

# CORRELATIONAL AND DESCRIPTIVE RESEARCH

Non-Experimental Methods of  
Research in Psychology

# What are non-experimental research methods?

- Researcher do not control the environment to gather research
- NO experiment
- **Naturalistic observation, case studies and surveys**

# Naturalistic Observation

- Careful, extensive observation of a behavior without direct intervention
- **Advantage:** Not artificial; real situations are being observed
- **Disadvantage:** Can't explain why certain behaviors are observed



# Case Study



- In-depth investigation of a single person using interviews and observation
- **Advantage:** Concrete examples to support a theory
- **Disadvantage:** Subjective and unrepresentative of the population

# Surveys



- Use questionnaires or interviews to gather information
  - Random and representative sample
- **Advantage:** Can gather information on difficult-to-observe behavior from a large population
- **Disadvantage:** Self-report data are sometimes unreliable



How can the wording of  
survey questions skew  
data?

# “Are You Interested in...”

□ Plants and trees?

□ 77%

□ Botany?

□ 39%

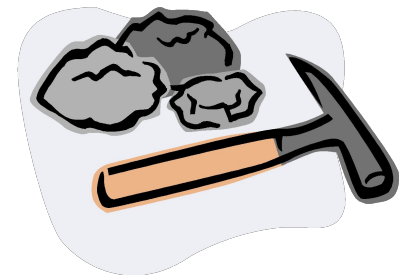


□ Rocks and minerals?

□ 42%

□ Geology?

□ 53%



# Choose the Method

- Determine which research method would be appropriate for the following hypotheses (Note: Some may be “not testable”)
  - Experiment?
  - Case study?
  - Observation?
  - Survey?
  - Not testable?



# Choose the Method

- Jogging increases lung capacity

**Experiment**

- The soul remains after death

**Not Testable**

- When administered the Rorschach Inkblot test, young children and sociopaths perceive more animals than humans

**Case Study**

# Choose the Method

- Individuals having one or more significant hobbies report more job satisfaction than individuals having no hobbies
- Unmarried cab drivers talk more with their customers than do married cab drivers

Survey

Observation

# Choose the Method

- More men than women report fantasies of making large sums of money

**Survey**

- Work productivity increases when workers are allowed flexible hours

**Experiment**

# Choose the Method

- Newborn infants have an innate concept of sin

**Not testable**

- Alcoholics with a history of poor nutrition show more signs of brain damage than alcoholics with a history of good nutrition

**Case study**



# PREVENTING UNNECESSARY MISTAKES IN RESEARCH STUDIES

# What are some common flaws in research?

In surveys...

- Social Desirability Bias
  - Prevention?
  - Indirect questioning
- **Poor wording**
- **Sampling Bias**
- **Response set**



# What are some common flaws in research?

- **Experimenter bias:**
  - Researcher sees what he wants to see!
  - Neutralized by double-blind procedure: neither subjects nor experimenters know who is the experimental or control group

# What are some common flaws in research?

## In experiments...

- **Placebo effects**: Participants' expectations lead them to think they experience some change when they receive empty, fake, or ineffectual treatment
  - Color of pills
  - Dosage
  - Capsule vs. tablet
  - Surgery



# Should placebos be used...

- For depression?

