

# Research in Psychology: Chapter 2

SUPA PSY 205  
September 14, 2016





# Goals for Today

- Wrap up quotes
- Wrap up hypothesis activity
  - Athletes and steroid use
- Review of Chapter 1
- Questions
- Introduction to research in psychology (Chapter 2)

# Athletes and Steroids



- Hypotheses generated
- Now explain the behavior from the perspectives of:
  - Skinner or Watson
  - Freud
  - Rogers

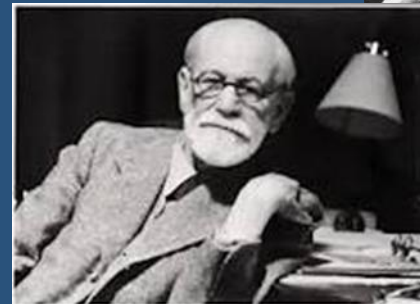
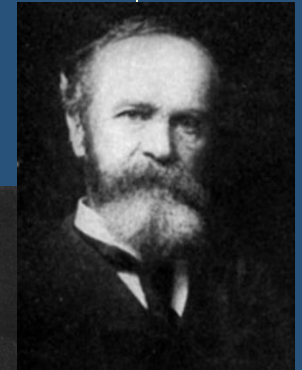
# THEMES FROM THE TEXT



- Psychology is empirical
- Psychology is theoretically diverse
- Psychology evolves in a sociohistorical context
- Behavior is determined by multiple causes
- Our behavior is shaped by cultural heritage
- Heredity and environment jointly influence behavior
- People's experience of the world is highly subjective

# In Review

- Psychology is a young science that has endured tremendous maturation over the past 130 years
  - Physiology → Structuralism/Functionalism → Psychoanalysis → Behaviorism → Humanism → Modern Psychology



# The Steps of Scientific Exploration



Theory and  
Observation

Step 1: Formulate a  
Hypothesis

Step 2: Design the  
Study

Step 3: Collect the  
Data

Step 4: Analyze and  
Draw Conclusions

Step 5: Report the  
Findings

# Advantages of the Scientific Approach



- Clarity and precision
- Relative Intolerance of Error





# Research Methods

- Two Major Types
  - Experimental
  - Descriptive/Correlational
    - Naturalistic Observation
    - Case Study
    - Survey



# Experimental Research



- Experiment: Manipulate one variable and observe changes in a second variable
  - Independent Variable
  - Dependent Variable
  - Extraneous Variables



# Experimental Research Cont.



- Experimental Group
  - Control Group
  - Random Assignment
- 
- But this seems complicated, is it worth it?
    - Strengths?
    - Weaknesses?

# Correlational Research



- In general, allow us to investigate relationships between variables
  - Naturalistic Observation
  - Case Study
  - Survey
- Strengths
- Weaknesses

## SELECTING APPROPRIATE RESEARCH METHODS



Choose what you believe to be the single preferred method of study for each statement below. If a problem can be studied with more than one approach, choose the method with greater precision. Label each with one of the following letters:

- N Naturalistic observation
- C Clinical approach
- S Survey method
- E Experimental approach
- ? Impossible to study the problem scientifically

- \_\_\_\_\_ 1. Jogging increases lung capacity.
- \_\_\_\_\_ 2. The soul remains after death.
- \_\_\_\_\_ 3. When administered the Rorschach Inkblot Test, young children and regressed psychotics perceive more animals than they do humans.
- \_\_\_\_\_ 4. Individuals having one or more significant hobbies report more job satisfaction than individuals having no hobbies.
- \_\_\_\_\_ 5. Unmarried cab drivers talk more with their customers than do married cab drivers.
- \_\_\_\_\_ 6. Newborn infants have an innate conception of sin.
- \_\_\_\_\_ 7. The purchase of tranquilizers increases during monetary crises.
- \_\_\_\_\_ 8. Alcoholics with a history of poor nutrition show more signs of brain damage than alcoholics with a history of good nutrition.
- \_\_\_\_\_ 9. More men than women report fantasies of making large sums of money.
- \_\_\_\_\_ 10. Work productivity increases when workers are allowed flexible hours.

# Theory to Research to Statistics and Conclusions



- Descriptive Statistics:
  - organize and summarize data
- Central Tendency
  - Mean
  - Median
  - Mode
- Variability
  - Standard Deviation
- Correlation
  - Strength
  - Direction