

Describe one field of psychology you find to be the most interesting

Research Methods

Pre-Research
 Psychologists must:
 Come up with a hypothesis



Look for evidence and data

Select a <u>sample</u>: small group out of total population



Hypothesis

Expresses a relationship between two variables

A variable is anything that can vary among participants in a study

Participating in class leads to better grades than not participating

Sampling

- Identify the population you want to study
- The sample must be <u>representative</u> of the population you want to study
- RANDOM SAMPLE
 - Every 20 names on a list
- Stratified Sampling
 - Strategically choosing people to make sure it is representative



Methods of Research

- 7 major ways for psychologists to conduct research
 - > Naturalistic Observation
 - Case Studies
 - > Surveys
 - Longitudinal studies
 - Cross-Sectional Studies
 - Correlations and Explanations
 - Experiments

Naturalistic Observation

 Watch subjects in their natural environment without knowing they are being watched

 Do not manipulate the environment

 If people and animals know you are watching they may act differently



Case Study

Intensive study of a person or group

- By itself, case studies are not very strong in telling us information
- Results of case studies can be used to form new hypotheses
- Include:
 - > Long term observations
 - Diaries
 - > Tests
 - Interviews



Surveys

- When information is obtained by asking many individuals a fixed set of questions
- Most common type of study in psychology
- Questionnaires
 - Less time to administer
 - Results can be more uniform
 - Helps reduce researcher influence



Interviews

- Allows researcher to modify question if participant doesn't understand
- Researcher can influence the participants unconsciously
- Participants may not answer truthfully



Longitudinal Studies

 Study of same group of people at intervals over a period of years to determine how behaviors and feeling have changed

Good Ideal way to examine consistencies and inconsistencies in behavior over time

Bad

- Take a really long time to do
- Precarious

Cross Sectional Studies

 Data is collected from groups of participants at different ages and compared to make conclusions about differences due to age.

Less expensive than longitudinal studies

Take less time than longitudinal studies

Correlation

 Used when researchers want to examine the relationship between 2 sets of observations

 Does NOT mean that one variable causes the other

As more ice cream is eaten, more people are murdered.

Does ice cream cause murder, or murder cause people to eat ice cream?

Types of CorrelationPositive CorrelationNegat• The variables go in
the SAME direction.• The
opp

Negative Correlation
The variables go in opposite directions.



Studying and grades hopefully has a positive correlation.



Heroin use and grades probably has a negative correlation.



