# Some data

- In 2013, the gender pay gap in India was estimated to be 24.81%.
- A report by World Economic Forum highlights that in the corporate sector in India, a woman is paid only 1/3$^{rd}$ what a man in the same position is paid.
- Representation of women in work force constitutes only 1/4$^{th}$ total strength

# Science and scientists are objective

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## Study 1

Trix and Psenka (2003) analyzed 312 letters of recommendation for 103 successful applicants for faculty positions in a large medical school.

They found that letters for women were shorter than letters for men, which meant that fewer of the women's credentials were being described.

Results of their study show that women are – unintentionally – discriminated against.

# Science and scientists are objective

## Study 2

- Research from Yale had scientists presented with application materials from a student applying for a lab manager position and who intended to go on to graduate school.

- Half the scientists were given the application with a male name attached, and half were given the exact same application with a female name attached.

- Results found that the "female" applicants were rated significantly lower than the "males" in competence, hireability, and whether the scientist would be willing to mentor the student.

- The scientists also offered lower starting salaries to the "female" applicants: $26,507.94 compared to $30,238.10.

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## Study 3: Head of the Table Exp (Porter and Geis)

College students saw a slide of 5 people seated around a table. The group was described as working together on a project. Two people sat at each side and one person sat at the head of the table.

Some students saw group all male, others all female, and yet others mixed, i.e. both males and females.

Students were asked to say who was the leader of the group.

In same-sex groups, students consistently identified the man or woman sitting at the head of the table as the leader.

In mixed-sex groups, if a man was at the head of the table, students saw him as the leader.

But if a woman was at the head, students labeled her as the leader about half the time and labeled a man seated elsewhere at the table as the leader about equally often.

Women are less likely to obtain the automatic deference that marks leadership conferred to men.

A woman has to work harder to demonstrate that her apparent position of leadership is a real position of leadership.

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## Study 4

One early study evaluated postdoctoral fellowship applications in the biomedical sciences and found that the women had to be 2.5 times more productive than the men in order to be rated equally scientifically competent by the senior scientists evaluating their applications.

The authors concluded, "Our study strongly suggests that peer reviewers cannot judge scientific merit independent of gender. The peer reviewers over-estimated male achievements and/or underestimated female performance."

The study finds that "gender discrimination of the magnitude we have observed… could entirely account for the lower success rate of female as compared with male researchers in attaining high academic rank."

*Whenever the subject of women in science comes up, there are people fiercely committed to the idea that sexism does not exist. They will point to everything and anything else to explain differences while becoming angry and condescending if you even suggest that discrimination could be a factor. But these people are wrong. This data shows they are wrong.*

*[Article in Scientific American about Yale study]*

*Scientists are supposed to be objective, able to evaluate data and results without being swayed by emotions or biases. This is a fundamental tenet of science. What this extensive literature shows is, in fact, scientists are people, subject to the same cultural norms and beliefs as the rest of society.*

*[Prof. Alison Coil, UCSD]*