

14.11–Lecture 4: Gender and Power

Prof. Esther Duflo

March 7, 2006

In 2000, women constituted 45% of the workforce, 4% of the five higher officers in Fortune 500 companies, and 0.4% of the CEOs in the U.S. They comprised only 13.8% of all parliament members in the world, up from 9% in 1987.

Compared to other dimensions of difference between men and women, access to leadership positions (in politics and elsewhere) is a domain where the relative position of women and men has changed very little.

1 Women as policy makers: why should we care?

Beyond equity, why should we care whether women are elected as politicians or become CEOs of top firms?

- Women and men have different preferences
- These preferences translate into different *policy* preferences
- Men and women do not equally represent the interests of voters (or the shareholders).

Two possible reasons:

- The politicians may not be able to fully commit to an agenda.
- Having a woman leader may shift the position of the median voters, by encouraging other women to intervene in the policy debate.

Is any of this true?

We often observe that women and men legislators take different positions and make different decisions. But is this a sign that they really make a difference? Why or why not?

Chattopadhyay and Duflo (2003) exploit a policy experiment in India: the set aside of seats for women and minorities in decentralized government. They use participatory resources appraisal methods and leader interviews to assess whether women and men invest in different public goods.

They find that:

- Women and men have different preferences over public goods.
- Women as policy makers do invest in different goods.
- The goods they invest in reflect the goods that women prefer (see West Bengal vs. Rajasthan).

Further, Beaman et al. (2006) find that other women are encouraged to participate more actively in politics when other women are the heads.

- They attend meetings more often.
- They are more likely to speak at meetings.
- In reserved villages, women are less likely to be interrupted and treated poorly by the Village Chief.

Therefore, there seems to be some truth to the “voice” view.

There is, however, some truth to the “power” view as well: when we look at whether women respond to the wishes of women in general, or to the wishes of the women in their villages, they seem to be more responsive to those of women in general.

2 Why are there so few women in leadership positions? I:

Women are not perceived as capable leaders

2.1 Topalova and Duflo: gender and perception of leadership quality

Since women make up half the electorate, (and if they represent the interests of women better), why don't women get elected more often?

The Indian experiment also gives us the opportunity to see how women leaders are appreciated by the voters.

Topalova and Duflo (2004) use data from the Millennium survey in India, which combines objective data on the *quality* of public goods with subjective data on the *perception* of the quality of these goods.

They find that overall, the objective quality of goods provided by women is not any worse than that of men. However, the subjective ratings are worse for all goods, even for water, which is objectively better for women, and for goods that are not even under their control (health). Both women and men rate women leaders as worse leaders.

2.2 Evaluation of leadership qualities

The problem that may remain in Duflo and Topalova's work is that the women may be worse in dimensions that we do not observe. For example, even though the water sources look just as good, they may be bad in worse ways.

We have seen in the first lecture a technique to address this problem. Do you remember what this was?

This technique (referred to as the Goldberg paradigm by psychologists) has been applied in a variety of settings: see review in Eagly and Karau.

E.g.: -evaluate resumes in order to hire a candidate for a managerial position (vary the level of management: from middle to top management). -ask people to rate the quality of a supposed leader's actions (e.g. a speech, or a vignette), where only the gender of the supposed leader is affected.

The article by Eagly and Karau is a meta-analysis of many of these experiments. The hypothesis is that the reason why women are rated less positively than men as leaders in general is because women's traditional role is viewed as being nice and "communal" as opposed to aggressive and "agentic." Moreover, they argue, for many people, this is not only a description of the world, but also a judgment on how the world *should* be. So women as leaders suffer a double disadvantage:

They glean from a variety of experiments evidence to support this hypothesis, which they organize into a variety of sub-hypotheses.

What is very nice in this work is the attempt to go beyond a description to a testable implication of a more specific theory.

2.3 Implicit association tests

The IATs try to uncover people's potentially unconscious bias and attitudes by asking them to associate concepts. The idea is that the speed at which people can put on the same "side" of the screen two classes of concepts indicates the ease, and therefore the implicit associates of these two classes.

You should try for yourself how they work.

Rudman and Kilianski (2000, *Personality and Social Psychology Bulletin*) propose 3 IATs: 15 male names, 15 female names.

-gender and career/family (this is the one available on the web).

-gender and authority positions (boss, leader, supervisor, authority, expert, leaders vs. assistant, secretary, subordinate, aid, helper).

-gender and stereotypes (individualist, competitive, independent, challenging, self-sufficient, autonomous, hierarchical vs. communal, connected, commitment, together, kinship, supportive, interdependence).

The task is in 5 steps:

-Participants press right key for male, and left for female

-Participants press right key for career, left key for family

-Male-female and career-family now appear together. Participants press right for male or career, and left for female and family (MALE+CAREER)

-Participants press right key for family, left key for career

-Participants press right for family or male and left for career of female. (FEMALE+CAREER)

The result is the *time* people take to complete tasks 3 and 4.

Results:

-Both men and women associate women with family and men with career, men with authority and women with low authority, men with agentic and women with communal.

-The differences between men and women are not significant except for the authority measures (where women have lower implicit association than men).

3 Methodology: human as subjects of research

In all these papers, researchers have used human subjects. The research governing human subjects is regulated, to ensure the protection of the participants.

The background:

- Nazi research: Nuremberg trials.
- Tuskegee syphilis trials: American medical research project conducted by the U.S. Public Health Service from 1932 to 1972, examined the natural course of untreated syphilis in black American men. The subjects, all impoverished sharecroppers from Macon County, Alabama, were unknowing participants in the study; they were not told that they had syphilis, nor were they offered effective treatment. By the end of the experiment, 28 of the men had died directly of syphilis, 100 were dead of related complications, 40 of their wives had been infected, and 19 of their children had been born with congenital syphilis. People were also lured to come for tests with publicity of free treatment. In 1972 the whistle was blown, and the men finally won a \$10 million class action suit against the PHS. The scientific merit of the study was also shoddy: apparently not much was ever learned from it about how to treat syphilis. President Clinton apologized in the name of the nation in 1997.

What seems wrong to you with the syphilis trials:

-
-
-

The research involving human subjects is governed by federal regulation. HHS Regulations for the Protection of Human Subjects at Title 45 Code of Federal Regulations Part 46.

The HHS regulations are intended to implement the basic ethical principles governing the conduct of human subjects research. These ethical principles are set forth in the report of the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research entitled: Ethical Principles and Guidelines for the Protection of Human Subjects of Research (the “Belmont Report”).

The Belmont Report lays out three basic ethical principles for the conduct of human subjects research:

Definitions

Research - A systematic investigation, including research development, testing and evaluation, designed to develop or contribute to generalizable knowledge. Activities that meet this definition constitute research for purposes of the HHS regulations, whether or not they are conducted or supported under a program, which is considered research for other purposes. For example, some demonstration and service programs may include research activities.

Human Subject - A living individual about whom an investigator (whether professional or student) conducting research obtains (1) data through intervention or interaction with the individual, or (2) identifiable private information.

- Respect for persons
 - Respect individual autonomy
 - Protect individuals with reduced autonomy
- Beneficence
 - Maximize benefits and minimize harms
- Justice
 - Equitable distribution of research burdens and benefits

Application of the general ethical principles to the conduct of human subjects research leads to the following requirements:

- Respect for Persons
 - Informed consent
 - Protecting privacy and maintaining confidentiality
 - Additional safeguards for protection of subjects likely to be vulnerable to coercion or undue influence
- Beneficence
 - Assessment of risk/benefit analysis including study design

- Ensure that risks to subjects are minimized
- Risk justified by benefits of the research
- Justice
 - Ensure that selection of subjects is equitable.

How does this work in practice:

- For any research by an MIT researcher, you need to be trained in human subjects (you have to conduct the training on the web site of the COUHES).
- You need to submit to MIT COUHES a form describing your research.
- You need to follow the appropriate deadlines; and get the authorization BEFORE you start.
- You need to submit your informed consent forms as well. You use the template on the forms.
- In some cases, you can request a *waiver* of the informed consent, if the research involves minimal risk to the subject and if the research could not be completed after asking for informed consent; or if the study is completely anonymous and the informed consent form is the only thing that would link the subject to the research.
- In some types of studies, the nature or validity of research may require that subjects are not fully informed in advance about the intent of and/or procedures in a study. However, unless otherwise specified by COUHES, subjects in these studies may sign informed consent forms that contain information that will not compromise the research. Such incomplete disclosure is justified only if it is clear that:
 - incomplete disclosure is truly necessary to accomplish the goals of the research,
 - there are no undisclosed risks to subjects that are more than minimal, and
 - there is an adequate plan for debriefing subjects, when appropriate, and for dissemination of research results to them. Debriefing should usually be in writing and should take place immediately after the subject's participation in the research.

When prospective subjects are considering enrollment in such studies, they should be informed that some aspects of the research will not be revealed until the study is concluded.

Some research is called *exempt*:

Exempt status may be granted for research activities in which the only involvement of human subjects will be in one or more of the following categories:

- Research conducted in established or commonly accepted educational settings, involving normal educational practices, such as (i) research on regular and special education instructional strategies, or (ii) research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.
- Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: (i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.
- Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior that is not exempt under paragraph (b)(2) of this section, if: (i) the human subjects are elected or appointed public officials or candidates for public office; or (ii) federal statute(s) require(s) without exception that the confidentiality of the personally identifiable information will be maintained throughout the research and thereafter.
- Research, involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are publicly available or if the information is recorded by the investigator in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects.
- Taste and food quality evaluation and consumer acceptance studies, (i) if wholesome foods

without additives are consumed or (ii) if a food is consumed that contains a food ingredient at or below the level and for a use found to be safe, or agricultural chemical or environmental contaminant at or below the level found to be safe, by the Food and Drug Administration or approved by the Environmental Protection Agency or the Food Safety and Inspection Service of the U.S. Department of Agriculture.

MIT COUHES determines exempt status, so you would still need to submit a form. The most likely reason why you would be exempt is in category I, if you do not need to report the identity of a subject. For example, if you go to a railway station, and ask the people who wait for the train to read an essay and tell you whether they think the author of the essay is a good leader or not, and you record their answer without recording their name or any other identifying information (such as their address), your research is probably exempt. You may also request a waiver of informed consent, because the signed form would be the only thing linking the subject to the research at all. It is harder to be exempt under category II, since it requires judgement.

Chattopadhyay and Duflo (women as policy makers) was exempt. Why?

So the first thing to decide is WHICH form to fill out: an exempt form or a standard form. In both cases, the forms are very similar, but the exempt form is somewhat lighter. Now let's first go through the form together, thinking about a particular application.

Two interesting experiments that may cause problems:

- The electric shock experiments (power of authority)
- The IQ experiments (power of suggestion)

What is your view on this? Should these be authorized?

4 Why are there so few women in leadership positions? II: Men are more competitive

Another possible explanation for why there are fewer women in politics is that women are less keen to compete than men. For example in West Bengal, women are significantly more likely than men to say that they will NOT run again. This may be explicitly frowned upon (like in India) or they may just not like it.

Gnuzi, Nierdele, Rustichini (2003) "Performance in Competitive Environment: Gender Differences."

This is a lab experiment, conducted at an engineering school in Israel. Students are recruited and asked to solve mazes on a computer.

Different treatments:

- To determine whether male ability to solve mazes and female ability to solve mazes is the same
- To see whether competition affects men differently than women
- To see whether this difference is due to women reacting differently to risk than men
- To see whether women and men have just different innate abilities to compete
- To see whether men are more confident in their ability than women.

Results:

- In piece rate, men and women solve almost equal number of mazes.
- In mixed tournament, men solve more mazes than in piece rate, and women do not. So men solve more mazes than women.
- In random treatment, men and women solve almost equal number of mazes
- In single sex treatment, both men and women solve more mazes than in piece rates. Men and women solve almost equal number of mazes.
- When asked to choose their difficulty level, women chose easier mazes than men (indication that men think they have higher ability)

Conclusions and interpretations:

- Men are more competitive than women, especially in a mixed environment
- Could this be due to the fact that they are slightly better than women at solving mazes?
Explain why?

- In fact, real difference would not explain this
- However, perhaps perceived differences do (see last experiment).

5 Why are women less competitive than men? The “backlash” theories

There are other possible interpretations of these results. In this experiment, the competition was just to exert more effort: the person who exerts the most effort wins. However, in many contexts of leadership, the performance is in part a function of how others perceive the leader (are they willing to cooperate; are they willing to vote for this person again).

If Eagly and Karau are correct, the lack of competitive spirit among women matched with men may be a rational reaction when faced with the possibility that women who are viewed as competitive may not be appreciated as leaders.

Note that if this is true there is a potential for self-reinforcing loops, and therefore multiple steady states: if women are viewed as meek and men aggressive, if people who stand out are not perceived positively and therefore lose points, then women will stay meek and men aggressive.

5.1 The backlash theory in psychology

Rudman (1998) (“Self Promotion as a Risk Factor for Women”) asked her subjects to evaluate potential partners for a “jeopardy” game they were supposed to play later in the experiment. The ideal partner was presented as competent and competitive. They evaluated partners in person or from a video. They had to rate competence, likeability, and hireability.

The “supposed” partners were confederates (i.e. in psychology: people who play on behalf of the professors), males and females who present themselves either as “agentic” (overconfident) or modest.

The backlash: self-effacing women are viewed as less competent, but agentic women are viewed as less likeable... so both are viewed as less hireable as a partner for the game.

Rudman and Glick (1999) (“Feminized Management and Backlash Towards Agentic Women”) added a second dimensions: the backlash is stronger for jobs that are described as requiring interpersonal skills.

They get students to rate people's competence, social skills, and likeability for a computer manager job. They show the students the same video tape as in the previous game, with agentic and self-effacing men and women.

They show a strong backlash against agentic women in jobs that are described as requiring social skills.

The trend in favor of feminine job descriptions for middle management jobs (while the top management positions remain "agentic") may lead to more difficulty in climbing up for the most ambitious women, creating a glass ceiling where there was not one before.

NB: What special permission do these psychology experiments have to request from human subjects?

Bowles, Babcock and Lai ("It Depends Who You Ask and Who Is Asking") ask the subjects to evaluate candidates for a management job in a firm (they know it's just imagined). The candidate can be a woman or a man, and they are described as equally competent and experienced. They can either attempt to negotiate for a pay raise or not.

Results:

- Competence is not affected by gender or by whether they attempt to negotiate
- For women evaluators, candidates that attempt to negotiate are viewed as more demanding, and they would not want to work with them. Women treat female and men negotiators in the same way.
- For men evaluators, women who attempt to negotiate are viewed as not socially skilled and not nice to work with.

In a second experiment, they tell people they will be evaluated by a man or by a woman, depending on the condition. They then ask them whether they want to negotiate for their pay or not. Men are as likely to negotiate when interviewed by a man as when they are interviewed by a woman. But women are less likely to negotiate when interviewed by a man than when interviewed by a woman.

NB: in experiment 1, they throw out respondents who did not remember whether the candidate wanted to negotiate or not. Is this OK?

5.2 A shadow of doubt on the backlash theory

Fiona Greig (2006) (“The Social Cost of Asking”) pursues in more detail the question of whether being “meek” (and asking less) is a rational strategy for a woman.

This is a pure lab experiment where subjects play economic games in Brazil.

- In round 1, they play a “taking” game: player B has to decide how much to take from player A. Player A and B do not know their respective identities and the result will remain secret.
- In round 2, they play the taking game again but this time they know about round 3.
- In round 3, they play a “trust” game. Player C is given some money. He can pass some back to the investigator, who multiplies it by 2 and gives it to player B. Then player B gives back what he wants.

Results:

- In round 3, people are punished for taking
- Men punish more than women
- However, women are not punished more than men
- Women *expect* higher punishment than men, but they are mistaken.

These conclusions are closer to the Gnuzy et al. (2003) conclusion: women’s lack of competition is due to a *perception* of their own ability or the *perception* of how much it is acceptable to take for one’s self rather than actual overly conservative behavior.

This brings us back to the paper by Steele in the first lecture: when these perceptions were manipulated (“on this particular test, women do as well as men”), women *did* do as well as men.

Drawback of this literature: most of it is in the lab. Little evidence on how people would behave in *real* circumstances. The experiments have little stake, and they are run with strange subjects (more on these problems in the next lecture).

More field research is warranted on:

- Whether manipulating perception (building up confidence) of women would lead to an improvement in their “effort” in a competitive environment.
- Whether this would lead to an increase in their performance in settings where performance is in part related to how they are perceived by others (e.g. politics or business environment) or whether the backlash would go against them.

Thoughts?