Psychological Research

Scientific Method

Falsifiable theories:
if a theory is wrong it can be demonstrated to be wrong

Steps in conducting scientific research

Step 3. Formulating Hypothesis

Hypothesis:
statement (in declarative form) that expresses the relationship between variables & makes testable predictions

Sample: a subset of population

- How many people are in the sample?
- Who is in the sample?
Sample:
- Representative - closely resembles the entire population

Research Designs
1. Naturalistic Observation
2. Case Studies
3. Surveys
4. Experiments - establishes cause & effect link (due to control)

Correlational Studies:
Correlation Coefficient - a measure of the relationship between two variables

Three Possible Cause-Effect Relationships

Step 5. Testing the hypothesis
- Evaluating evidence
- Quantification of data
- Statistics

Step 6. Interpretation of results
1. Make knowledge public
2. Reconsidering the theory
Ethical Considerations in Research

- Deception
  - Milgram study (1963)
- Informed Consent form
  - Nuremberg Tribunals