

DISCOVERING PSYCHOLOGY

UNDERSTANDING RESEARCH

Directions: This study guide must be completed during today's film. You are to answer the following questions. The concepts are presented chronologically during the film.

1. What do psychologists use to assist them in doing research?
2. What types of methods do they use to explore our personalities, values and talents?
3. What is a hypothesis?
4. What is the experimental group?
5. What is the control group?
6. What notion about the way we believe is psychology designed to assist us with?
7. Can psychological reality affect biological reality?
8. What is the placebo effect?
9. What is the double blind method?
10. What is the significance of Norman Cousins?
11. What were the other extraneous variables or influences on his state of mind and health?
12. What is the difference between correlation and causation?
13. Why is sampling so important in psychology?
14. What does representative mean?
15. What is pseudo science?

Unit Two

Research Methodology in Psychology

Directions: match each concept to the appropriate statement, and write the corresponding letter in the space provided. Be ready to justify your answers.

1. _____ In a _____ study, a psychologist organizes individuals into groups based on age.
2. _____ The branch of mathematics that allows researchers to organize and evaluate data is called _____.
3. _____ Establishing a correlation is useful because it enables scientists to make relatively accurate _____.
4. _____ If you subtract the lowest score in a data set from the highest score, you are determining the _____.
5. _____ An experiment enables the experimenter to _____ the situation and to eliminate outside factors that might influence the results.
6. _____ Sigmund Freud's theory of personality development was based on _____.
7. _____ Participants who are treated in the same way as the experimental group, except that the experimental treatment is not applied
8. _____ To determine whether the data support a hypothesis or the results are due to chance, researchers use _____.
9. _____ A _____ is a relatively small group out of the total population under study.
10. _____ Numbers that describe something about the average score are called measures of _____.
11. _____ The mean is what most people think of as the _____.
12. _____ A coefficient with a plus sign indicates a _____ correlation.
13. _____ In _____ studies, the psychologist studies the same group of participants at regular intervals over a period of years.
14. _____ Researchers need to know if the results of their experiments are statistically significant or are due to _____.
15. _____ Observing how humans and animals behave without interfering is known as _____ observation.
16. _____ a symmetrical bell-shaped curve
17. _____ The total group from which a sample is drawn is the _____.
18. _____ Arranging data so you know how often a score occurs is called a _____ distribution.
19. _____ A graph that demonstrates the direction of the relationship between two variables is a _____
20. _____ An equal chance of being represented is called a _____.

Concepts

- | | | | |
|-----------------|------------------|---------------------|-----------------|
| a. AVERAGE | b. CASE STUDIES | c. CENTRAL TENDENCY | d. CHANCE |
| e. CONTROL | f. CONTROL GROUP | g. CROSS-SECTIONAL | h. EXPERIMENTAL |
| i. FREQUENCY | j. INFERENTIAL | k. LONGITUDINAL | l. MEDIAN |
| m. NATURALISTIC | n. NORMAL CURVE | o. POPULATION | p. POSITIVE |
| q. PREDICTIONS | r. RANDOM SAMPLE | s. RANGE | t. SAMPLE |
| u. SCATTERPLOT | v. STANDARD | w. STATISTICS | x. SURVEY |

Unit Two

Research Methodology in Psychology

DIRECTIONS: Define or explain the significance of each of the following concepts. These concepts are directly taken from the Chapter Test.

AVERAGE

BIMODAL DISTRIBUTIONS

CASE STUDIES

CENTRAL TENDENCY

CONTROL

CONTROL GROUP

CORRELATION

CORRELATION COEFFICIENT

CROSS-SECTIONAL

DEPENDENT

DESCRIPTIVE STATISTICS

DOUBLE-BLIND STUDY

ETHICS

EXPERIMENTAL GROUP

EXPERIMENTS

FREQUENCY DISTRIBUTIONS

HAWTHORN EFFECT

HISTOGRAM

INDEPENDENT

INFERENTIAL STATISTICS

INTERVIEW

LONGITUDINAL STUDY

MEAN

MEDIAN

METHODOLOGY

MILGRAM, STANLEY

MODE

NATURALISTIC OBSERVATION

NEGATIVE CORRELATION

NORMAL

NORMAL CURVE

PLACEBO STUDY

POPULATION

POSITIVE CORRELATION

PREDICTIONS

QUESTIONNAIRE

RANDOM SAMPLE

RANGE

SAMPLE

SCATTERPLOT

SELF-FULFILLING PROPHECY

SINGLE-BLIND

SKEWED DISTRIBUTION

STANDARD DEVIATION

STATISTICALLY SIGNIFICANT

STATISTICS

STRATIFIED SAMPLE

SURVEY

VARIABLES

VARIANCE

Unit Two

Research Methodology in Psychology

The crossword puzzle grid consists of 38 numbered starting points for words. The numbers are distributed as follows:

- 1: Down (top center)
- 2: Down (top left)
- 3: Down (top right)
- 4: Down (left edge)
- 5: Down (left edge)
- 6: Across (top middle)
- 7: Across (top middle)
- 8: Across (middle left)
- 9: Across (middle left)
- 10: Across (middle right)
- 11: Across (middle left)
- 12: Across (middle right)
- 13: Across (middle left)
- 14: Across (middle left)
- 15: Across (middle right)
- 16: Down (middle right)
- 17: Down (middle right)
- 18: Across (middle right)
- 19: Across (middle right)
- 20: Across (middle left)
- 21: Across (middle left)
- 22: Across (middle right)
- 23: Down (middle left)
- 24: Across (middle right)
- 25: Across (middle right)
- 26: Down (right edge)
- 27: Across (middle left)
- 28: Across (middle right)
- 29: Across (middle right)
- 30: Down (middle right)
- 31: Down (middle right)
- 32: Across (middle right)
- 33: Across (middle right)
- 34: Down (middle right)
- 35: Across (middle right)
- 36: Across (middle right)
- 37: Across (middle right)
- 38: Across (bottom middle)

Across

2. An in-depth study of a single person group to reveal some universal principle is a _____ study.
6. A normal distribution of scores is _____.
8. The middle score is called the _____.
9. Some distributions have two most common scores and are therefore called _____.
10. A _____ distribution is often called a bell curve.
11. Test scores are often expressed a _____.
12. Psychologists use several measures of _____ tendency to show what a typical score looks like.
13. This branch of statistics used to summarize data in a practical way is called _____.
15. If a random _____ is big enough, chances are that it will accurately represent the whole population.
18. One of the most clever of all horses was _____.
19. A _____ is an inert substance used in controlled experiments to test the effectiveness of another substance.
20. In the longitudinal _____ groups are studied years or even decades.
22. A _____ blind study is where the participants are unaware of whether they are in the control group, or experimental group.
24. A _____ correlation is an unpleasant stimulus between two variables, which one variable increases and the other decreases.
25. Experiments contain _____, or factors that can change.
27. Interviews and questionnaires use _____ to gather information from large groups of people.
28. A _____ correlation is a relationship between variables in which one variable increases as the other variable also increases.
32. An educated guess that can be tested is a _____.
33. An _____ is a controlled scientific procedure to determine whether certain variables manipulated by the researcher have an effect on other variables.
35. A _____ fulfilling prophesy occurs when a subject acts in a manner that they think they are suppose to act in order to accomplish the experimental goal.
36. The most common score is called the _____.
37. A _____ blind study is where neither the participant nor the researcher knows where the participant has received the treatment or the placebo.
38. A _____ method is a type of research in which the same people are studied over a long period of time.

Down

1. Measures of _____ show how spread out the scores in the distribution are.
3. A _____ is a type of graphic frequency distribution.
4. The _____ deviation is a statistic that shows how typical a score tends to vary from the normal variance from the mean.
5. Psychologists often use _____ distributions to show how often a particular score occurred.
7. The arithmetic average is called the _____.
14. A _____ bias is the concept that people who volunteer to participate in research studies often differ from those who don't.
15. A representative segment of a target population is a _____.
16. A _____ is a factor that is measured or controlled in a scientific study.
17. A _____ observation is the study of behavior in naturally occurring situations without manipulation or control of the observer.
21. The _____ study was one of the most famous successful mistakes in the history of psychology.
23. An _____ group is where the participants receive treatment.
26. A cross _____ method of research looks at different age groups to understand changes that occur during the life span.
27. A branch of mathematics which enables researcher to organize and analyze there data.
29. A _____ variable is a factor manipulated by the researcher.
30. A _____ experiment uses both a control group and an experimental group.
31. A research technique for acquiring data is _____.
34. A _____ group does not receive the treatment.