

**1.3 The Experimental Method**  
H. Identify independent, dependent, confounding, and control variables in experimental designs.

I. Describe how research design drives the reasonable conclusions that can be drawn.

Experiments determine cause and effect, experimental controls reduce alternate explanations, random assignment is needed to demonstrate cause and effect, correlation can indicate relationship but not causation.

J. Distinguish between random assignment of participants to conditions in experiments and random selection of participants, primarily in correlational studies and surveys.

Independent Variable

Control Group

Dependent Variable

Experimental Research: Hypothesis If/then

Operational Definition

 Experimental Group

Confounding Variables

Placebo Effect

Random Assignment

Double Blind

Experimenter Bias