# Units I and II Test Review

For practice questions and flashcards see the text website.

The course website has a concept map with audio files

# Format

- **Questions were drawn from the key terms on pages 26 and 71 and the ORANGE HAND OUT STUDY GUIDE**
- 45 multiple choice (one point each)
- 1 essay on perspectives: applying them to a situation
- 1 essay on research: identifying the type of study and analyzing the results

# Unit I test material

# Wilhelm Wundt, page 3

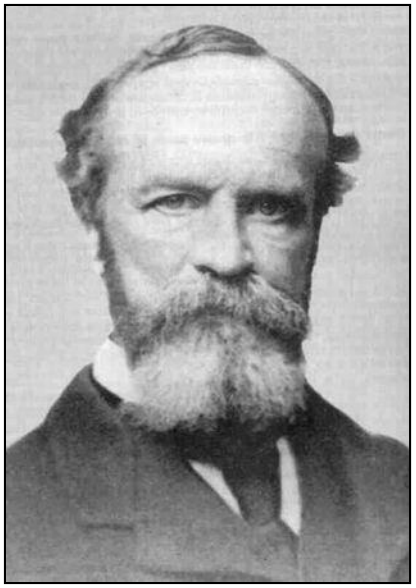
- Method called **Introspection (reflecting on one's own thoughts)**
- First psych lab, 1879
- Field of psych called **Structuralism**
- **He studied the reactions of people to sensory stimuli**

# Exploring the mind

- Wundt's approach of breaking the mind down into elementary units became less popular.
- It was unreliable
- It was too subjective, based on opinion
- Memories fail
- Self reports are often inaccurate
- His approach did lead to the modern study of sensation and perception

# William James, pp. 4-5

- Wrote most famous psych text: *Principles of Psychology*, 1890
- Field of psych called **Functionalism**
- He believed you should study how the mind functioned in a situation; how it adapted to conscious thoughts and emotions



## Table 2.1 Psychology's Approaches

| Perspective | Focus | Sample Questions |
|---|---|---|
| *Behavioral* | How we learn observable responses | How do we learn to fear particular objects or situations? What is the most effective way to alter our behavior, say, to lose weight? |
| *Biological* | How the body and brain enable emotions, memories, and sensory experiences; how genes combine with environment to influence individual differences | How do pain messages travel from the hand to the brain? How is blood chemistry linked with moods and motives? To what extent are traits such as intelligence, personality, sexual orientation, and depression attributable to our genes? To our environment? |
| *Cognitive* | How we encode, process, store, and retrieve information | How do we use information in remembering? Reasoning? Solving problems? |
| *Evolutionary* | How the natural selection of traits has promoted the survival of genes | How does evolution influence behavior tendencies? |
| *Humanistic* | How we meet our needs for love and acceptance and achieve self-fulfillment | How can we work toward fulfilling our potential? How can we overcome barriers to our personal growth? |
| *Psychodynamic* | How behavior springs from unconscious drives and conflicts | How can someone's personality traits and disorders be explained by unfulfilled wishes and childhood traumas? |
| *Social-cultural* | How behavior and thinking vary across situations and cultures | How are we alike as members of one human family? How do we differ as products of our environment? |

**Table 2.1** Psychology's Approaches
David G. Myers: Myers' Psychology for AP®, Second Edition

# 1. Which of the following perspectives is interested mainly in the study of mental processes?

- A. psychodynamic
- B. humanistic
- C. behaviorism
- D. evolutionary
- E. cognitive

# 2. Introspection was Wilhelm Wundt's process of:

- A. reflecting on one's own sensations and feelings
- B. spacing our your practice
- C. using gestalt psychology
- D. clinically examining a patient
- E. promoting personal growth

# 3. Which perspective focuses on the observation of what people do?

- A. psychodynamic
- B. behavioral
- C. humanistic
- D. evolutionary
- E. biological

4. Which perspective would be best for studying how people from different countries express anger?

- A. socio cultural
- B. functionalist
- C. humanism
- D. behavioral
- E. psychodynamic

5. Love, acceptance and personal growth would be the focus of which perspective?

- A. social cultural
- B. functionalist
- C. humanism
- D. behavioral
- E. psychodynamic

# Practice answers

- 1 e  2 a  3 b 4a  5c

# Unit II test material

# Hindsight Bias, 31

Hindsight Bias is the "I-knew-it-all-along" phenomenon.

After learning the outcome of an event, many people believe they could have predicted that very outcome. We only knew the dot.com stocks would plummet after they actually did plummet.

# Operational definition, 39

A statement of procedures (operations) used to define research variables

Example-

- intelligence may be operationally defined as what an intelligence test measures

# Replication, 39

- repeating the essence of  a research study to see whether the basic finding generalizes to other subjects and circumstances
- usually with different subjects in different situations
- Example:

- Joseph Cesario tried to replicate John Bargh's 'Do you feel lonely in the shower study?' Using 2,400 more subjects than Bargh he found no relationship between bathing and loneliness.
- Said Cesario:  "Extremely small samples, extremely large effects—that's a red flag," he says. "It's not a red flag for people publishing those studies, but it should be.“
- http://chronicle.com/article/Power-of-Suggestion/136907/

# Case Study, 40

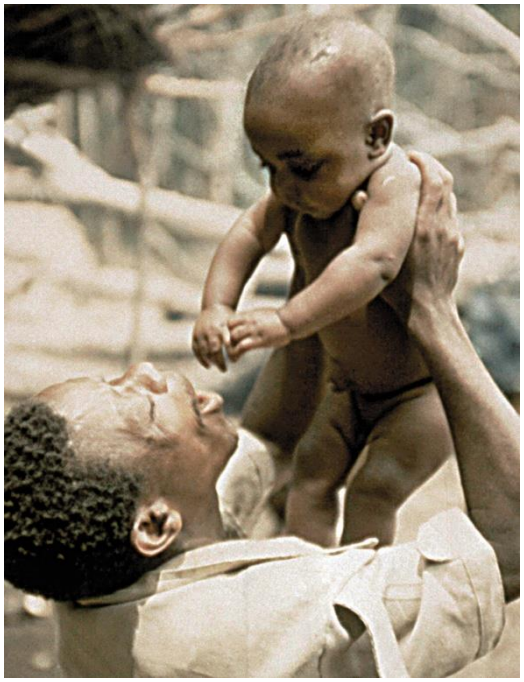
## Clinical Study

A clinical study is a form of case study in which the therapist investigates the problems associated with a client.

http://behavioralhealth.typepad.com

# Naturalistic Observation, 40

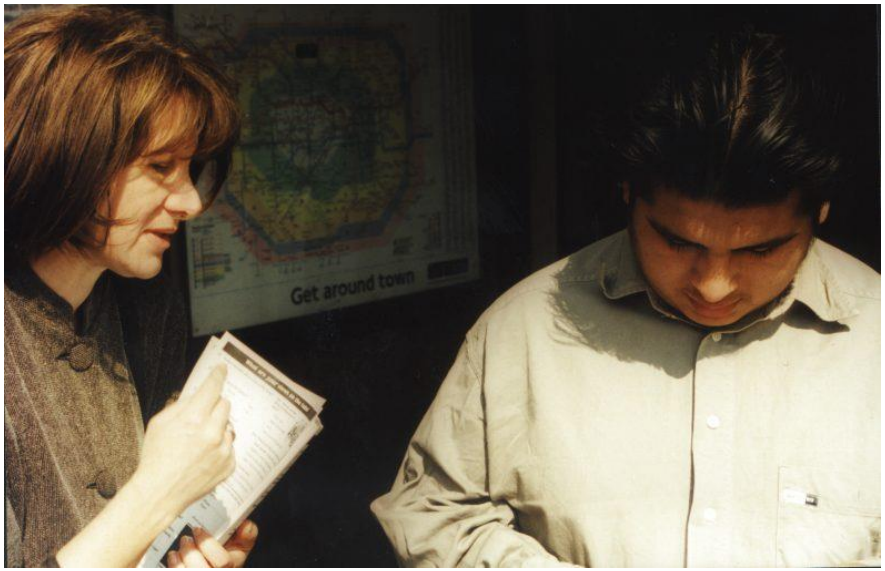
Observing and recording the behavior of animals in the wild and recording self-seating patterns in a multiracial school lunchroom are examples  naturalistic observation.



Courtesy of Gilda Morelli

# Survey, 42

A technique for ascertaining the self-reported attitudes, opinions or behaviors of people usually done by questioning a representative, random sample of people.




http://www.lynnefeatherstone.org

# Wording Effects, 42

Wording can change the results of a survey.

Q: Should cigarette ads be allowed on television? (not allowed vs. forbidden)

# Sampling the Population, 43

- Population
  - all the cases in a group, from which samples may be drawn for a study
- Random Sample
  - a sample that fairly represents a population because each member has an equal chance of inclusion

# Comparison

## Below is a comparison of different research methods.

**COMPARING RESEARCH METHODS**

| Research Method | Basic Purpose | How Conducted | What Is Manipulated | Weaknesses |
|---|---|---|---|---|
| Descriptive | To observe and record behavior | Do case studies, surveys, or naturalistic observations | Nothing | No control of variables; single cases may be misleading |
| Correlational | To detect naturally occurring relationships; to assess how well one variable predicts another | Compute statistical association, sometimes among survey responses | Nothing | Does not specify cause and effect |
| Experimental | To explore cause and effect | Manipulate one or more factors; use random assignment | The independent variable(s) | Sometimes not feasible; results may not generalize to other contexts; not ethical to manipulate certain variables |

# Practice question 5: Why is an operational definition of variables necessary?

- A. it is better than the dictionary
- B. it uses scientific language
- C. you can translate the information into other languages
- D. it provides more context for the reader
- E. it allows other researchers to replicate the procedures used by the first experimenter

6 You need to watch elementary students on the play ground to study play habits for your psychology class. What method are you using?

- A. case study
- B. district study
- C. random sample approach
- D. naturalistic observation
- E. survey

7: Bob is a supermemorist, able to recall every aspect of all of his birthdays back to age five. You give him questionnaires, a brain scan and some tests. What method are you using?

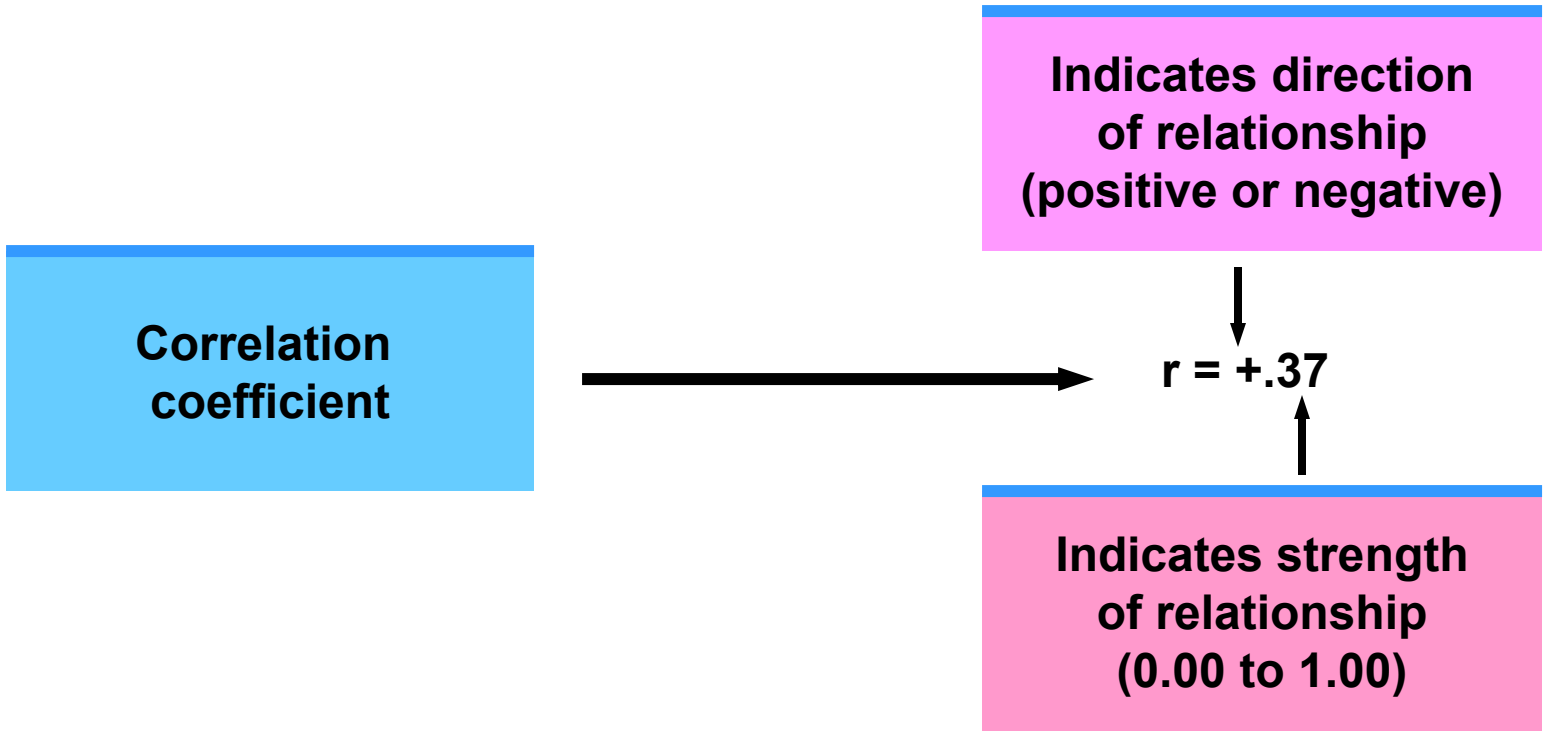
- A. observation
- B. case study
- C. interview
- D. survey
- E. experimentation

# answers

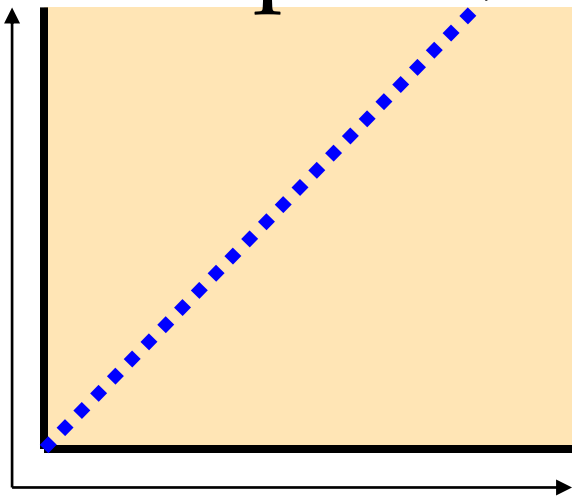
- 5e
- 6d
- 7b

# Correlation coefficient, 46

– a statistical measure of the extent to which two factors vary together and thus how well either factor predicts the other



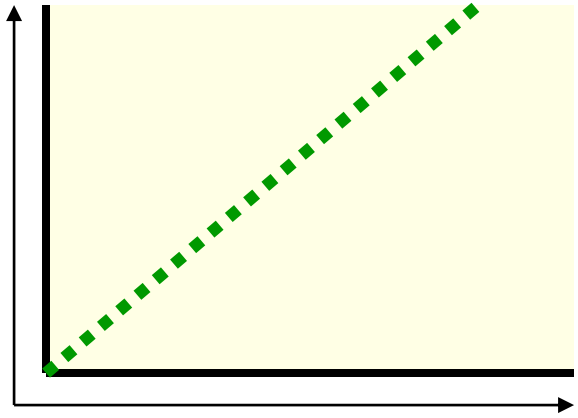
# Scatterplots, 47



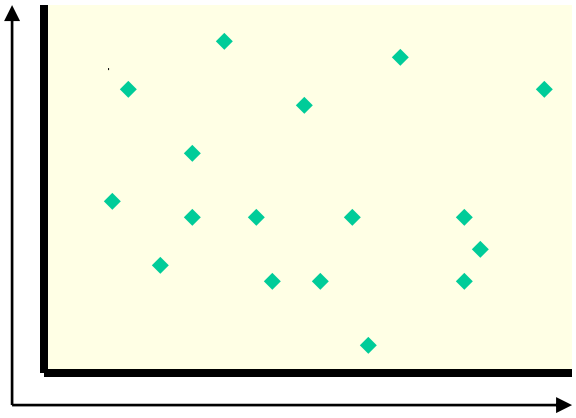
Perfect positive
correlation (+1.00)

Scatterplot is a graph comprised of points that are generated by values of two variables. The slope of the points depicts the direction, while the amount of scatter depicts the strength of the relationship.

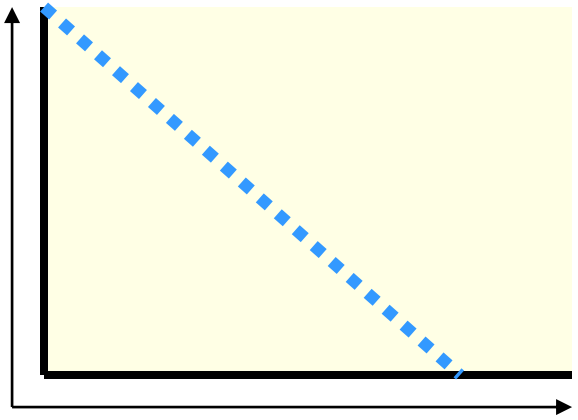
# Correlations by scatterplot, 47



**Perfect positive correlation (+1.00)**



**No relationship (0.00)**



**Perfect negative correlation (-1.00)**

# Correlation doesn’t equal causation

- Just because two variables are correlated doesn't mean one causes the other.
- The classic example is the case where the number of churches and crime rate both increased. How could that be?
- A third variable: population increase.
- Or the greater the ice cream the greater the deaths by drowning.
- Both could be due to a third variable: more population.

# Illusory Correlation, 50

– the perception of a relationship where none exists

| | Conceive | Do not conceive |
|---|---|---|
| Adopt | confirming evidence  | disconfirming evidence |
| Do not adopt | disconfirming evidence | confirming evidence |

# Experimentation, 50

## Exploring Cause and Effect

Like other sciences, experimentation is the backbone of psychology research.

Experiments isolate causes and their effects.

# Random Assignment, 51

Assigning participants to experimental and control conditions by random assignment minimizes pre-existing differences between the two groups.

# Double blind procedure, 51

- both the subject and the research staff are ignorant (blind) about whether the subject has received the treatment or a placebo
- commonly used in drug-evaluation studies

# Placebo, 52

– an inert substance or condition that may be administered instead of a presumed active agent, such as a drug, to see if it triggers the effects believed to characterize the active agent

# Placebo effect

- The tin man didn't really receive a heart, the lion didn't really get courage and the scarecrow didn't really obtain a brain.
- But they felt that they did.

# Conditions (groups), 51

- Experimental Condition
  - the condition of an experiment that exposes subjects to the treatment, that is, to one version of the independent variable
- Control Condition
  - the condition of an experiment that contrasts with the experimental treatment
  - serves as a comparison for evaluating the effect of the treatment

# Independent Variable, 52

The independent Variable is a factor manipulated by the experimenter.

The effect of the independent variable is the focus of the study.

# Dependent Variable, 52

A dependent Variable is a factor that may change in response to an independent variable.

In psychology, it is usually a behavior or a mental process.

# Confounding Variable, 52

- In an experiment, a variable other than the independent variable that could produce a change in the dependent variable
- The variable “confounds” the results

# Typical human confounders

- Age
- Gender
- Smoking
- Income
- RANDOM ASSIGNMENT CAN CONTROL FOR MOST OF THESE CONFOUNDERS.
- This means the differences are spread out among the two groups, so these factors aren't the major cause of any differences in the study

# Practice question 8: which of the following correlation co-efficients shows the strongest relationship between two variables?

- A  +.30
- B. +.75
- C. +1.3
- D. -.85
- E. -1.2

# 9 What is the purpose of random assignment?

- A. allow both groups to receive the independent variable
- B  ensure members of the population have an equal chance of being chosen for an experiment
- C. eliminates the placebo effect
- D. reduces potential confounding variables
- E. generates operational definitions for the independent and dependent variables

# 10. Which is used only in correlational studies?

- A. scatterplot
- B. double blind
- C. random assignment
- D. random sample
- E. placebo

# 11. Which is a negative correlation?

- A. teen females tend to have fewer traffic tickets than teen males
- B. students with lower reading scores tend to have lower grades
- C. people who spend more time exercising tend to weigh less
- D. as hours studying for a test decrease so do grades

# answers

- 8d
- 9d
- 10a
- 11c

# Measures of central tendency, 57

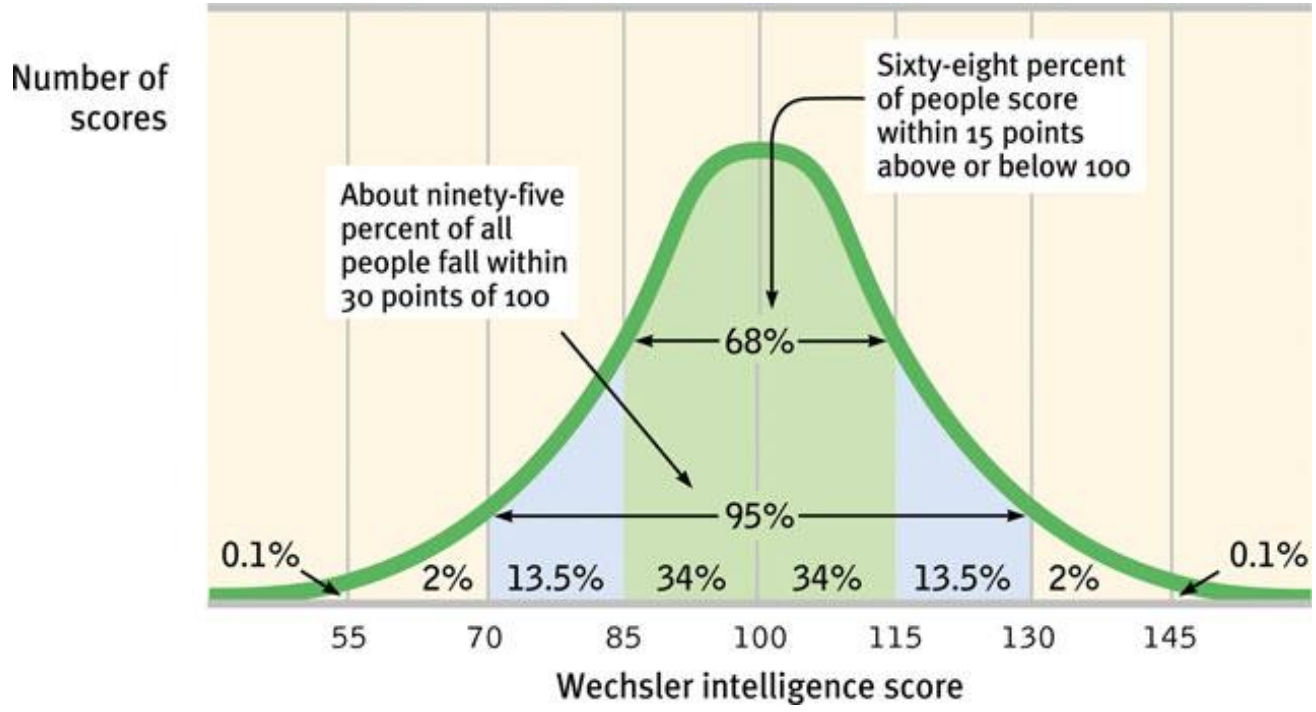
- Mode
  - the most frequently occurring score in a distribution
- Mean
  - the arithmetic average of a distribution
  - obtained by adding the scores and then dividing by the number of scores
- Median
  - the middle score in a distribution
  - half the scores are above it and half are below it

# Why figure standard deviation? 58

- This number tells the researcher how consistent the data is.
- Is the range of scores really extreme, or is everyone pretty close to the average?
- A small SD means most scores are around the average (mean).
- A large SD means the scores are spread and the average may not the best way to look at the data.

# An example of how psychologists apply deviation:

Standardized tests establish a normal distribution of intelligence scores on a tested population in a bell-shaped pattern called the normal curve.



# M and Ms lab concepts, 43 and 60

- A. *sample size*: as it increases, the sample becomes more "representative" of the entire population (all the cases in a group, from which samples may be drawn for a study)
- Population for this study:  every Fun Size pack in the world!

# How big of a sample?

- For a presidential election about 1,500 randomly chosen can predict the election
- ….as long as those chosen are "representative" of the voting population

# Inferential statistics and Statistical significance, 60

- When the observed difference between two groups is NOT  due to chance.
- There has to be less than 5% probability the difference between the groups under study is due to chance.

12. A researcher determines statistical significance for her study and finds a 5 percent chance that results are due to chance. Which of the following is accurate?

- A. this is well beyond the range of statistical significance
- B. this is the minimum result typically considered statistically significant
- C. this is not statistically significant
- D. chance or coincidence is unrelated to statistical significance

# 13

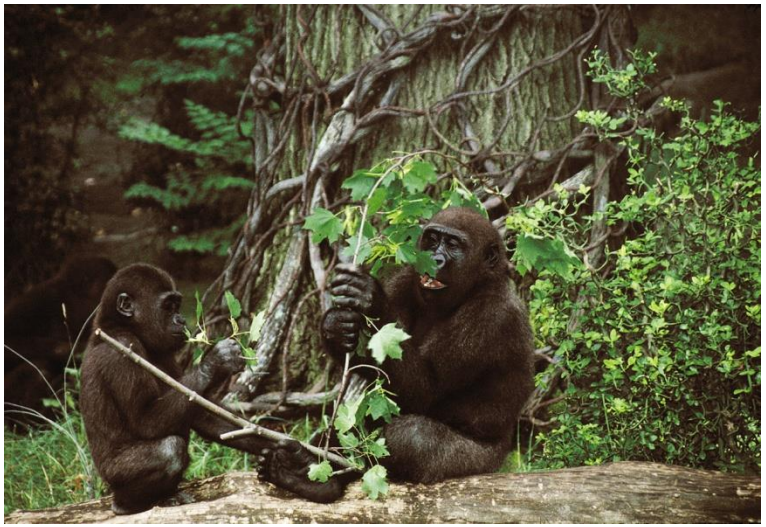
- In a normal distribution, what % falls within one standard deviation on either side of the mean?
- A. 95
- B. 68
- C. 50
- D. 40
- E. 34

# answers

- 12b
- 13b

# Why do psychologists study animals? 66

Studying animals gives us the understanding of many behaviors that may have common biology across animals and humans.



D. Shapiro, © Wildlife Conservation Society

Is it ethical to experiment on animals? 66-67

Yes, says author David Myers

1 To gain insights to devastating and fatal diseases.

2 All researchers who deal with animal research are required to follow ethical guidelines in caring for these animals.

# Research ethics guidelines for animals, 67

- The  British Psychological groups require animals to be housed  under natural living conditions with other animals
- American guidelines require researchers to ensure the comfort, health and humane treatment of animals in experiments.
- Infection, illness and pain should be minimized.

# Ethical Guidelines (APA) for human experiments, 68

- (Write these down on your hand out)
- 1. Informed consent.
- Participation should be voluntary and based on informed consent: subjects should know what is involved so they can make the decision to participate. Subjects may withdraw at any time.

# Ethics: Protection from harm

- 2. There should be no exposure to harmful procedures.
- Researchers should make every effort to ensure that subjects aren't physically or psychologically harmed by the experiment

# Debriefing

- 3. Any deception must be promptly explained during debriefing.
- The deception should be such that it would not have affected the subject's decision to participate.

# Experimental ethics: Privacy

- 4. The right to privacy shall be maintained.

- Subject's names and experiment results/data shall not be identified.

# 14.

- To fulfill informed consent what should a researcher do?
- A. keep information confidential
- B. allow participants to choose whether to take part
- C. protect subjects from harm
- D. provide a post-experiment explanation of the study

# 15

- Which ethical principle requires that at the end of the study subjects should be told about the true purpose?
- A. IRB approval
- B. informed consent
- C. confidentiality
- D. debriefing
- E. protection from harm

# answers

- 14b
- 15d