### CHAPTER 2: RESEARCH

**quantitative research** - uses numerical data (e.g., surveys)

**qualitative research** - narrative and descriptive data

**survey** - method in which people respond to questions - most widely used research method for sociologists - ideal for studying large numbers of people

**population** - a group of people with certain specified characteristics (e.g., all high school school seniors in the U.S.)

**sample** - group of people who represent a larger population

**representative sample** - a sample that accurately reflects the characteristics of a population as a whole

- if a sample is not representative of the population from which it was drawn, the survey findings cannot be used to make generalizations about the entire population (e.g., conduct a survey using ten AP Physics students, sample wouldn't be representative of the whole school)

**surveys** - info. obtained through a questionnaire or interview, closed-ended or open-ended questions

**secondary analysis** - using pre-collected info. for data collection and research purposes (govt. reports, company records, voting lists, prison records, reports of research done by other social scientists)

- U.S. Census Bureau - important source of pre-collected data

**field research** - takes place in a natural (non-laboratory) setting
**case study** - intensive study of a single group, incident, or community - findings in one case can be generalized to similar situations - however, researchers must point out unique factors in study that wouldn't apply to other situations

**participant observation** - case study where the researcher becomes a member of the group being studied

**causation** - belief that events occur in predictable ways and that one events leads to another

**multiple causation** - an event occurs as a result of several factors working in combination

**variable** - characteristic that is subject to change (age, education, occupation)

**types of variables:**
- **quantitative** - measured numerically (family income, nations' literacy rates)
  - **qualitative** - defined by presence or absence in a category (gender, marital status, group membership)
- **independent** - characteristic that causes something to occur
  - (time spent studying)
- **dependent** - reflects a change (grade change)
- **intervening** - changes relationship between ind. & dep. variable

**correlation** - measure of the relationship between two variables

**standards for showing causation:**
1. two variables must be correlated
2. all other possible factors must be considered

**correlation does not always equal causation**

**spurious correlation** - relationship between two variables that is actually caused by a third factor (e.g., less church attendance is not the cause for more delinquency - increased age is correlated with less church attendance, more delinquency)
standards for showing causation:  3. a change in the ind. variable **must** occur **before** a change in the dep. variable can occur

steps in the research process:
1. **identify the problem** - researcher chooses an object or topic for study
2. **review the literature** - researcher must find out all that he or she can about any earlier research
3. **formulate hypotheses** - hypothesis = a testable statement of relationships among well-defined variables (e.g., longer a couple is married, less likely marriage will end in divorce - ind. var. = length of marriage, dep. var. = divorce)
4. **develop a research design** - Survey? Case study?
5. **collect data** - asking people questions, observing behavior, analyzing existing materials and records
6. **analyzing data** - researcher must determine whether the hypotheses are supported
7. **state findings and conclusions** - methods are described (survey, case study), hypotheses are accepted/rejected/modified

**sociology's code of ethics** - researcher shows objectivity, uses superior research standards, reports findings and methods truthfully, protects the rights and privacy of research subjects
positive correlation

study time  

independent variable  

low  

high  

grades  

dependent variable
negative correlation

time watching TV

high

independent variable

low

grades

dependent variable

high