Diversity and Global Policy: Socio-psychological Factors

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Recap of the Last Lectures

Increasing diversity may increase the quality of governance and economic performance – but this is not always the case.

Nonetheless, whether it is out of fairness or efficiency concerns, there is a case to be made for increasing diversity.

To do so, we need a deeper understanding of why we observe differences in outcomes to think of the appropriate policies to put in place.

Our Roadmap

We study the factors driving observed differences in group outcomes.

We focus on:

- **Socio-psychological factors** (today's lecture)
  - Focus on gender differences in preferences
- **Culture, norms, and stereotypes**
  - Focus on their formation and persistence across time and space
- **(Unfair) institutions**
  - Focus on the history of slavery in the United States
- **Discrimination**
  - Theoretical models of discrimination
  - Quasi-experimental evidence of discriminatory practices of employers

The Role of Gendered Preferences

It is often argued that gender gaps (*e.g., the gender wage gap*) are the result of differences in preferences between genders.

This raises several important questions:

- What are these preferences?
- Are these “natural” or “cultural” differences?
- What does this imply for policy-making?

Croson and Gneezy (2009) review the economic literature on differences in gender preferences. Their paper will form the basis for our discussion.

Three Types of Gendered Preferences

There are three types of gender differences in preferences:

- **Risk preferences**
  - Controlled lab experiments with objective probability lotteries
  - Financial portfolio choices
- **Social preferences**
  - Dictator games and redistributive policies (ring a bell?)
  - Trust and reciprocity
- **Competitiveness preferences**
  - Reacting to competition
  - Self-selection into/out of competition
  - Bargaining for wages and promotions

We start with risk preferences...

Examples of Objective Probability Lotteries

Gamble choices, expected payoffs, and risk

Choice	Event	Probability (%)	Payoff
			Abstract/ loss and investment
1	A	50	$10
	B	50	$10
2	A	50	$18
	B	50	$6
3	A	50	$26
	B	50	$2
4	A	50	$34
	B	50	−$2
5	A	50	$42
	B	50	−$6

Objective Probability Lotteries

Dozens of studies have made similar lab experiments involving some uncertainty regarding gains.

Women tend to prefer smaller gains with more certainty than more significant gains with greater uncertainty (relative to men).

$\Rightarrow$ Robust finding in real and hypothetical gambles

$\Rightarrow$ Suggests **women are more risk-averse than men**

Quiz

Do you think such lab experiments provide credible evidence of differences in risk-taking behaviors?

A prior, external validity “in the real world” is low...

Do laboratory experiments with small stakes yield conclusions that generalize to high-stakes decisions?

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Portfolio Choices

Most comparisons between high- and low-stakes have shown that these findings do generalize.

Outside of the lab, men and women also differ in the composition of their financial portfolios:

- Single women are less risk-prone than single men.
- The gender of the household's "accountant" also largely determines whether assets are invested in risky or safe stocks.

Notable exception: Contrary to the general population, gender differences in risk-taking are largely mitigated when focusing on managers (probably selection into the job).

Where do these differences come from?

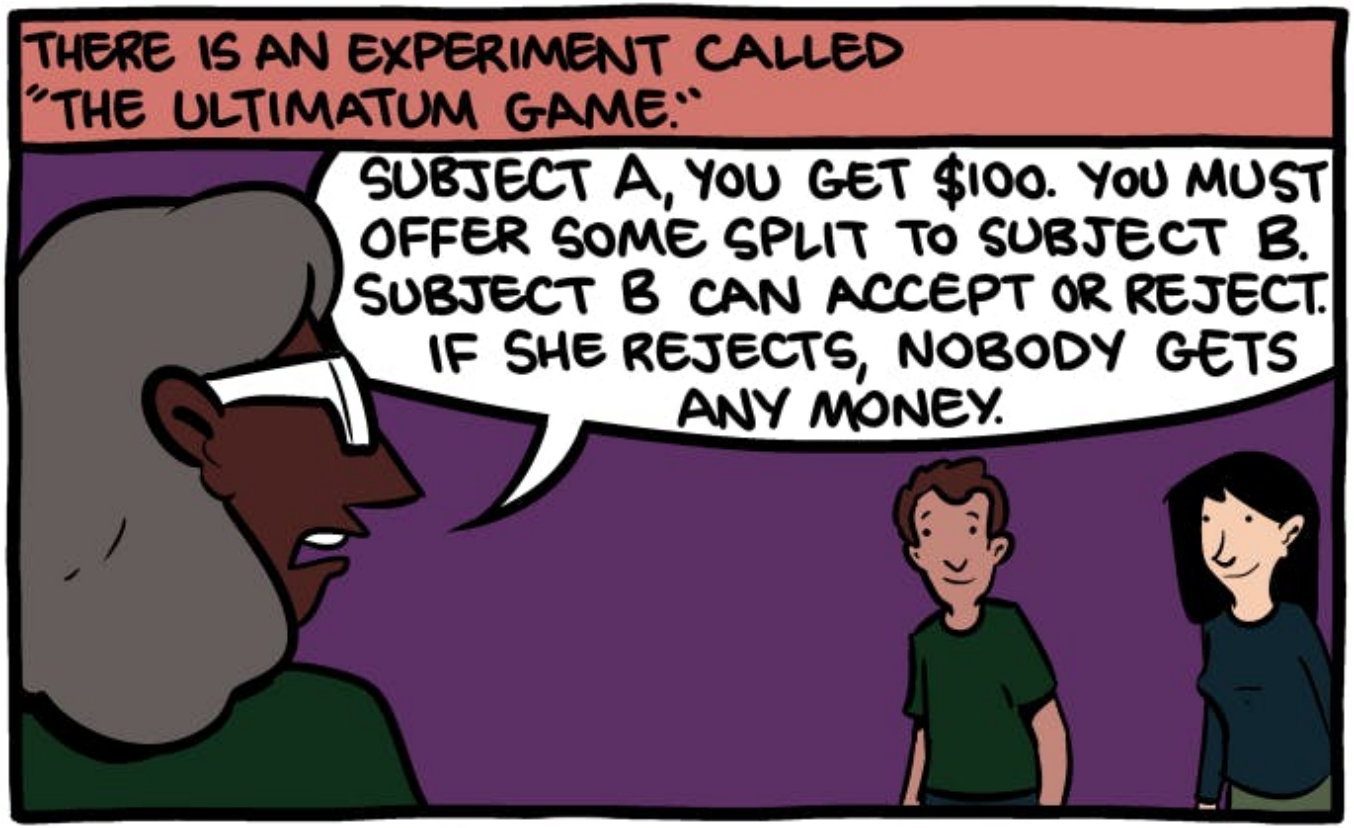
Emotions could be one explanation:

- Negative outcomes are experienced as worse by women than men.
- Emotions affect our perceptions of probability.

Overconfidence is a second factor:

- Men tend to overestimate their odds of success more than women (who already overestimate theirs...).

Now, onto social preferences...


THERE IS AN EXPERIMENT CALLED "THE ULTIMATUM GAME."
SUBJECT A, YOU GET $100. YOU MUST OFFER SOME SPLIT TO SUBJECT B. SUBJECT B CAN ACCEPT OR REJECT. IF SHE REJECTS, NOBODY GETS ANY MONEY.

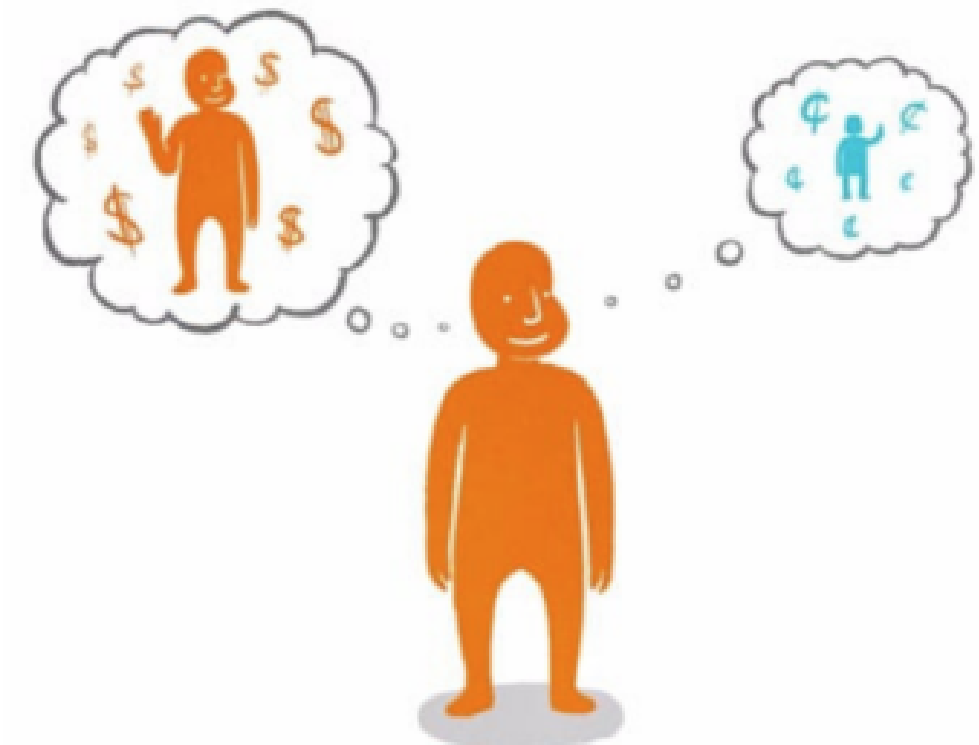
The Ultimatum Game – Results

Assuming selfish players, the best strategy is for Subject A to give a tiny amount ε to Subject B, who will have no choice but to accept if he/she doesn't want to walk empty-handed.

In practice, people often deviate from this strategy to "punish" Subject A.

No conclusive differences between men and women – though results point in the direction of more inequality aversion for women.

DICTATOR GAME



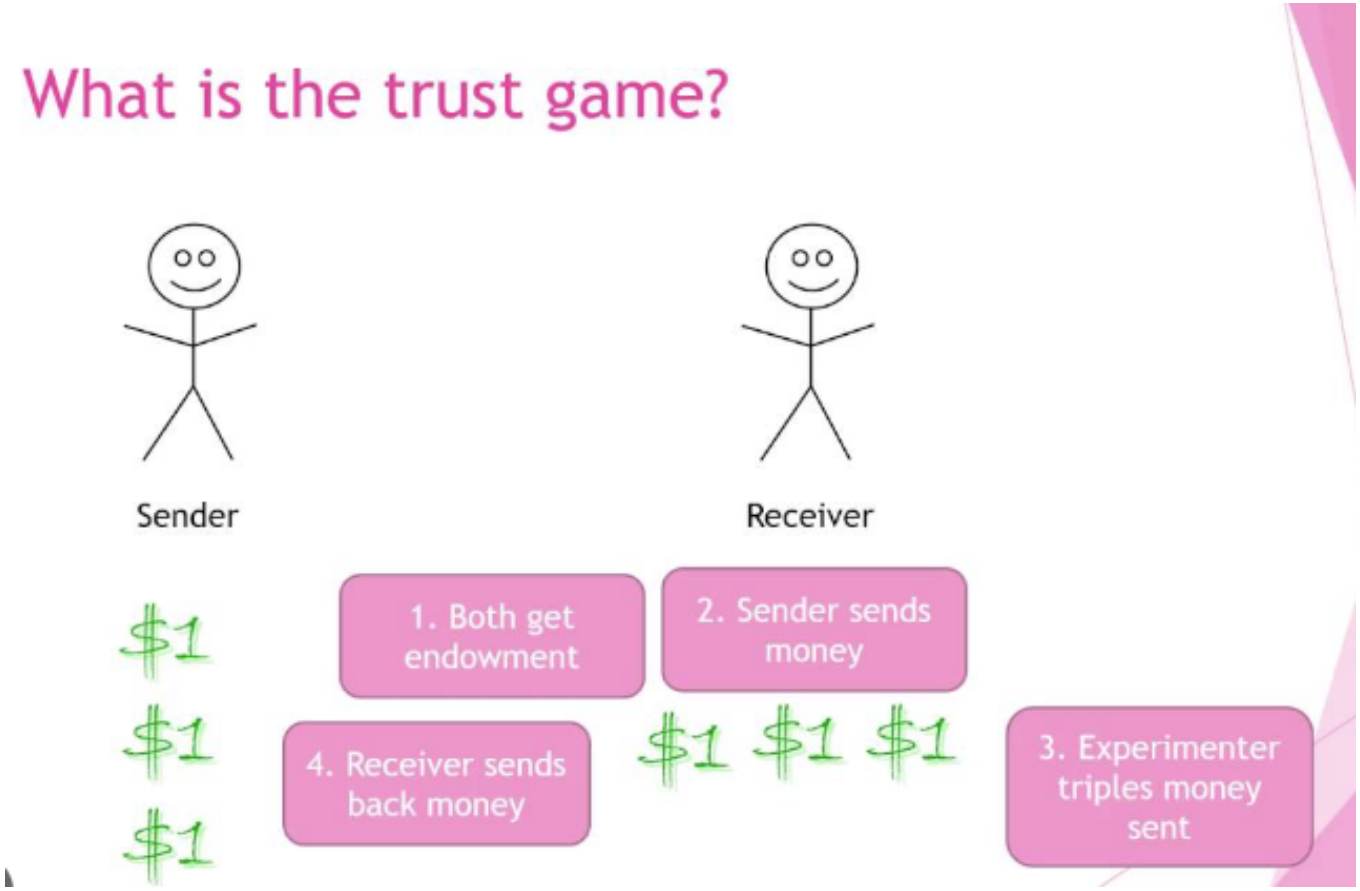
The Dictator Game – Results

Assuming selfish players, the best strategy is to keep everything (no repercussions, more utility).

In this game, many studies find that women give more than men.

$\Rightarrow$ Suggests once again more inequality aversion for women

What is the trust game?



The Trust Game – Results

The trust game is designed to examine social preferences related to trust and reciprocity:

- The amount of money given measures “trust”.

  $\Rightarrow$ No differences, or women give less than men.

- The amount of money given back measures “reciprocity”.

  Reciprocity is also called “conditional altruism”.

  - i.e., I act altruistically toward you if and only if you have been generous to me in the past.

  $\Rightarrow$ No differences, or women exhibit more reciprocity than men.

Where do these differences come from?

Overall, these are mixed results (several papers even find opposite effects...).

Croson and Gneezy (2009) argue that women are more sensitive than men to the exact details/framing of the games played.

More generally, it speaks against trusting the results of lab experiments without additional observational studies “in the real world”.

Quiz

Do you think such lab experiments provide credible evidence of differences in risk-taking behaviors?

Once again, we would expect relatively low external validity...

Yet we do observe some of these differences in actual voting behaviors (recall Funk and Gathmann, 2015).

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We now discuss the behaviors of men and women in competitive settings...

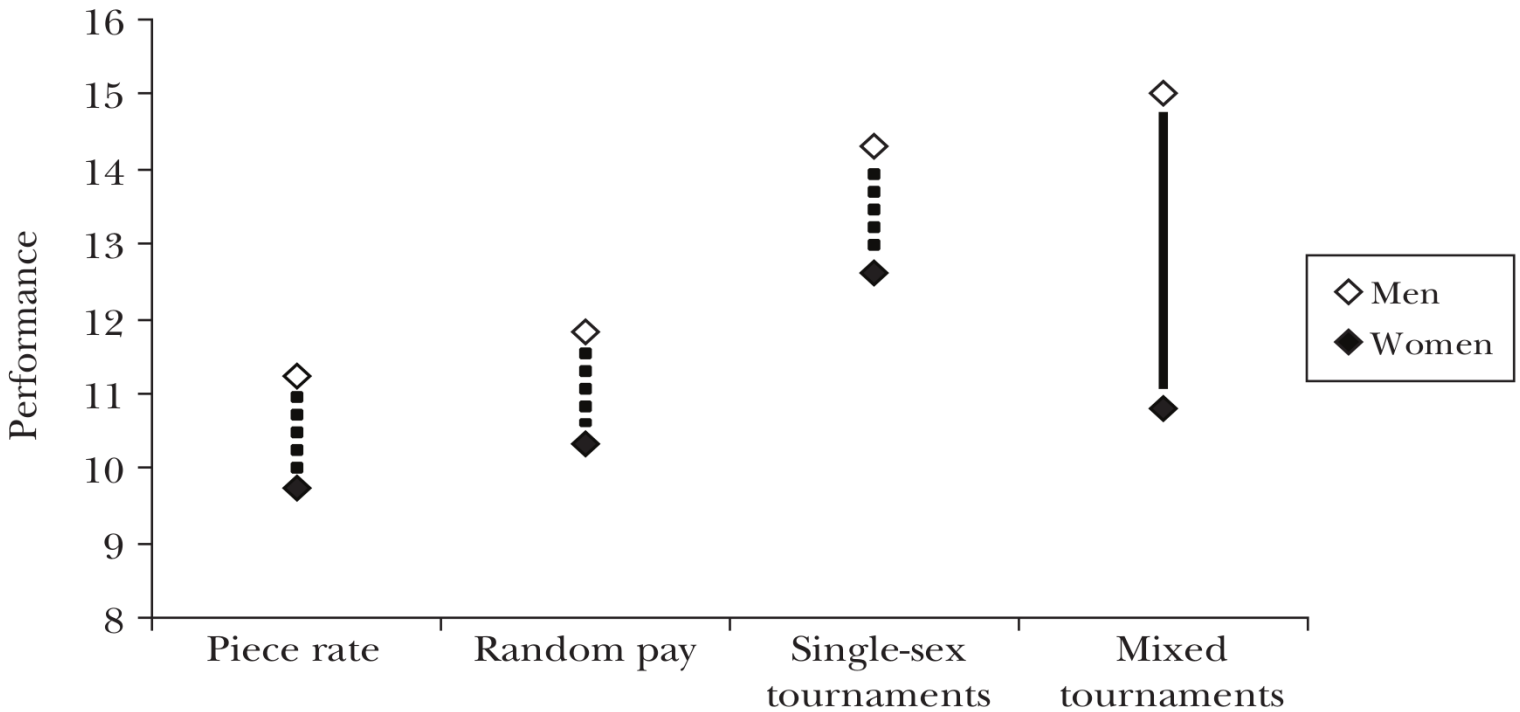
Reaction to Competition

Many studies suggest women's performance decreases in competitive environments, whereas men's performance increases.

For example, Gneezy et al. (2003) conduct an experiment at the Technion in Israel:

- Individuals were asked to solve mazes online for 15 minutes.
- Four incentive schemes varied in the degree of competitiveness and gender diversity.
- Thirty women and thirty men perform under each incentive scheme.
- All exercises were conducted in groups of six.

Average Performance of 30 Men and 30 Women in Each Treatment



Source: Gneezy, Niederle, and Rustichini (2003).

Going Outside of the Lab

Ors et al. (2013) compares the performance of French students taking the competitive exam for HEC (the business school).

They compare the male and female students:

- at the baccalaureate exam (at the end of high school)
- at the HEC competitive entry exam (two years later)
- at the first-year HEC exams

Only the second is genuinely competitive because there are limited places for HEC (380).

They find that:

- Male students perform better than female students in the competitive entry exam.

  $\Rightarrow$ As a result, more men are admitted than women.

- But female students perform better than male students at the baccalaureate and for the first-year HEC exams!

  $\Rightarrow$ Likely not due to differences in abilities, but rather differences in preferences regarding competition.

Self-selection Effects

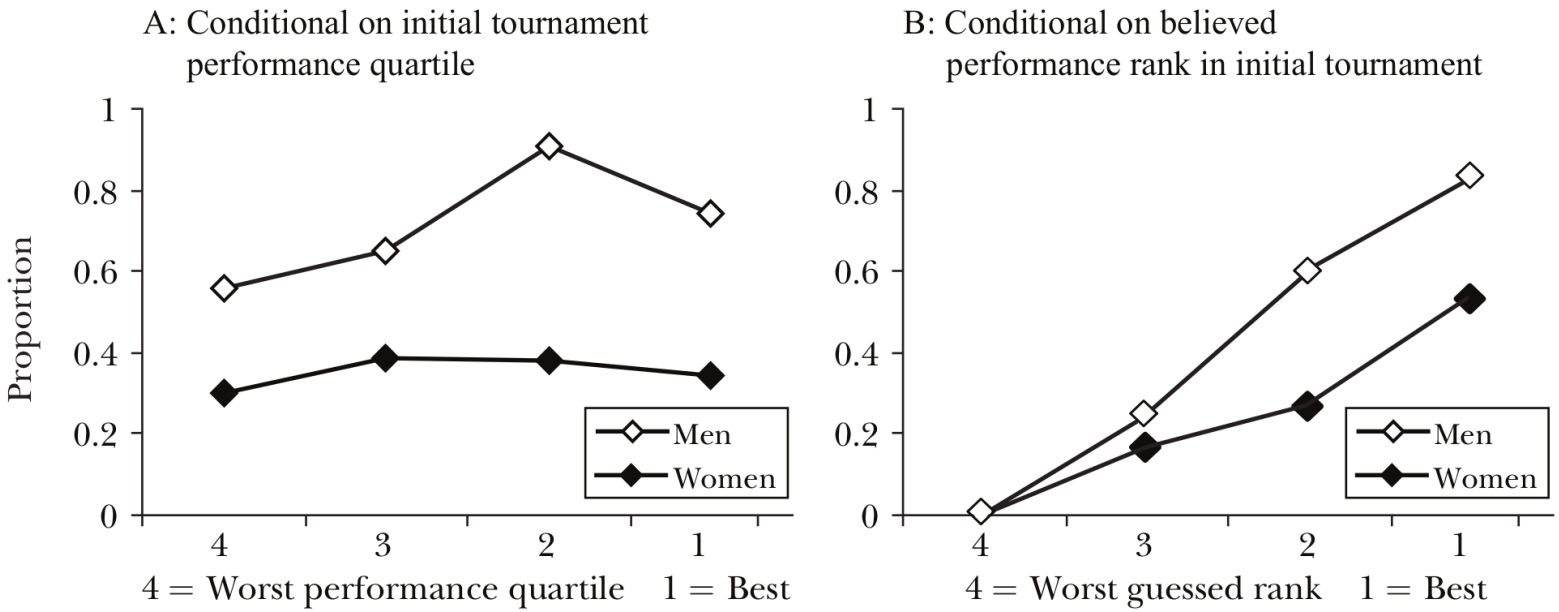
Conditional on competing, men tend to perform better than women.

But in some cases, we have the opportunity to avoid competitive environments.

Niederle and Vesterlund (2007) find evidence of avoidance strategies in the lab. In their setting:

"While 73% of the men select the tournament, only 35% of the women make this choice."

Proportion Selecting Tournament



Source: Niederle and Vesterlund (2007).

Bargaining

One area in which avoiding competition can have a strong impact is bargaining.

Leibbrandt and List (2015) conduct a field experiment to test this hypothesis.

They post 18 job ads for “administrative assistant positions” in 9 major US metropolitan areas.

They randomize nearly 2,500 job seekers into jobs that:

- Explicitly mention that the wage is negotiable.
- Do not.

Job seekers are only made aware of these contractual details after signaling their interest in the job.

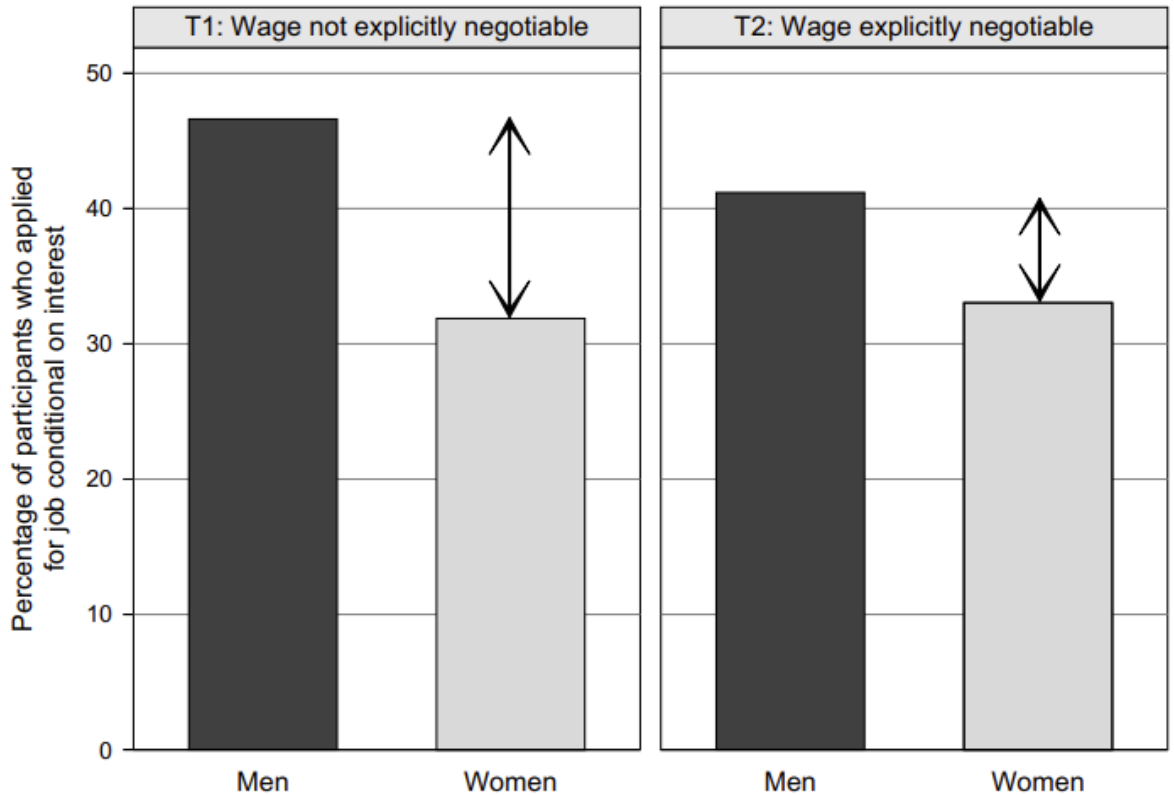
Main Results

With no explicit statement that wages are negotiable, men are more likely to negotiate for a higher wage, whereas women are more likely to signal their willingness to work for a lower wage.

When the possibility that wages are negotiable is explicit, these differences are mitigated.

Men, in contrast to women, prefer job environments where the rules of wage determination are ambiguous.

Figure 1 Percentages of Job Applications Conditional on Interest and Depending on Treatment and Gender for Both Jobs



Notes. There are two treatments: in T1, the wage description did not explicitly mention that wages are negotiable; in T2, the wage description did explicitly mention that wages are negotiable. The dark (light) bars illustrate the application probabilities for men (women). The arrows indicate the gender gap in job applications in both treatments.

Class Discussion

Do you think these differences are nature or nurture?

Does this lead to different normative conclusions?

What do these results imply for public/private policies?

There is no clear-cut answer to the nature versus nurture debate.

However, human beings often tend to “naturalize” observed phenomena.

Let’s discuss gender differences in test scores as a case in point...

The Educational Attainment Convergence

In the 1960s, the gender gap in college enrollments was 1.55 males for every female (Pope and Sydnor, 2010).

By the 1980s, this gap had been erased.

By 2003, the college gender gap was 1.30 females for every male undergraduate.

All cohorts of U.S. women born since 1960 have had higher average years of schooling than their male counterparts.

Despite this convergence at the undergraduate level, women are still greatly underrepresented in the upper echelons of STEM fields.

Distributions of Test Scores

Potential explanation: Men perform better than women in math-related tasks at the extremes of the distribution.

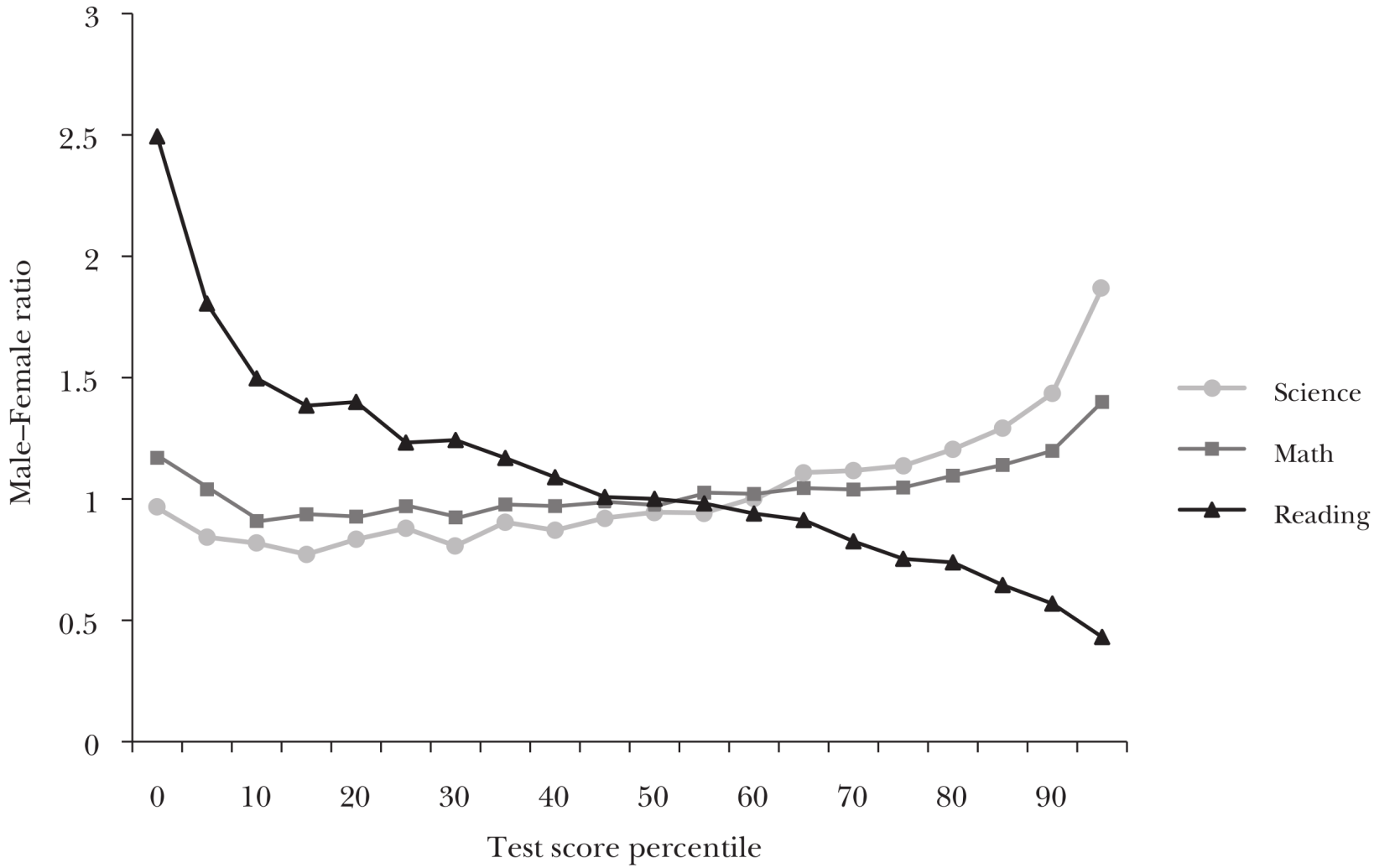
One way of testing this hypothesis is to focus on the test scores of pre-collegiate students.

Nowadays, the average standardized difference in test scores between males and females is very small and statistically insignificant.

But there is a but:

- significantly more males than females score in the very high ranges on science and math tests
- significantly more females score very highly on language and reading tests

Male–Female Ratios in Science, Math, and Reading across the Distribution



Nature or Nurture?

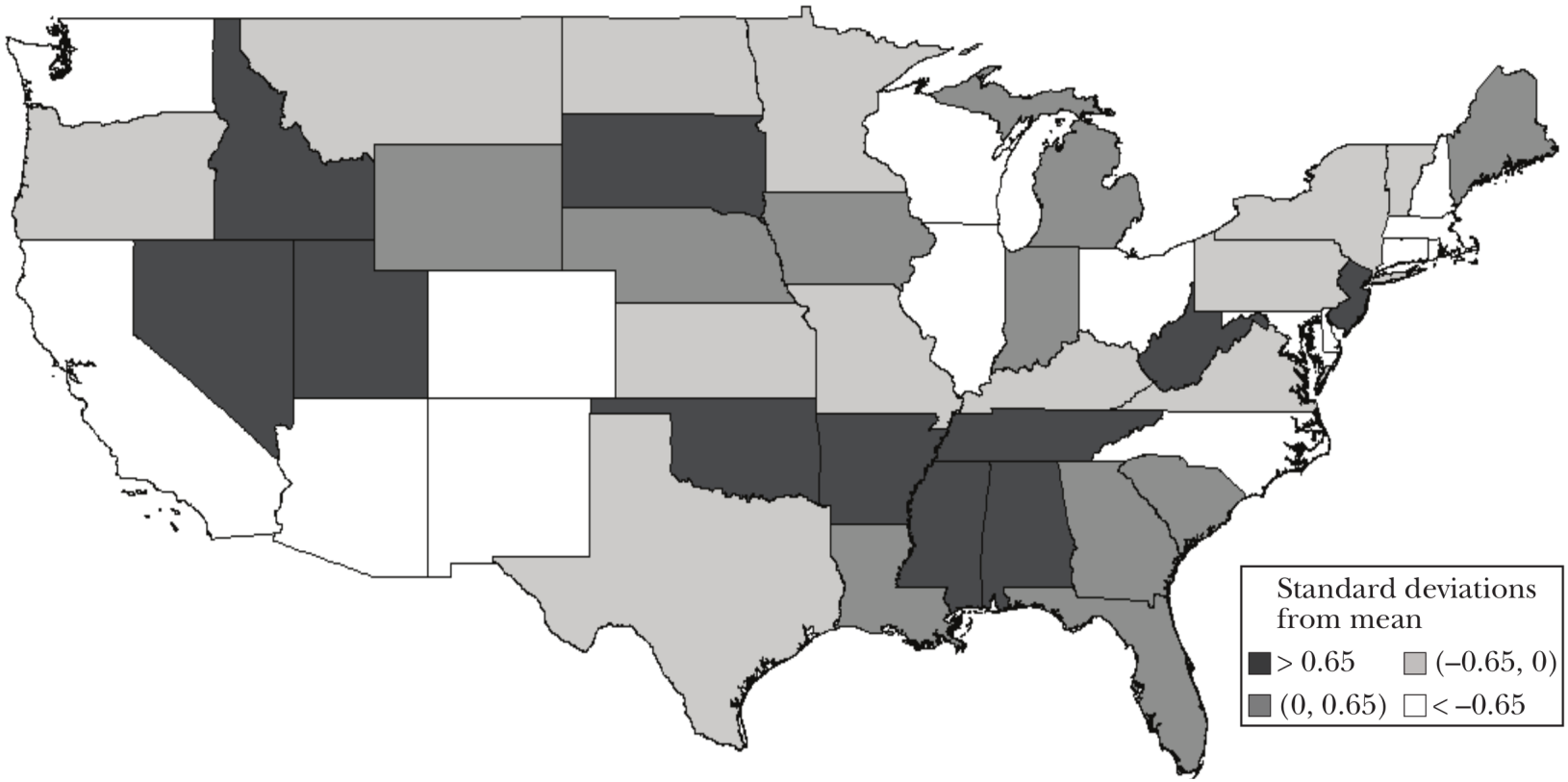
Is this nature or nurture? Extremely hard debate to settle, but empirical evidence suggests nurture definitely matters.

In 1972 boys had average math scores that were 0.25 standard deviations higher than those of girls.

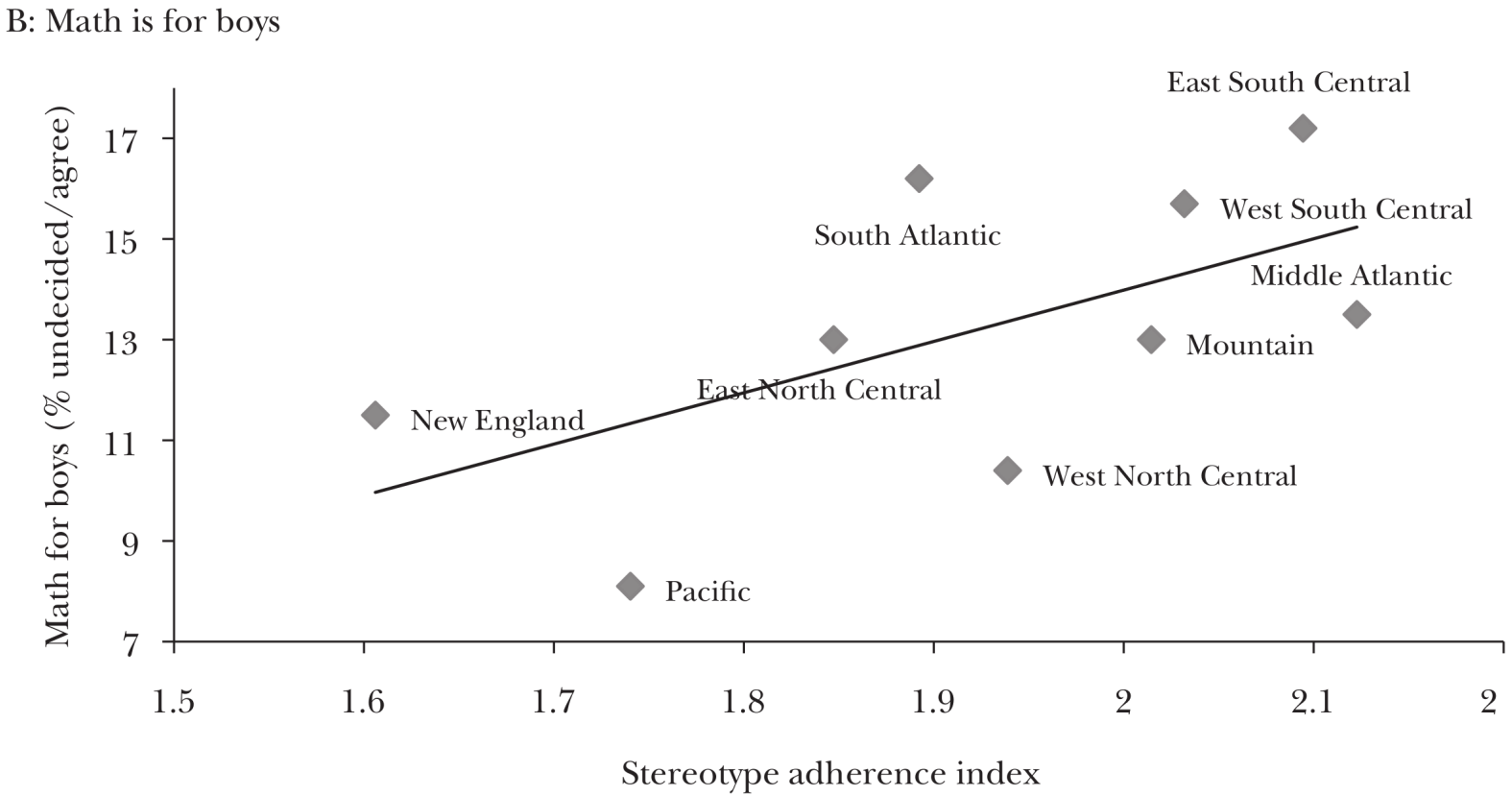
Girls had a slight edge of 0.035 standard deviations in average reading scores.

By 1992, the girls had cut into the average math gap by 0.17 standard deviations (!) and had added to their lead in reading.

Geographic Representation of the Stereotype Adherence Index (SAI)



Notes: Gender gaps in test scores vary widely across the United States.



Notes: Stereotypes in survey responses correlate with the gender gap in test scores.

Conclusion

There are observed gender differences in preferences and performance inside and outside the lab.

However, these differences vary quite drastically across settings, suggesting culture is essential in explaining these differences.

In the next lecture, we will discuss how culture, social norms, and stereotypes can shape and sustain inequality between groups.

Croson, R. and Gneezy, U. (2009). Gender differences in preferences. *Journal of Economic literature*, 47(2):448–474.

Funk, P. and Gathmann, C. (2015). Gender gaps in policy making: Evidence from direct democracy in switzerland. *Economic Policy*, 30(81):141–181.

Gneezy, U., Niederle, M., and Rustichini, A. (2003). Performance in competitive environments: Gender differences. *The quarterly journal of economics*, 118(3):1049–1074.

Leibbrandt, A. and List, J. A. (2015). Do women avoid salary negotiations? evidence from a large-scale natural field experiment. *Management Science*, 61(9):2016–2024.

Niederle, M. and Vesterlund, L. (2007). Do women shy away from competition? do men compete too much? *The quarterly journal of economics*, 122(3):1067–1101.

Ors, E., Palomino, F., and Peyrache, E. (2013). Performance gender gap: does competition matter? *Journal of Labor Economics*, 31(3):443–499.

Pope, D. G. and Sydnor, J. R. (2010). Geographic variation in the gender differences in test scores. *Journal of Economic Perspectives*, 24(2):95–108.

Tips for the Exam

Know the lab experiments that have helped researchers elicit gender differences in preferences.

Understand the three main dimensions along which men and women differ in terms of preferences.

Understand why the nature/nurture debate is empirically complex, and why this does not preclude policies addressing diversity.