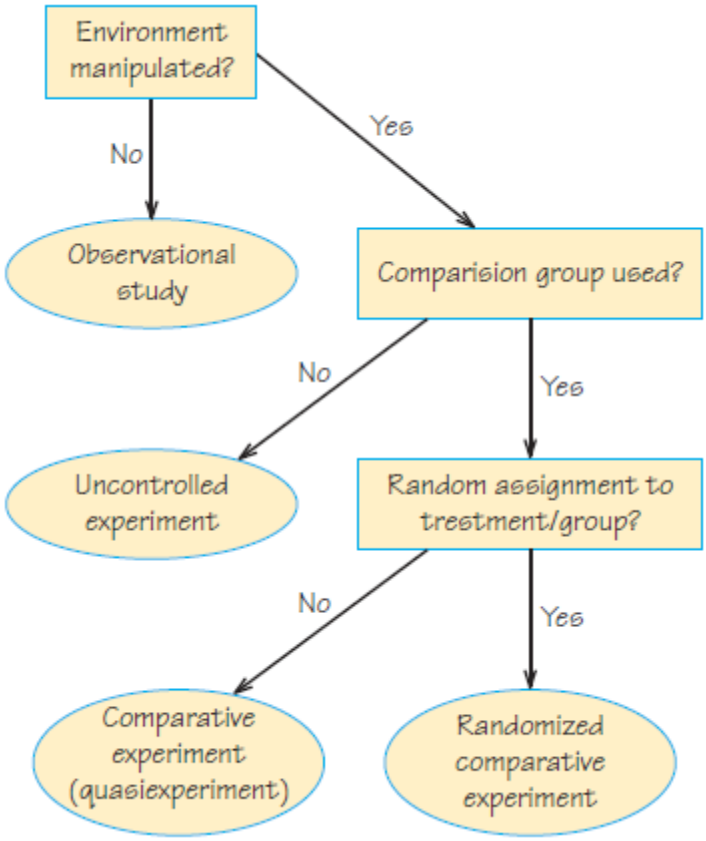
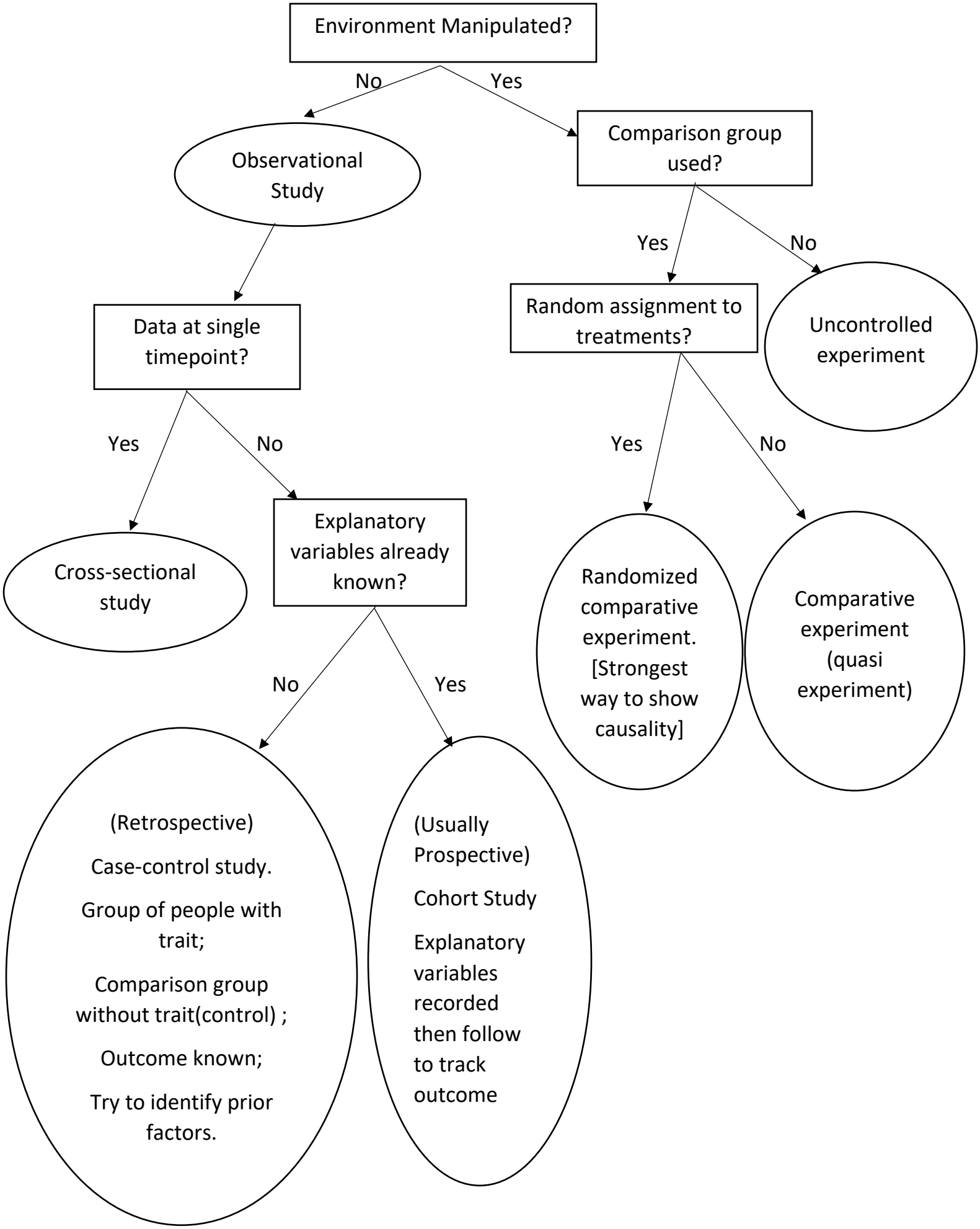


written by Lesser for p. 273 of *For All Practical Purposes* 9e (2013)


Environment Manipulated?
No
Yes
Observational Study
Comparison group used?
Yes
No
Random assignment to treatments?
Uncontrolled experiment
Data at single timepoint?
Yes
No
Yes
No
Cross-sectional study
Explanatory variables already known?
Randomized comparative experiment. [Strongest way to show causality]
Comparative experiment (quasi experiment)
No
Yes
(Retrospective)
Case-control study.
Group of people with trait;
Comparison group without trait(control) ;
Outcome known;
Try to identify prior factors.
(Usually Prospective)
Cohort Study
Explanatory variables recorded then follow to track outcome