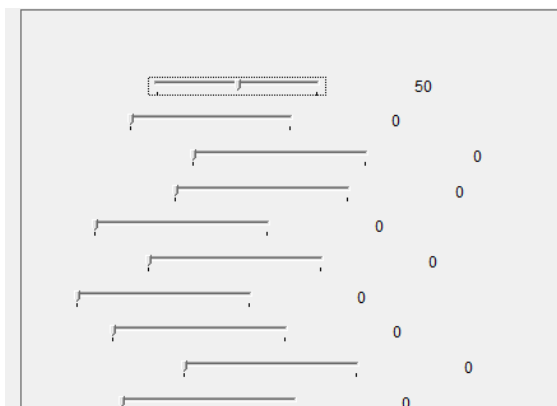
No Negotiation



Negotiation



No negotiation treatment



Result:
25% wage gap favoring
worker randomly
assigned to more
productive task

Please type the red letter below.

X

V

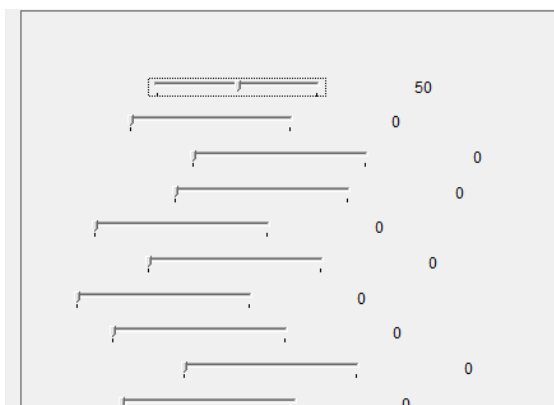
Negotiation treatment



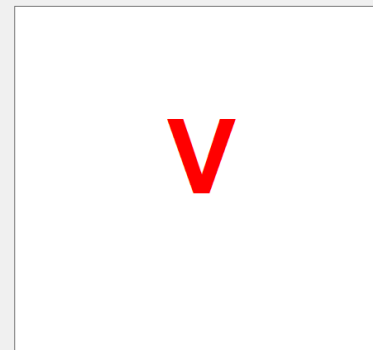
Results: Negotiation (only) effective for worker on more productive task



Wage gap increases with negotiation



Please type the red letter below.



Effect of task assignment on compensation and negotiation

- Compensation – employee with less productive task paid 25% less
- Negotiation – exacerbates gap



Examples of exciting recent work

- Discrimination (Aislinn Bohren and Alex Imas)
- Blame/credit (Heather Sarsons; Rachel Landsman; Olga Stoddard)
- Ambition (Amanda Pallais; Ghazala Azmat)
- Confidence and stereotypes (Katie Coffman)
- Negotiation (Zoe Cullen; Nina Roussille)
- Self-promotion (Christine Exley and Judd Kessler)