## Homework 11: Reading the Paper

## 36-313, Fall 2022

## Due at 6 pm on Thursday, 1 December 2022

**Agenda**: Reading and critically evaluating a popular-press argument about inequality; review of concepts.

For this assignment, start by reading the following:

Jessica Nordell (with graphics by Yaryna Serkez), "This Is How Everyday Sexism Could Stop You From Getting That Promotion", *New York Times* 14 October 20221, [https://www.nytimes.com/interactive/2021/10/14/opinion/gender-bias.html]

- 1. Describe the problem This essay, like most writing about inequality, is about inequality of something, between different groups.
  - a.(10) What are the main groups the essay is comparing? Are these groups defined by ascribed statuses or achieved ones? Are the groups categorical, ordinal, quantitative, or something else?
  - b.(10) What is the main outcome or variable the essay wants to make more equal? (Said differently: inequality of what?) Is this outcome categorical, ordinal, numerical?
  - c.(10) How does the essay compare outcomes or variables across groups? For instance, does it compare rates or proportions, or means, or medians, or present correlations? Are these appropriate ways of doing the comparisons, based on your answers to Q1a and Q1b?
- 2. A simulation The center of the essay is, unusually, a simulation model of sex bias in promotions within a company.
  - a. (5) Briefly describe how the simulation is supposed to work. *Hint* Carefully read the paragraphs just before the first interactive figure, and run the interactive figure at least once.
  - b. (5) In class, and in an after-class exercise, we looked at a very simple model of successive promotion or selection. How does that model differ from the one used in the simulation?
  - c. (5) The figure titled "Small change, big difference" shows two different runs of the simulation. What's the difference in the parameters between them? What's the difference in the outcomes? What point is the essay trying to make by including this?

## 3. Advice

- a. (5) What are two measures to reduce the inequality which the essay says do not work, or do not work well?
- b. (5) What are two measures to reduce the inequality which the essay says do work?
- c. (5) Which of those claims about what does or doesn't work are supported by observational studies?
- d. (5) Which of those claims about what does or doesn't work are supported by experimental studies?
- e. (5) Which of these claims about what does or doesn't work are supported by the simulation?
- f. (5) What can the simulation add to evidence from observational or experimental studies?
- 4. Close to home (9) Who is Lenore Blum? Where is she mentioned in the essay? What role does she play in the essay?
- 5. Not that kind of equality (5) The essay presumes that it's good to eliminate one kind of inequality within organizations (which you described in Q1). What's another kind of inequality which the essay within organizations which the essay presumes should be left alone?
- 6. Timing (1) How long, roughly, did you spend on this assignment?

**Presentation rubric** (10): The text is laid out cleanly, with clear divisions between problems and subproblems. The writing itself is well-organized, free of grammatical and other mechanical errors, and easy to

follow. Plots are carefully labeled, with informative and legible titles, axis labels, and (if called for) sub-titles and legends; they are placed near the text of the corresponding problem. All quantitative and mathematical claims are supported by appropriate derivations, included in the text, or calculations in code. Numerical results are reported to appropriate precision.