

**antecedent variable:** A variable that occurs before, and may be a cause of, both the independent and dependent variables in a causal relationship.

**causal relationship:** A relationship in which it is theorized that changes in one variable produce or bring about changes in another variable.

**concept:** Terms scientists use to group together phenomena that have important things in common.

**control variable:** A variable that is not allowed to vary or otherwise held constant during the course of data collection or analysis.

**dependent variable:** The variable that the researcher tries to explain or predict; the presumed effect in a causal relationship.

**ecological fallacy:** Erroneous use of data describing an aggregate unit (e.g., organizations) to draw inferences about the units of analysis that make up the aggregate (e.g., individual members of organizations).

**extraneous variable:** A variable that is not part of a hypothesized relationship.

**independent variable:** A presumed influence or cause of a dependent variable.

**intervening variable:** A variable that is intermediate between two other variables in a causal relationship; it is an effect of one and a cause of the other.

**qualitative research question:** A question that asks about social processes or the meaning and cultural significance of people's actions.

**quantitative research question:** A question that asks about the empirical relationship between two or more variables.

**research design:** The overall plan of a study for collecting data.

**spurious relationship:** A noncausal statistical association between two variables produced by a common cause (i.e., an antecedent variable).

**statistical significance:** The likelihood that the results of a study, such as an association between variables, could have occurred by chance.

**units of analysis:** The entities such as people, nations, and artifacts that are studied, which are described and compared in terms of variables.

**variable:** A measured concept that may vary across cases or across time.