

A student who believes that his performance on tests is influenced by wearing a lucky hat is using

- the method of empiricism.
- the method of faith.
- the method of tenacity.
- the method of authority.

Seeking answers by using the reference materials in a college library is an example of using the

- method of empiricism.
- rational method.
- method of authority.
- scientific method.

You find some mushrooms growing in your backyard and want to find out whether or not they are poisonous, so you eat a few and see what happens. This is an example of the _____ method of knowing or acquiring knowledge.

- rational
- authority
- empirical
- scientific

When your doctor uses a stethoscope to listen to your heart, the doctor is gathering information by using the _____.

- method of authority
- rational method
- empirical method
- method of intuition

An explanation is empirical if it is

- based on widely held beliefs.
- based on logical deductions.
- based on evidence of the senses.
- based on respect for the source of the explanation.

In a chemistry class, a group of students tried mixing two chemicals together to see what would happen. These students are using the _____ method to gather information.

- empirical
- rational
- intuitive
- scientific

One step in the scientific method involves using a hypothesis to generate a testable prediction. This process is an example of _____.

- deduction
- induction
- reduction
- replication

Which of the following is not a good example of a scientific hypothesis?

- a. Academic performance will improve if students begin classes earlier in the day.
- b. There would be less racial tension today if Abraham Lincoln had not been assassinated.
- c. Children can learn a new language faster than adults can.
- d. People can respond faster to a sound stimulus than to a light stimulus.

Which of the following is not a good example of a scientific hypothesis?

- a. There is no relationship between fatigue and reaction time.
- b. Increased sugar consumption leads to an increased level of activity.
- c. Smaller class size is related to better academic performance.
- d. A person's level of self-esteem is related to how long he or she will persist at a difficult task.

It is possible for psychologists to study variables such as hunger, motivation, and self-esteem because these variables can be measured by _____.

- a. hypothetical constructs
- b. interval or ratio scales
- c. operational definitions
- d. participant reactivity

A measurement procedure is *valid* if it

- a. produces measurements that are stable and consistent.
- b. measures what you intend it to measure.
- c. produces measurements that make sense.
- d. produces measurements that are obvious.

You develop a new measure of love and you find that your measure correlates highly with an established measure of love. You have demonstrated

- a. concurrent validity.
- b. discriminate validity.
- c. face validity.
- d. reliability.

A researcher is measuring social skills for pre-school children by observing their behavior during a play period. However, the researcher is concerned about the validity of the observational measure, so a questionnaire is sent home to each child's parents to obtain a second measure of social skill. The two measures are then compared to make sure that they agree. This is an example of establishing _____.

- a. predictive validity
- b. concurrent validity
- c. convergent validity
- d. divergent validity

A(n) _____ measure produces similar results when the same individuals are measured under identical conditions.

- a. valid
- b. accurate
- c. good
- d. reliable

Measurement that includes a large error component will have very low _____.

- a. face validity
- b. concurrent validity
- c. reliability
- d. all of the other options are correct

Using hat size as an operational definition of intelligence (bigger hat means bigger brain) will produce measurements that are

- a. very reliable but not valid.
- b. valid but not reliable.
- c. both valid and reliable.
- d. neither valid nor reliable.

Reaction time measured in seconds is an example of what scale of measurement?

- a. interval
- b. ratio
- c. nominal
- d. ordinal

What additional information is provided by measurements from an interval scale that is not provided by measurements from an ordinal scale?

- a. whether two individuals are the same or different
- b. of two different measurements, which is the larger score
- c. how much difference there is between two individuals
- d. whether one score is more than two times larger than another

If a researcher fails to explain what will happen in a research study using language that potential participants can understand, then the researcher has violated the intent of

- a. confidentiality.
- b. preventing harm.
- c. informed consent.
- d. anonymity.

The issue of ethics must be kept in mind during which of the steps in the research process?

- a. selecting measures
- b. selecting participants
- c. reporting results
- d. the other three choices are all steps in the research process where ethics must be considered

Under which of the following circumstances is informed consent not necessary?

- a. a drug study where participants receive experimental medication
- b. a perceptual research where participants are asked to judge different colors
- c. a public opinion research where participants complete anonymous questionnaires
- d. none of the above - informed consent is always required

Passive deception refers to

- a. deception that is not justified by the study's potential value.
- b. deception that is justified by the study's potential value.

- c. withholding information from participants.
- d. presenting misinformation to participants

Debriefing is

- a. always effective at removing lingering effects.
- b. more effective the sooner it is delivered.
- c. more effective with active deception.
- d. a continuation of the deception.

Which of the following is *not* included as part of the APA ethical guidelines?

- a. no harm
- b. informed consent
- c. confidentiality
- d. anonymity

Fraud involves

- a. errors made while measuring individual participants.
- b. errors made while entering data into a computer program.
- c. changing scores to make them fit the hypothesis.
- d. the other three choices are all examples of fraud.

If the individuals in a sample have characteristics that are noticeably different from the individuals in the population, then the sample is said to be

- a. representative.
- b. random.
- c. stratified.
- d. biased.

The names of all the students in a class are listed on separate pieces of paper. The teacher places the papers in a hat and mixes them thoroughly before reaching in to draw out five names. The teacher is using

- a. simple random sampling.
- b. stratified random sampling.
- c. proportionate stratified random sampling.
- d. cluster sampling.

Which of the following is not required for a simple random sample from a population of 20 individuals?

- a. Each individual in the population has a $1/20$ probability of being selected.
- b. The selection of one individual is independent of the selection of any other individual.
- c. After 20 selections, each individual must have been selected exactly one time.
- d. The individual obtained on any specific selection must be unpredictable.

A researcher would like to describe and compare the attitudes of four different ethnic groups of students at a local state college. To obtain participants for the study, the researcher should probably use _____.

- a. simple random sampling
- b. stratified random sampling
- c. proportionate stratified random sampling
- d. systematic sampling

If your primary concern is that the composition of your sample should accurately reflect the composition of the population, then you should use

- a. parametric sampling.
- b. cluster sampling.
- c. stratified sampling.
- d. proportionate stratified sampling.

One criticism of a stratified random sample is

- a. it is not based on a random selection process.
- b. the overall composition of the sample is usually not representative of the overall composition of the population.
- c. some segments of the population will not be represented in the sample.
- d. all of the other choices are criticisms of a stratified random sample.

The most commonly used sampling method in psychological research is probably

- a. cluster sampling.
- b. quota sampling.
- c. simple random sampling.
- d. convenience sampling.

Convenience sampling requires

- a. a complete list of all the individuals in the population.
- b. the selection of one individual is independent of the selection of any other individual.
- c. each individual has an equal chance and the selections must be independent.
- d. none of the other choices is required for a convenience sample.

A researcher who obtains a sample of preschool children by selecting individuals from a local daycare center is using

- a. simple random sampling.
- b. cluster sampling.
- c. probability sampling.
- d. nonprobability sampling.

The technique of quota sampling is most similar to

- a. simple random sampling.
- b. stratified random sampling.
- c. cluster sampling.
- d. systematic sampling.

A study addressing how many cigarettes a week are smoked by adolescents at a high school is an example of what research approach?

- a. experimental
- b. quasi-experimental

- c. correlational
- d. descriptive

The _____ strategy is an approach to research whereby two variables are measured for each individual and the relationship between the variables is examined.

- a. descriptive
- b. correlational
- c. experimental
- d. quasi-experimental

Experiments allow researchers to

- a. eliminate experimenter bias.
- b. answer questions about the existence of a relationship between two variables.
- c. observe naturally occurring behavior.
- d. answer cause-and-effect questions about the relationship between two variables.

Any factor that raises doubts about the research results or the interpretation of the results is a

- a. threat to reliability.
- b. threat to validity.
- c. experimenter expectancy.
- d. demand characteristic.

Any factor that limits the ability to generalize the results of the study is a threat to

- a. internal validity.
- b. external validity.
- c. reliability.
- d. accuracy.

In which research situation would the study be confounded?

- a. An extraneous variable varies systematically along with the two variables being studied.
- b. An extraneous variable varies systematically with one variable being studied.
- c. An extraneous variable does not vary systematically with the other variables being investigated.
- d. An extraneous variable does not vary systematically with other extraneous variables.

A study examining the relationship between humor and memory compares memory performance scores for one group presented with humorous sentences and a second group presented with nonhumorous sentences. The participants in both groups consist of a mixture of males and females. In this study, gender (male/female) is a(n) _____ variable.

- a. independent
- b. dependent
- c. extraneous
- d. confounding

_____ effects occur when environmental events other than the treatment influence the participants' scores in one treatment differently than in another treatment.

- a. Subject selection bias
- b. Volunteerism
- c. Fatigue

d. History

The tendency for individuals who have extreme scores (high or low) on one measurement and to have less extreme scores on a second measurement is called

- a. history.
- b. instrumentation.
- c. maturation.
- d. regression toward the mean.

Experimental research studies tend to have very _____ internal validity but often have relatively _____ external validity.

- a. high; low
- b. low; high
- c. high; high
- d. low; low

The goal of the descriptive research strategy is

- a. to describe an individual person or patient in great detail.
- b. to describe a variable (or variables) as they exist naturally.
- c. to describe the relationship between two variables.
- d. to establish the existence of a cause and effect relationship between variables.

A researcher watches children on a playground to obtain measurements of their level of aggression. This researcher is using

- a. naturalistic observation.
- b. participant observation.
- c. contrived observation.
- d. unstructured observation.

A researcher who wanted to observe behaviors in a private social club would probably need to use

- a. naturalistic observation.
- b. participant observation.
- c. contrived observation.
- d. unstructured observation.

A researcher who brings dating couples into the laboratory to be observed while they are solving a problem is using

- a. participant observation.
- b. naturalistic observation.
- c. contrived observation.
- d. case study research.

What type of question produces a numerical score for each participant?

- a. open-ended
- b. restricted
- c. rating scale
- d. physiological

One problem with mail surveys is non-response bias. This means

- a. usually only a small percentage of the surveys are returned.
- b. many questionnaires will be returned with missing answers.
- c. individuals who return surveys may not be representative of the general population.
- d. attempts to increase the number of people who return the survey may produce a biased sample.

A case study typically involves the detailed study of

- a. a single disease or psychiatric disorder.
- b. a single clinical treatment.
- c. a single group such as a fraternity or an athletic team
- d. a single individual

The multiple-personality study reported in Thigpen and Cleckley's *Three Faces of Eve* is an example of

- a. participant observation.
- b. naturalistic observation.
- c. correlational research.
- d. case study research.

A defining characteristic of the correlational study is

- a. the research is conducted in field settings rather than in a laboratory.
- b. the intent is simply to describe behaviors.
- c. the intent is to demonstrate the relationship between variables.
- d. The other three options are all defining characteristics of the correlational study

A researcher watches children on a playground to obtain measurements of their level of activity. Then the researcher watches the children's caregivers on the playground to obtain measurements of their level of verbal reprimanding of children. The researcher hopes to demonstrate that the caregivers verbal reprimanding is related to children's activity level. This researcher is using the

- a. descriptive research strategy.
- b. correlational research strategy.
- c. experimental research strategy.
- d. scientific research strategy.

A negative value for a correlation indicates _____.

- a. a much stronger relationship than if the correlation were positive
- b. a much weaker relationship than if the correlation were positive
- c. increases in X tend to be accompanied by increases in Y
- d. increases in X tend to be accompanied by decreases in Y

The Spearman correlation measures

- a. the degree to which the relationship is causal.
- b. the degree of linear relationship.
- c. the degree of curvilinear relationship.
- d. the degree of monotonic relationship.

A Pearson correlation of $r = -0.85$ indicates that a graph of the data would show

- a. points clustered close to a line that slopes up to the right.
- b. points clustered close to a line that slopes down to the right.
- c. points widely scattered around a line that slopes up to the right.
- d. points widely scattered around a line that slopes down to the right.

A Pearson correlation of $r = +0.2$ indicates that a graph of the data would show

- a. points clustered close to a line that slopes up to the right.
- b. points clustered close to a line that slopes down to the right.
- c. points widely scattered around a line that slopes up to the right.
- d. points widely scattered around a line that slopes down to the right.

Similar to correlational research, the differential design

- a. establishes the existence of a relationship by demonstrating a difference between groups.
- b. uses one of the two variables to create groups of participants.
- c. involves two groups with one score for each participant.
- d. demonstrates the existence of a relationship between two variables.

Johnny hopes to demonstrate that pre-school children who listen to more country music also tend to be more active than their peers. If this result is obtained, then _____ would be the predictor variable and _____ would be the criterion variable for the study.

- a. the amount of country music listened to; the level of activity
- b. the level of activity; the amount of country music listened to
- c. those who listen to a lot country music; those who listen to relatively little country music
- d. the preschool children; the amount of activity

Which research design is commonly used to help establish the reliability or validity of a measurement procedure?

- a. the observational research design
- b. the survey research design
- c. the case study design
- d. the correlational design

The correlational research strategy is often used when

- a. a researcher is prohibited from manipulating a variable.
- b. a theory is tested.
- c. an area of research is just beginning.
- d. the other three choices are all uses of the correlational strategy.

Essay questions

Define a construct and explain why psychologists often need to use an operational definition to measure constructs.

What is meant by the reliability of measurement? Describe three methods for measuring reliability.

Describe the two basic categories of ethical responsibility that a researcher has.

Describe the factors that influence a debriefing's effectiveness.

Describe the basic distinction between probability sampling and nonprobability and explain why most psychology research uses nonprobability methods.

Explain why you are more likely to obtain a representative sample with proportionate stratified random sampling than with either stratified random sampling or simple random sampling.

Describe the kind of question that each of the 5 research strategies intends to answer.

Describe two time-related threats to internal validity. (Note: For each threat, be sure to label it, describe it, and be sure to indicate how it specifically is a threat to the internal validity of the design.)

Describe the three types of behavioral observation and briefly explain the circumstances under which each is used.

Outline the major advantages and disadvantages of administering a survey by mail.