

## CHAPTER 1: Philosophies of Science and Counseling: Why Science Matters to Counseling

### True/ False Questions

1. In counseling, the segregation of science and practice is essential in order to maintain updated knowledge that practitioners can integrate in their clinical work.

Answer: False

2. The a priori method of "fixing belief" states that if something makes sense and has previously been believed to be true, then it is indeed true.

Answer: True

3. According to the positivist perspective, a given experiment is expected to lead to the same outcome and conclusion, regardless of who conducts the experiment.

Answer: True

4. In the postpositivism paradigm, notions of "truth" and "reality" are abandoned in favor of the belief that ideas about the social world are constructed in the minds of individuals.

Answer: False

5. In the constructivist paradigm, there can be no predictions based upon hypothesized truths or tests of conjectures.

Answer: True

6. Scientific research can advance researchers' understanding of human behavior by providing data that can be used to understand these behaviors. This contributes to the ability to alter such behaviors through counseling and consultation interventions.

Answer: True

7. Theory-driven research involves a process whereby testing and observations are used to guide the development of hypothesis generation.

Answer: False

8. Evidence-based practice policies require that psychotherapists' practice be grounded in theory and research.

Answer: True

9. One of the hallmarks of graduate work in counseling is to acquire critical thinking skills, the ability to identify and process information with fewer biases, stereotypes, and assumptions; formulate hypotheses; gather data; and make informed decisions.

Answer: True

10. Research indicates that people are selective or biased in the type of information to which they attend and do not think as "objective computers."

Answer: True

### **Multiple Choice Questions**

1. The foundation of counseling and counseling psychology is based on the integration of:
- a. science and technology into behavior management.
  - b. science into practice and of practice into science.
  - c. science into society through hybrid organizations.
  - d. science into policymaking and of policymaking into science.

Answer: b

2. The \_\_\_\_\_ is one of the ways of "fixing belief" that states that whatever belief one firmly adheres to is truth.
- a. method of authority
  - b. scientific method
  - c. method of intuition
  - d. method of tenacity

Answer: d

3. It has been experimentally proven that the Sun is the main source of heat and light for all forms of life on Earth. This method of verifying facts and establishing "truths" is called the \_\_\_\_\_.
- a. method of authority
  - b. scientific method
  - c. a priori method
  - d. method of tenacity

Answer: b

4. The paradigm of positivism posits that:
- a. there is no universal truth.
  - b. researchers are subjective and impact what is being studied.
  - c. there is no "real" reality or absolute truth.
  - d. dichotomous conclusions are possible in scientific research.

Answer: d

5. Which of the following paradigms recognizes that dichotomous conclusions are not possible in research because systems are complex and all research is flawed?

- a. Positivism
- b. Postpositivism
- c. Constructivism
- d. Critical theory

Answer: b

6. A difference between the positivist perspective and the postpositivist perspective is that the postpositivist perspective posits that:
- a. there is no absolute truth.
  - b. scientists have biases that may affect research.
  - c. there is no scope for error in the scientific process.
  - d. dichotomous conclusions are possible in scientific researches.

Answer: b

7. According to constructivism, \_\_\_\_\_.
- a. absolute truth exists and can be known
  - b. individuals create their own realities and truths based on experiences
  - c. conjectures can exist
  - d. dichotomous conclusions are possible

Answer: b

8. Which of the following states that an individual's social constructions are shaped by the social, political, cultural, historical, and economic forces in the environment that often have been created by individuals who were in positions of power?
- a. Critical theory
  - b. Expectancy theory
  - c. Postpositivism
  - d. Positivism

Answer: a

9. A goal of critical theory is:
- a. to produce descriptions that are closer approximations to the truth through a succession of experiments.
  - b. to identify causal relationships among variables in a process.
  - c. to develop descriptions of human behavior, which consist of a network of knowledge statements that are grounded in observation.
  - d. to facilitate individuals' realization that constructions are socially constructed beliefs rather than unchangeable truths.

Answer: d

10. The \_\_\_\_\_ focuses on how clinicians develop and test hypotheses in the session while working with their clients.
- a. scientist-practitioner model
  - b. epistemological model
  - c. local clinical scientist model

d. clinical governance model

Answer: c