AP Psychology CHAPTER 6: Memory

LEARNING OBJECTIVES

When your students finish studying this chapter, they should be able to:

Introduction: What Is Memory?

1. Define memory, and explain the processes of encoding, storage, and retrieval.

2. Describe the stage model of memory, and describe how each of the three stages functions.

3. Discuss the function, duration, capacity, and types of sensory memory, and explain how George Sperling’s experiment advanced the understanding of sensory memory.

4. Describe the function, duration, and capacity of short-term memory, and explain the usefulness of chunking.

5. Explain the functions of the different components in Baddeley’s model of working memory.

6. Give examples of maintenance rehearsal and elaborative rehearsal, and explain why one is more effective in encoding long-term memories.

7. Describe the types of information in long-term memory, and explain the differences between implicit memory and explicit memory.

8. (Culture and Human Behavior) Discuss the findings of research which investigated the earliest memories in European-American college students compared to Chinese and Taiwanese college students.

9. Discuss the organization of information in long-term memory.

Retrieval: Getting Information from Long-Term Memory

10. Define retrieval, noting how retrieval cues work, and describe what happens when retrieval fails, as in a tip-of-the-tongue (TOT) experience.

11. Compare and contrast recognition and recall in terms of retrieval. Describe free recall versus cued recall. How do these factors influence the serial position effect.

12. Discuss the context effect and mood congruence as different forms of the encoding specificity principle, and evaluate the accuracy of flashbulb memories.

Forgetting: When Retrieval Fails

13. Discuss Hermann Ebbinghaus’s studies of forgetting, noting the basic pattern of the forgetting curve.

14. Describe how each of the following explanations account for forgetting: encoding failure, decay theory, interference theory, and motivated forgetting.

15. (In Focus) List the typical characteristics of déjà vu experiences, and summarize the explanations to account for these experiences.

Imperfect Memories: Errors, Distortions, and False Memories

16. Explain how the misinformation effect, source confusion, and schemas and scripts can contribute to distorted or false memories.

17. Define imagination inflation, and describe how it has been used in psychological studies to create false memories.

18. (Critical Thinking) Discuss the controversy surrounding repressed memory therapy, noting the objections of memory experts, and state what conclusions can be drawn

The Search for the Biological Basis of Memory

19. Explain how research by Karl Lashley and by Richard Thompson demonstrated that memories can be both localized and distributed in the brain.

20. (Focus on Neuroscience) Describe the research on sensory aspects of memory using fMRI, and identify which brain areas are involved in audio and visual memories.

21. Define long-term potentiation, and discuss how Eric Kandel’s research on Aplysia demonstrated the physical changes associated with forming a new long-term memory.

22. Define memory consolidation, retrograde amnesia, and anterograde amnesia.

23. Summarize what has been learned about memory from the famous case of H.M., including Brenda Milner and Suzanne Corkin’s work with this patient.

24. (In Focus) Describe the results of the research on H.M. and famous people, and state what conclusions can be drawn about brain functioning based on this case study.

25. Describe the roles of different brain structures in normal memory.

26. Describe the underlying causes and typical course of Alzheimer’s disease, including the progressive destruction of brain tissue.

27. (Focus on Neuroscience) Discuss the results of research using MRI brain scans of Alzheimer’s patients and specify the brain areas affected by the disease.

Psych for Your Life: Ten Steps to Boost Your Memory

28. Identify several strategies you can use to enhance your ability to remember information.