



Story-Led Causal Inference

Jessica Young

(Harvard University)

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Department of Statistics

Ludwigstr. 33, Seminar Room 144,

and online via Zoom [\[Link\]](#)

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Abstract

The modern causal inference literature has expressed a deep divide over the nature of the so-called consistency condition. Consistency is popularly characterized as the condition that counterfactual/potential outcomes indexed by a hypothetical intervention of interest may be equated to measured outcomes among those whose data is consistent with that intervention. One “camp” argues consistency is a definition/axiom under the investigator’s causal model while the other insists consistency is an assumption that fails when there are “multiple versions of treatment” rendering the causal target/estimand ill-defined. In this talk, I consider a third perspective on the consistency question that falls out of prioritizing the details of an investigator’s underlying story about what is actually of interest over data that happens to be available for analysis. I will illustrate the benefits of this “story-led approach” using an example of an underlying story behind studies of the “protective effect of cancer on dementia.”

About the Speaker:

Jessica Young is an Associate Professor in the Department of Population Medicine at the Harvard Medical School and Harvard Pilgrim Health Care Institute and the Department of Epidemiology at the Harvard Chan School of Public Health. Her research focuses on the development and application of statistical methods for making valid causal inferences in longitudinal studies with complications such as time-varying confounding, competing events and censoring. She is a Co-Investigator and Biostatistician for the Project Viva Cohort.

References:

Young, Jessica G. (2024): “Story-led causal inference,” *Epidemiology* 35(3). [\[PDF\]](#)
