

A factor that distorts the apparent effect of an intervention on the outcome of interest, or that distorts the apparent association between the exposure and the outcome.

Example: If people in the experimental group of a controlled trial are younger than those in the control group, it will be difficult to decide whether a lower risk of death in one group is due to the intervention or to the difference in ages. Age is then said to be a confounder.

Note 1: The identification of confounders requires expert or substantive knowledge about the causal network of which the intervention (or exposure) and the outcome are part (e.g. pathophysiological and clinical knowledge). Attempts to select confounders solely on the basis of observed statistical associations may lead to [bias](#).

Note 2: Synonyms include confounding variable and confounding factor.

Note 3: Related terms include confounding bias.