

1. Peer-review allows psychologists to be sure that the information shared in journal articles is:
 - A) unbiased and validated.
 - B) unbiased and invalidated.
 - C) bias and validated.
 - D) bias and invalidated.

2. Which of the following would a researcher most likely use to get peer-reviewed information on a psychological topic?
 - A) PsycARTICLES
 - B) books
 - C) news articles
 - D) websites

3. The process of peer review is aimed at:
 - A) making psychological findings more accessible to the general public.
 - B) only publishing studies that prove scientific facts.
 - C) minimizing bias among scientists' collective of knowledge.
 - D) acknowledging the most preeminent scientists for their lifetime of achievements to their respective fields.

4. An educated prediction that provides a testable explanation of a phenomenon is a(n):
 - A) theory.
 - B) hypothesis.
 - C) law.
 - D) observational definition.

5. A(n) _____ is a well-substantiated explanation of some aspect of the natural world confirmed through repeated observation and experimentation.
 - A) observational definition
 - B) hypothesis
 - C) conceptual definition
 - D) theory

1. How do research psychologists share their findings with others in their discipline?
2. Professor McAdams is interested in examining the relationship between playing video games and aggressive behavior. Differentiate the types of results he would obtain if he used a between-subjects research design as compared with a within-subjects research design.
3. Clay believes the adage “An apple a day keeps the doctor away.” If he is going to experimentally examine this saying, how would he operationally define the independent and dependent variables?
4. A research protocol includes both an informed consent and a debriefing. Discuss how these two items are similar to as well as different from each other.
5. Kaila is interested in studying whether participation in beauty pageants is related to intelligence. How might she design a nonexperimental study to investigate this relationship?

1. What do sociology, geology, and psychology have in common?
 - A) All three use the scientific method.
 - B) All three study how humans think, feel, and behave.
 - C) All three focus on unanswerable questions.
 - D) All three are based on subjective reasoning.

2. The scientific method relies on:
 - A) personal experience to inform theory.
 - B) making observations to answer questions.
 - C) anecdotal evidence to answer questions.
 - D) intuition as evidence.

3. Which of the following is NOT an example of empirical research?
 - A) examining IQ using a standardized test
 - B) measuring passionate love using a self-report measure
 - C) investigating gender differences in athleticism
 - D) assessing whether someone has behaved well enough to get into heaven

4. Which of the following could be examined using empirical research?
 - A) Bigfoot
 - B) the Loch Ness Monster
 - C) vampires
 - D) great white sharks

5. Why are most philosophical questions poorly suited for empirical investigation?
 - A) Philosophy is not an important discipline.
 - B) Most philosophical questions cannot be objectively measured.
 - C) Empirical investigations can only test unobservable behaviors.
 - D) Philosophy is inherently unscientific and thus does not necessitate investigation.

6. What is the best way for a researcher to empirically investigate a psychological phenomenon?
 - A) nonscientifically
 - B) using observable behaviors to make assumptions about underlying psychological states
 - C) by asking participants' friends and family for their opinions
 - D) by having participants complete self-report measures

Use the following to answer questions 1-4:

Scenario I

Scenario I is based on fabricated data inspired by the following study:

Swee, G. & Schirmer, A. (2014). On the importance of being vocal: saying "ow" improves pain tolerance. *The Journal of Pain*, 16(4), 326–334.

Vocalization and Pain Tolerance

Swee and Schirmer (2014) examined the effect of behavioral interventions on pain tolerance in adults. Participants submerged their nondominant hand in an ice bath on five different occasions. During each occasion they either said “ow,” heard a recording of them saying “ow,” heard a recording of someone else saying “ow,” pressed a button, or did nothing. The researchers hypothesized that what participants did while their hand was in the ice bath would increase how long they kept their hand in the ice bath. The results of the study showed that when participants said “ow” they were able to keep their hand in the ice bath significantly longer than during any of the other treatment conditions.

1. (Scenario I) In Scenario I pain tolerance is operationally defined as:
 - A) the participants' ability to withstand a painful stimulus.
 - B) how long the participants kept their hand in the ice bath.
 - C) when the participants said “ow.”
 - D) whether participants' behavior changed across trials.

2. (Scenario I) What is the independent variable in Scenario I?
 - A) intervention
 - B) pain tolerance
 - C) saying “ow”
 - D) how long a participant kept their hand in the ice bath

3. (Scenario I) Suppose the researchers still measured the effect of all five treatments on pain tolerance, but each participant was only measured under one treatment condition. In making this adjustment the research design would change from a _____ design to a _____ design.
 - A) between subjects; within subjects
 - B) within subjects; longitudinal
 - C) longitudinal; between subjects
 - D) within subjects; between subjects

1. Riya would like to empirically test whether there is a heaven. Explain why this would NOT be a good research question.
2. Explain why literature searches using general search engines like Google and Bing are poor foundations for scientific investigations.
3. Explain how a theory is different from a hypothesis.
4. List and describe two ways to generate a good research hypothesis.
5. When conducting a literature review, Carlita discovers conflicting information. How might she use this perplexing knowledge to further explore the phenomenon?
6. List and describe two characteristics of a good hypothesis.
7. Identify one time in your own life where you fell victim to the Barnum Effect.
8. Preston hypothesizes that although children are unaware of it, they secretly harbor feelings of jealousy toward their parents. He conducts a research study examining children's self-reported jealousy toward each of their parents. Just as he expected, results of the children's self-report measures reveal no explicit jealousy toward their parents. Identify what is wrong with Preston's research hypothesis and detail why it is unsuitable for empirical investigation.
9. Marcy is a developmental psychologist interested in examining whether the number of presents a child receives for his/her birthday is related to how much the child misbehaves. Her hypothesis is that a children spoiled by too many presents will be more likely to act out negatively. If she designs an experimental study, what would be her independent variable and her dependent variable?
10. Carico wants to understand whether owning a sports car leads to reckless driving. Should he use an experimental or nonexperimental research design to investigate his research question?
11. Why might a researcher choose to use a nonexperimental design?

1. Empirical research relies on:
 - A) systematic observation.
 - B) intuition.
 - C) anecdotal evidence.
 - D) introspection.

2. Which of the following is an example of empirical research?
 - A) determining whether Cupid causes people to fall in love
 - B) measuring how quickly the Sandman causes children to fall asleep
 - C) investigating whether the Easter Bunny is more likely to leave pink or blue eggs
 - D) assessing whether water consumption leads to clearer skin

3. PsycINFO is a:
 - A) website that publishes educational blogs.
 - B) pop culture website referencing psychological findings.
 - C) database housing peer-reviewed journal articles.
 - D) book of the standard criteria for the classification of mental disorders.

4. Articles that successfully complete the peer-review process are those that:
 - A) ask sound questions, use suitable methods, and then draw bias conclusions.
 - B) ask sound questions, use suitable methods, and then draw appropriate conclusions.
 - C) ask subjective questions, use suitable methods, and then draw bias conclusions.
 - D) ask subjective questions, use suitable methods, and then draw appropriate conclusions.

5. A(n) _____ is a statement based on repeated experimental observation that describes some aspect of the world.
 - A) observational definition
 - B) hypothesis
 - C) scientific law
 - D) conceptual definition

6. Which of the following is NOT a characteristic of a good hypothesis?
 - A) being specific
 - B) being grounded in previous research
 - C) being elaborate
 - D) being falsifiable