Chapter 2 - Psychological Methods

Why Research?

Video
Key Terms Worksheet

- Define your word and share and collaborate for the rest
Chapter 2: Section 1 E.Q. How To Conduct Research?

-Psychology is an experimental science that uses a variety of research methods to study behavior and mental processes.
Steps Of Scientific Research

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Diagram:
- Ask Question
- Do Background Research
- Construct Hypothesis
- Test with an Experiment
- Analyze Results Draw Conclusion
  - Hypothesis Is True
  - Hypothesis Is False or Partially True
- Report Results
- Think! Try Again
Replication

- Replication must be used to confirm the results of the study.
- If a replicated study does not result in the same findings as the original study, the original results may not have been accurate.
From Mumbo Jumbo To A Child’s Death

Really? Therapy or Abuse? Video
Chapter 2: Section 1 Review

- List and describe the five steps that scientists follow in conducting research.

- Why is replication of a research study important?
Chapter 2: Section 2 E.Q.
Surveys, Samples, and Populations

-One way to gather information about people's attitudes and behaviors is a survey.

-Surveys can be written questionnaires or personal interviews and are not necessarily accurate.
World Sleep Survey

Go To: http://www.worldsleepsurvey.com/ and see what you score.
Survey Notes (Cont.)

Quality Survey Questions:
http://www.statpac.com/surveys/question-qualities.htm

Poor Survey Questions:
No Good, stupid, invalid questions!
Survey Time Homework

- List five potential topics that you may be interested in creating a survey on. Make sure it is something that you are interested in and will enjoy creating a short survey on.
- Feel free to browse the textbook or internet for ideas that interest you.
Group Selection

-Researchers must consider the group selected and how that group will be selected. Curfews?

-Key Terms: Target Population, Sample, Random Sample, Generalized Sample
Findings

- Findings of surveys cannot be generalized unless all people in a group are surveyed.

- Results of surveys may differ because: volunteered participants and participants who were selected randomly. Volunteer Bias.
Chapter 2: Section 2 Review

- What are two different ways by which surveys are conducted?

- Explain the importance of random and stratified sampling.
Section 3 E.Q.’s
Methods of Observation

-Psychologists may use their own personal observations to start their research.

-Once they have begun their research, however, they use more careful methods of observation.
6 METHODS OF OBSERVATION

Testing Method – several types of tests measure various elements of human behavior such as abilities, interests, and personality

  Ex. Intelligence, aptitude, and personality test

Case-study Method – researchers conduct in-depth investigations of individuals or small groups

  Ex. Genie’s story (language issues)
METHODS OF OBSERVATION (Cont.)

Longitudinal Method – a group of participants are observed at intervals over an extended period of time

Ex. Language acquisition (same people)

Cross-Sectional Method – researchers compare the differences and similarities among people in different age groups at a given time

Ex. Language acquisition (samples of different ages)
Methods of Observation (Cont.)

Naturalistic-Observation Method – researchers observe the behavior of people or animals in their natural habitats
   Ex. Restaurants, Kids at play

Laboratory-Observation Method – participants are observed in a laboratory setting
   Ex. Fish Tank, opportunity for observation or experiments
Positive and Negative Correlation

- Describes relationship, not cause and effect
- Other factors for examples above?
Section 3 Review

-What is a case study? Name one drawback of the case study method?

-What is the difference between the naturalistic observation method and the laboratory observation method?
Describe the elements of an experiment.

- Researchers administer a treatment, then carefully observe the participants to determine how the treatment influences their behavior, if at all.
- Experiments contain variables, or factors that can change. (fish food)
Possible explanations:

1. X → Y  
   X causes Y.

2. X → Y  
   Y causes X.

3. X → Z → Y  
   X correlates with Z, which causes Y.
Experiments (Cont.)

- Researchers establish experimental groups and control groups to ensure that the results of an experiment are caused by the treatment and not by something else.
- Extracurricular/Grades

- The expectations of participants and researchers can interfere with the effects of an experimental treatment.
Better Living Through The Placebo Effect

Placebo Effect You Tube Video
Chapter 2 Section 4 Review

-Single Blind/Double Blind

-Give an example of an independent variable and dependant variable.

-What is a controlled experiment? What is the difference between an experimental group and a control group?
Chapter 2 Section 5 E.Q.
What are the Ethical Issues involved in Psychological Research?

-Psychologists follow standards for proper and responsible behavior that have been established by the American Psychology Association (APA)

1) Confidentiality protects privacy and encourages the truth
2) Informed consent is required for research with people
3) Sometimes participants must be kept in the dark about the true nature of research. The APA has strict guidelines for these situations. (3 deception situations)

Ethics Video YouTube (APA)
Ethical Issues (Cont.)

-The use of animals in scientific research continues to be a subject for debate.

-Discuss: Why use animals? Benefits/Examples?

Save The Animals Video
Ethics (Cont.)

-Psychologists must take certain considerations into account when they interpret their research findings.

-Researcher Bias
-Must be willing to fail
Chapter 2 Section 5 Review

- Explain the purpose of ethical standards in the profession of psychology.
- Why are confidentiality and informed consent important to psychological research?
Chapter 2 Test Review

- Ethics Video (Youtube 9:20)
- Chapter 2 Graphic Organizer (Worksheet)
- Read and Review: Page 48 Chapter 2 Review
- Answer ?’s 1-10 (Term and Concept Review)
- Chapter 2 Test (Thursday)