Speed Dating Project Introduction to Causal Inference 097400

Shany Biton, 204535959 Sheina Gendelman, 324740141

Spring 2022

Casual Question

The effect of subjects seeking serious relationships on dating one of their matches in the next 3-weeks.

Data

The Speed Dating dataset was compiled by Columbia Business School [1]. Data was gathered from 552 unique participants in experimental speed dating events from 2002-2004 conducted at Columbia University. During the events, participants engage in four-minute conversations. At the end of their four minutes, participants were asked if they would like to see their date again. The dataset also includes questionnaire data gathered from participants at different points in the process (before, immediately after, and 3 weeks after the event). These fields include: demographics, dating habits, self-perception, beliefs on what others find valuable in a partner, and lifestyle information.

Methods

- The treatment (T) is the 'goal' of participants in attending this event and the outcome (Y) is 'future dating' i.e., going on at least one date in the following 3-weeks with one of their matches.
- Causal analysis: develop and train a Causal graph with relevant variables to ensure proper estimation of causal effects of 'goal' on 'future dating'.
- Expected outcomes: We hypothesise that participants seeking serious relationships are more likely to go on a date in the future with at least one of their matches.

challenges and limitations

Several confounders should be considered such as: age, income, academic achievements, career, previous encounter of participants. An important confounders is the gender of participants, which can highly affect the outcome, as studied at Fishman et al. [1]. Another hidden confounders are are for example: mental state of the participants, family background, disability.

References

[1] Raymond Fisman, Sheena S Iyengar, Emir Kamenica, and Itamar Simonson. Gender differences in mate selection: Evidence from a speed dating experiment. *The Quarterly Journal of Economics*, 121(2):673–697, 2006.