Cognitive Psychology v5 1st edition Riegler Test Bank

SKU: 9798887941646-TEST-BANK

Chapter 1: Cognition as the Study of Information Processing

MULTIPLE CHOICE

1. The subdiscipline of cognitive science that is interested in the association between mental processing and brain activity is:
   a. developmental
   b. clinical
   c. neuroscience
   d. social

   ANS: C DIF: Easy

2. The issue of how we manage (or fail to manage) driving and talking on a cell phone would be of most interest to someone who studies:
   a. problem solving
   b. attention
   c. memory
   d. decision-making.

   ANS: B DIF Easy

3. You need to write multiple papers and study for several exams over a tight semester schedule. Your ability to plan and prioritize tasks reflects which cognitive process?
   a. memory encoding
   b. decision-making
   c. problem solving
   d. language comprehension

   ANS: C DIF: Moderate

4. According to critics like Núñez et al. (2019), one reason cognitive science may not have fulfilled its interdisciplinary promise is because
   a. artificial intelligence failed to simulate real human behavior.
   b. neuroscience does not consider cultural influences.
   c. cognitive psychology has become dominant and absorbed the broader field.
   d. neuroscience resists integration with linguistics.

   ANS: C DIF: Moderate

Cognitive Psychology v5 1st edition Riegler Test Bank

5. The two disciplines typically characterized as the forerunners to psychology (and cognitive psychology) are:
   a. philosophy and physiology
   b. sociology and history
   c. history and philosophy
   d. chemistry and theology

   ANS: A DIF: Easy

6. In which of the following would a psychophysicist be most interested?
   a. the ways in which the perceptual system translates an incoming stimulus
   b. the basic relationship between brain activity and conscious experience
   c. identifying the basic sensations, images, and feelings that comprise experience
   d. the behavior of someone in response to some stimulus

   ANS: A DIF: Easy

7. Generally, as a stimulus becomes more intense, the minimal change in intensity needed for a person to notice the change
   a. increases.
   b. decreases.
   c. stays the same.
   d. has no relationship whatsoever to original intensity.

   ANS: A DIF: Moderate

8. Which psychophysicist came up with the notion of an unconscious inference?
   a. Donders
   b. Fechner
   c. Helmholtz
   d. Wundt

   ANS: C DIF: Easy

9. Which psychophysicist's major contribution was to demonstrate that the relationship between incoming stimuli and corresponding perceptions was not one-to-one?
   a. Fechner
   b. Helmholtz
   c. Wundt
   d. Titchener

   ANS: A DIF: Easy

10. Helmholtz was a _____ whose work included the insight that _____.
    a. structuralist; perception involves unconscious inferences about incoming stimuli
    b. structuralist; consciousness is complex, but composed of simple elements that can be analyzed through introspection
    c. psychophysicist; perception involves unconscious inferences about incoming stimuli
    d. psychophysicist; consciousness is complex, but composed of simple elements that can be analyzed through introspection

    ANS: C DIF: Moderate

11. Who established the first psychological laboratory in Leipzig, Germany?
    a. Titchener
    b. Fechner
    c. Watson
    d. Wundt

    ANS: D DIF: Easy

12. According to structuralists, consciousness encompasses three basic categories of experience including sensations, feelings, and:
    a. behaviors
    b. motives
    c. drives
    d. images

    ANS: D DIF: Easy

13. _____ refers to a procedure that requires a rigorous and systematic self-report of the basic elements of an experience, and was the primary method used by _____.
    a. Schema analysis; Gestalt psychologists
    b. Savings; behaviorists
    c. Functional reporting; functionalists
    d. Introspection; structuralists

    ANS: D DIF: Moderate

14. William James was a prominent _____ who characterized consciousness as a _____.
    a. functionalist; stream
    b. functionalist; complex combination of simple elements
    c. structuralist; stream
    d. structuralist; complex combination of simple elements

    ANS: A DIF: Moderate

Cognitive Psychology v5 1st edition Riegler Test Bank

15. William James criticized introspection on the grounds that
    a. it emphasized emotions over cognition.
    b. consciousness is too continuous and dynamic for discrete analysis.
    c. it lacked scientific rigor.
    d. it ignored the role of behavior.

    ANS: B DIF: Moderate

16. When considering the emotion of anger, which of the following questions would be of most interest to a functionalist?
    a. What is the conscious experience of anger like?
    b. What is the purpose of anger?
    c. What are the behaviors of an angry person?
    d. What happens in the brain during fits of anger?

    ANS: B DIF: Easy

17. Behaviorists rejected the study of consciousness because:
    a. they believed consciousness didn't exist.
    b. it couldn't be scientifically measured or observed.
    c. it contradicted Freudian theory.
    d. it was based on animal behavior.

    ANS: B DIF: Easy

18. The scientific perspective known as behaviorism was established by:
    a. William James
    b. Edwin C. Tolman
    c. John Watson
    d. B.F. Skinner

    ANS: C DIF: Easy

19. According to behaviorism, the mind is considered a "black box" because
    a. it is the source of all behavior.
    b. it contains memories and motives.
    c. it cannot be studied scientifically.
    d. it is where reinforcement occurs.

    ANS: C DIF: Moderate

20. Which of the following best explains why behaviorism rose to prominence in early twentieth-century America?
    a. It provided a way to study unconscious processes.
    b. It aligned with the philosophical traditions of Europe.
    c. It emphasized observable, measurable behavior compatible with scientific rigor.
    d. It integrated mental and neural processing.

    ANS: C DIF: Moderate

21. A key criticism of introspection by both behaviorists and functionalists was
    a. it was too focused on stimuli and response.
    b. it was too quantitative.
    c. it relied on subjective, unobservable self-report.
    d. it didn't account for unconscious processing.

    ANS: C DIF: Hard

22. The forgetting curve observed by Ebbinghaus demonstrates
    a. that emotional memories fade more slowly.
    b. that forgetting is most rapid shortly after learning.
    c. that people never fully forget previously learned material.
    d. that schema-based interference accounts for memory loss.

    ANS: B DIF: Moderate

23. If you're a psychology major, you've probably been exposed to basic information about the history of psychology in several courses. Each time you're exposed to this information, you probably pick up on it and retain it a little better. This is an example of _____, a key concept from the work of memory psychologist _____.
    a. savings; Bartlett
    b. savings; Ebbinghaus
    c. schemata; Bartlett
    d. schemata; Ebbinghaus

    ANS: B DIF: Hard

24. Bartlett's studies of memory were different than Ebbinghaus's in that
    a. Bartlett found little evidence of forgetting.
    b. Bartlett's studies featured a higher degree of realism.
    c. Bartlett's ideas were consistent with the behaviorist approach of the day.
    d. Bartlett's research has had relatively little influence on current day research.

    ANS: B DIF: Moderate

Cognitive Psychology v5 1st edition Riegler Test Bank

25. Which of the following is the term Bartlett used for generalized knowledge structures about events and situations based on past experience?
    a. savings
    b. introspections
    c. configurations
    d. schemata

    ANS: D DIF: Easy

26. Which school of psychology is best captured by its credo, "The whole is different than the sum of its parts"?
    a. structuralism
    b. functionalism
    c. Gestalt approach
    d. behaviorism

    ANS: C DIF: Easy

27. In explaining how a rat learns to navigate a maze to get food, behaviorists would be extremely unlikely to include which of the following phrases in their accounts?
    a. "The rat knows."
    b. "The rat runs."
    c. "Reinforcement strengthens."
    d. "Stimulus–response connection."

    ANS: A DIF: Moderate

28. Recall the study by McNamara, Long, and Wike (1956) in which rats were exposed to a T-maze in one of two ways: the rats in one group ran the maze themselves, while the rats in the other group were pushed through the maze in carts. Which group(s) learned to make the correct choice at the end of the "T"?
    a. The rats who ran themselves learned to make the correct choice, but the rats in carts failed to learn it.
    b. The rats in carts learned to make the correct choice, but the rats who ran themselves failed to learn it.
    c. Neither group of rats learned to make the correct choice.
    d. Both groups of rats learned to make the correct choice.

    ANS: A DIF: Moderate

29. Which cognitive scientist famously challenged Skinner's behaviorist account of language?
    a. Edward Tolman
    b. Karl Lashley
    c. Noam Chomsky

d. Claude Shannon

ANS: C DIF: Easy

30. What happened to the group of rats that wasn't reinforced until the eleventh day of the Tolman and Honzik study?
    a. After the eleventh day, they showed slow but steady improvement in their maze-running.
    b. They showed no improvement and no decline in their maze-running.
    c. They showed sudden improvement in their maze-running after day 11, running as quickly as the rats who had always been reinforced.
    d. They showed sudden improvement in their maze-running, but never ran as quickly as the rats who had always been reinforced.

    ANS: C DIF: Easy

31. What was the term Tolman (1948) coined to refer to learning that occurs in the absence of any reinforcement?
    a. latent learning
    b. learning by savings
    c. Gestalt learning
    d. associative learning

    ANS: A DIF: Easy

32. In a classic study reported by Tolman (1948), rats were exposed to a complex maze that had three different paths to food: Path 1 was shortest, Path 2 was a bit longer, and Path 3 was the longest. After experiencing all of the paths, rats showed a strong preference for Path 1 (the shortest path). Then, the researchers blocked Path 1—which, also, as it turns out, blocked Path 2. What did rats do when they were placed in this situation?
    a. After being blocked at Path 1, they tried Path 2, and then finally chose Path 3.
    b. After being blocked on Path 1, they kept trying Path 1 over and over again.
    c. After being blocked at Path 1, they tried Path 2, and then kept trying Path 2 over and over again.
    d. After being blocked at Path 1, they immediately switched to Path 3 (not even bothering with Path 2).

    ANS: D DIF: Easy

33. Noam Chomsky
    a. proposed that language can be accounted for solely based on S–R principles.
    b. sharply criticized Skinner's view of language learning.
    c. proposed that language learning is dependent on automatic self-reinforcement.
    d. saw no need for the concept of mental representations in explaining language.

ANS: B DIF: Easy

34. Which of the following best represents Chomsky's main argument against Skinner's view of language?
    a. Reinforcement cannot explain the creative and novel nature of language.
    b. Stimuli are the sole triggers for all speech.
    c. Children imitate exact adult speech patterns.
    d. Internal mental grammar can be conditioned through reinforcement.

    ANS: A DIF: Moderate

35. In the end, what happened to behaviorism?
    a. It was replaced by a renewed interest in structuralism.
    b. It completely died out.
    c. It continues to hold some sway to this day.
    d. It was replaced by a renewed interest in functionalism.

    ANS: C DIF: Easy

36. The information processing approach to cognition likens thought to
    a. the operation of a computer.
    b. the storage system of a library.
    c. the assembly-line production of a factory.
    d. the trial-and-error learning of the rat in a maze.

    ANS: A DIF: Easy

37. The information processing approach is to the connectionist approach as _____ is to _____.
    a. recent; antique
    b. serial; parallel
    c. automatic; controlled
    d. brain; computer

    ANS: B DIF: Moderate

38. In explaining cognition, the connectionist approach emphasizes
    a. interactions between individual processing units in the brain.
    b. the serial nature of cognitive processing.
    c. that cognitive processes are localized within certain regions of the brain.
    d. simple perceptual processing, rather than higher-level cognitive processing.

    ANS: A DIF: Easy

39. What is the term proposed by Descartes that refers to the belief that mind and body are separable entities?
    a. empiricism
    b. materialism
    c. dualism
    d. embodied cognition

    ANS: C DIF: Easy

40. Why has the information-processing metaphor been largely replaced in cognitive psychology?
    a. It doesn't account for social behavior.
    b. It can't simulate decision-making.
    c. It overemphasizes accuracy in perception.
    d. It fails to model the parallel processing of the brain.

    ANS: D DIF: Moderate

41. According to materialism, the mind
    a. exists as a separate entity from the brain.
    b. cannot be measured.
    c. is simply a label for brain activity.
    d. is influenced solely by emotion.

    ANS: C DIF: Moderate

.

TRUE/FALSE

42. Perception refers to the cognitive processes that help you organize and interpret incoming sensory information.

    ANS: T DIF: EASY

43. The processes of attention are unlimited; you can fully attend to all sources of information simultaneously.

    ANS: F DIF: Easy

44. Ebbinghaus's research demonstrated that memory could not be studied scientifically.

    ANS: F DIF: Easy

Cognitive Psychology v5 1st edition Riegler Test Bank

45. Structuralism aimed to analyze the basic elements of consciousness through introspection.

ANS: T DIF: Easy

46. Behaviorists believed that the contents of consciousness could not be meaningfully studied and had no causal role in behavior.

ANS: T DIF: Moderate

47. Bartlett's research supported the idea that memory is reconstructive rather than reproductive.
ANS: T DIF: Easy

48. Behaviorists welcomed the use of mental representations in scientific explanations.

ANS: F DIF: Easy

49. Behaviorists explained language as a learned set of responses controlled by reinforcement.

ANS: T DIF: Easy

50. Shannon's communication model inspired analogies for how human minds process information.

ANS: T DIF: Easy

51. The concept of "cognitive maps" was developed to explain maze learning in rats.

ANS: T DIF: Easy

52. The information-processing approach assumes cognition is mostly passive.

ANS: F DIF: Moderate

53. Materialists believe that the mind and body are fundamentally separate.

ANS: F DIF: Easy

54. Neural networks simulate cognition using interconnected nodes based on neurons.

ANS: T DIF: Easy

COMPLETION

55. _____ is the field that studies the relationship between physical stimuli and subjective experience.

    ANS: Psychophysics DIF: Easy

56. The two primary parent disciplines of psychology are _____ and _____.

    ANS: philosophy; physiology DIF: Easy

57. Wilhelm Wundt used the method of _____ to identify the basic components of conscious experience.

    ANS: introspection DIF: Easy

58. Bartlett introduced the concept of _____ to describe generalized knowledge structures that influence memory reconstruction.

    ANS: schemata, schemas DIF: Easy

59. Hermann Ebbinghaus coined the term _____ to describe the reduction in learning time when information is relearned after a delay.

    ANS: savings DIF: Moderate

60. Tolman and Honzik's (1930) study demonstrated the phenomenon of _____ learning, in which rats learned the layout of a maze without receiving any reinforcement.

    ANS: latent DIF: Easy

61. The development of the _____, which processes information through stages of input, processing, and output, provided a powerful metaphor for understanding human cognition.

    ANS: computer DIF: Easy

62. The belief that mind and body are distinct and separable entities is termed _____ and is typically attributed to the philosopher _____.

    ANS: dualism; Descartes DIF: Hard

Cognitive Psychology v5 1st edition Riegler Test Bank

ESSAY

63. Explain why behaviorists rejected the study of consciousness and describe their alternative approach.

    ANS: Behaviorists rejected the study of consciousness because it was seen as unobservable, unmeasurable, and unreliable. In other words, it is not a proper subject for scientific study. Instead, they focused on observable behavior and proposed that psychology should study stimulus–response (S–R) associations that can be measured empirically.

    DIF: Moderate

64. Describe how Ebbinghaus's method of savings contributed to the scientific study of memory.

    ANS: Ebbinghaus showed that previously learned information is retained in some form, even if it seems forgotten, by measuring the reduced effort needed to relearn material. His systematic approach provided empirical evidence that memory could be studied quantitatively under controlled conditions.

    DIF: Moderate

65. How does Bartlett's concept of schema help explain why people misremember parts of a story?

    ANS: Bartlett proposed that memory is reconstructive, not reproductive, and guided by existing schemas or frameworks of knowledge. When people recall stories, they may omit or alter details to make the information more consistent with their expectations or prior knowledge. They reconstruct, rather than reproduce, what they heard and/or experienced.

    DIF: Easy

66. What are some limitations of the computer metaphor for understanding human cognition?

    ANS: Unlike computers, the human brain processes information in a parallel and distributed manner, without a central processor. Also, the "hardware" of the computer in no way maps onto the physical structure of the brain. The metaphor also fails to account for emotion, context, and embodiment, which are integral elements in human cognition.

    DIF: Moderate

67. How does the concept of embodied cognition challenge traditional views of how thinking occurs?

Cognitive Psychology v5 1st edition Riegler Test Bank

ANS: Embodied cognition posits that cognitive processes are shaped by bodily actions and environmental context, not just internal mental states. It challenges the view of the mind as a detached, abstract processor and emphasizes dynamic interaction with the world. This view may be a “holdover from the Cartesian prejudice” referred to in the text.

DIF: Moderate

68. What did Tolman’s studies on maze learning reveal about the limitations of behaviorist theory?

ANS: Tolman demonstrated that rats could form cognitive maps and learn spatial layouts without reinforcement or overt responses. These findings challenged the behaviorist assumption that learning only occurs through stimulus–response associations reinforced over time. In Tolman’s studies, reinforcements were withheld and responses blocked, and still rats learned the appropriate responses.

DIF: Hard

69. How did Chomsky’s critique of Skinner’s theory of language challenge the behaviorist perspective?

ANS: Chomsky argued that behaviorism couldn’t account for the complexity, creativity, and novelty of language use through the simple mechanisms of imitation, response, and reinforcement. Language acquisition is too rapid and proficient to have those mechanisms as the primary factors. He introduced the idea of mental representations and innate grammatical rules, shifting the focus from observable behavior to internal cognitive processes.

DIF: Moderate

70. Explain how technological advances in communication and computing influenced the emergence of cognitive psychology.

ANS: Communication systems (e.g., Shannon’s model) and computers offered metaphors and models for understanding mental processes like encoding and transmission. These technologies inspired new ways of conceptualizing the mind as an information-processing system.

DIF: Easy