Unit 12: Cognition (8-10%)

Barron’s Chapter 7 and Textbook Chapter 7 / Intelligence is Barron’s Chapter 11

Cognition Quiz: Intelligence Quiz:

Reading Guide Due: Exam and Notecards:

*In this unit students learn how humans convert sensory input into kinds of information. They examine how humans learn, remember, and retrieve information. This part of the course also addresses problem solving, language, and creativity.*

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| Learning Objectives | Key Terms |
| * Compare and contrast various cognitive processes:   — effortful versus automatic processing;  — deep versus shallow processing;  — focused versus divided attention.   * Describe and differentiate psychological and physiological systems of memory (e.g., short-term memory, procedural memory). * Outline the principles that underlie effective encoding, storage, and construction of memories. * Describe strategies for memory improvement. * Synthesize how biological, cognitive, and cultural factors converge to facilitate acquisition, development, and use of language. * Identify problem-solving strategies as well as factors that influence their effectiveness. * List the characteristics of creative thought and creative thinkers. * Identify key contributors in cognitive psychology (e.g., Noam Chomsky, Hermann Ebbinghaus, Wolfgang Köhler, Elizabeth Loftus, George A. Miller). * Explain how psychologists design tests, including standardization strategies and other techniques to establish reliability and validity. * Explain how psychologists design tests, including standardization strategies and other techniques to establish reliability and validity. * Define intelligence and list characteristics of how psychologists measure intelligence:   — abstract versus verbal measures;  — speed of processing.   * Discuss how culture influences the definition of intelligence. * Compare and contrast historic and contemporary theories of intelligence (e.g., Charles Spearman, Howard Gardner, Robert Sternberg). * Describe relevant labels related to intelligence testing (e.g., gifted, cognitively disabled). * Debate the appropriate testing practices, particularly in relation to culture-fair test uses. * Identify key contributors in intelligence research and testing (e.g., Alfred Binet, Francis Galton, David Wechsler). | 1. Memory 2. Three Box/Information-Processing Model 3. sensory memory 4. Iconic vs. Echoic Memory 5. Encoding 6. short-term memory 7. storage 8. George A. Miller 9. chunking 10. mnemonic device 11. method of loci 12. rehearsal 13. long-term memory (include episodic, semantic, and procedural) 14. explicit memory vs. implicit memory 15. eidetic memory 16. Levels of Processing Model 17. recall vs. recognition 18. serial position effect 19. Hermann Ebbinghaus 20. retrieval 21. flashbulb memory 22. mood-congruent memory 23. state-dependent memory 24. Elizabeth Loftus 25. proactive interference 26. retroactive interference 27. anterograde amnesia 28. retrograde amnesia 29. concept 30. prototype 31. algorithm 32. heuristic: availability and representativeness 33. insight 34. mental set 35. functional fixedness 36. framing 37. standardization 38. Types of reliability (split-half, equivalent form reliability, test-retest) 39. Types of validity (face, content, criterion, construct) 40. Aptitude Test 41. Achievement Test 42. Spearman – The “g” factor 43. Gardner - Multiple Intelligences 44. Goleman – Emotional Intelligence (EQ) 45. Sternberg – Triarchic Theory of Intelligence 46. Alfred Binet 47. Intelligence Quotient (IQ) 48. David Wechsler 49. Flynn Effect |