

## COMPREHENSIVE EXAM READING LIST: MEMORY

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### **Current Committee Members**

Kimberly Fenn (chair), Susan Ravizza, Devin McAuley

### **Journals**

Below is a list of journals you should monitor for content relevant articles. While we will not ask a question solely on the content of recent articles, we may ask questions that ask you to apply what you know from the content of the reading list below to a current issue or hot topic of recent articles.

- *Psychological Science*
- *Learning and Memory*
- *JEP: LMC*
- *Memory and Cognition*
- *Cognition*
- *Cognitive Science*
- *Cognitive Psychology*
- *Journal of Memory and Language*
- *Journal of Cognitive Neuroscience*
- *Journal of Neuroscience*
- *Memory*

### **References**

The following book may be useful for a general background reference.

- Tulving, E., & Craik, F.I.M., (Eds.). (2000). *The Oxford Handbook of Memory*. New York, NY: Oxford University Press.

### **Sensory Memory**

1. Cowan, N. (1984). On Short And Long Auditory Stores. *Psychological Bulletin*, 96(2), 341- 370.
2. Sperling, G. (1960). The information available in brief visual presentations. *Psychological Monographs: General and Applied*, 74(11), 1-30.

### **Short Term Memory**

3. Miller, G.A. (1956). The Magical Number Seven, Plus or Minus Two: Some Limits on our Capacity for Processing Information. *Psychological Review*, 63, 81-97.
4. Cowan, N. (2000). The magical number 4 in short-term memory: A reconsideration of mental storage capacity. *Behavioral and Brain Sciences*, 24, 87-185.

### **Longterm Memory**

#### **A. Declarative/Explicit vs Procedural/Implicit memory**

5. Jacoby, L. L., Toth, J. P., & Yonelinas, A. P. (1993). Separating conscious and unconscious influences of memory: Measuring recollection. *Journal of Experimental Psychology: General*, 122(2), 139-154.
6. Knowlton, B.J., Mangels, J.A., & Squire, L.R. (1996). A neostriatal habit learning system in humans. *Science*, 273(5280), 1399-1402.

7. Tulving, E. (1972). Episodic and semantic memory. In E. Tulving & W. Donaldson (Eds.), *Organization of Memory* (pp. 381-402). New York, NY: Academic Press.
8. Squire, L. R. (1986). Mechanisms of memory. *Science*, 232(4758), 1612-1619.

### **B. Prospective memory, Source memory, and Autobiographical memory**

9. Einstein, G. O., McDaniel, M. A., Thomas, R., Mayfield, S., Shank, H., Morisette, N., & Breneiser, J. (2005). Multiple processes in prospective memory retrieval: Factors determining monitoring versus spontaneous retrieval. *Journal of Experimental Psychology: General*, 134, 327-342.
10. Johnson, M.K., Hashtroudi, S., & Lindsay, D.S. (1993) Source Monitoring, *Psychological Bulletin*, 114, 3-28.
11. Janata, P. (2009). The neural architecture of music-evoked autobiographical memories. *Cerebral Cortex*, 19, 2579-2594.

### **Longterm Memory: Factors that affect storage**

12. Craik, F.I.M., & Lockhart, R.S. (1972). Levels of Processing: A framework for Memory Research. *Journal of Verbal Learning and Verbal Behavior*, 11, 671-684.
13. Gobet, F., Lane, P.C.R., Croker, S., Cheng, P.C.H., Jones, G., Oliver, I., & Pine, J.M. (2001). Chunking mechanisms in human learning. *Trends in Cognitive Sciences*, 5, 236-243.
14. Greene, R.L. (1989). Spacing effects in memory: Evidence for a two-process account. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 15(3), 371-377.
15. Tulving, E., & Thompson, D. M. (1973). Encoding specificity and retrieval processes in episodic memory. *Psychological Review*, 80, 352-373.

### **The influence of emotion and stress on memory**

16. Canli T., Zhao Z., Brewer J., Gabrieli J.D., & Cahill L. (2000). Event-related activation in the human amygdala associates with later memory for individual emotional experience. *Journal of Neuroscience*, 20(RC99), 1-5.
17. Kensinger, E.A., & Corkin, S. (2004). Two routes to emotional memory: Distinct neural processes for valence and arousal. *Proceedings of the National Academy of Sciences USA*, 101, 3310-3315.
18. Rogan, M.T., Staubli, U.V., & LeDoux, J.E. (1997). Fear conditioning induces associative long-term potentiation in the amygdala. *Nature*, 390, 604-607.

### **Measuring memory**

19. Anderson, J. R., & Bower, G. H. (1972). Recognition and retrieval processes in free recall. *Psychological Review*, 79, 97-123.
20. Haist, F., Shimamura, A.P., & Squire, L.R. (1992). On the relationship between recall and recognition memory. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 18(4), 691-702.
21. Yonelinas, A.P. (2002). The nature of recollection and familiarity: a review of 30 years of research. *Journal of Memory and Language*, 46, 441-517.

### **Forgetting**

22. Anderson, M.C., Bjork, R.A., & Bjork, E.L. (1994). Remembering can cause forgetting: retrieval dynamics in long-term memory. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 20, 1063-1087.
23. Ebbinghaus H. (1885/1913). *Memory. A Contribution to Experimental Psychology*. New York, NY: Teachers College/Columbia University.

24. Sahakyan, L. (2004). Destructive effects of “forget” instructions. *Psychonomic Bulletin & Review*, *11*(3), 555-559.
25. Wixted, J.T. (2004). The psychology and neuroscience of forgetting. *Annual Review of Psychology*, *55*, 235-269.
26. Oberauer, K., & Lewandowsky, S. (2008). Forgetting in immediate serial recall: Decay, temporal distinctiveness, or interference? *Psychological Review*, *115*(3), 544-576.

### **Amnesia**

27. Corkin, S., Amaral, D. G., González, R. G., Johnson, K. A., & Hyman, B. T. (1997). H. M.'s medial temporal lobe lesion: Findings from magnetic resonance imaging. *The Journal of Neuroscience*, *17*(10), 964–3979.
28. Graf, P., & Schacter, D. (1985). Implicit and explicit memory for new associates in normal and amnesic subjects. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *11*, 501-518.
29. Schmolck, H., Kensinger, E.A., Corkin, S., & Squire, L.R. (2002). Semantic knowledge in Patient H.M. and other patients with bilateral medial and lateral temporal lobe lesions. *Hippocampus*, *12*(4), 520–533.
30. Squire L.R., Clark R.E., & Knowlton, B.J. (2001). Retrograde amnesia. *Hippocampus*, *11*, 50–55.

### **False memory**

31. Loftus, E. F., & Hoffman, H.G. (1989). Misinformation and memory: The creation of new memories. *Journal of Experimental Psychology: General*, *118*, 100-104.
32. Roediger, H.L. III, & McDermott, K.B. (1995). Creating false memories: Remembering words not presented in lists. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *21*, 803-814.
33. Schacter, D.L., Norman, K.A., & Koutstaal, W. (1998). The cognitive neuroscience of constructive memory. *Annual Review of Psychology*, *49*, 289-318.
34. Watson, J.M., Bunting, M.F., Poole, B.J., & Conway, A.R.A. (2005). Individual differences in susceptibility to false memory in the Deese-Roediger-McDermott Paradigm. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *31*(1), 76-85.

### **Memory Models**

35. Anderson, J. R., Bothell, D., Byrne, M. D., Douglass, S., Lebiere, C., & Qin, Y. (2004). An integrated theory of the mind. *Psychological Review* *111*(4), 1036-1060.
36. Atkinson, R.C., & Shiffrin, R.M. (1968). Human memory: A proposed system and its control processes. In: K. W. Spence & J. T. Spence (Eds.), *The psychology of learning and motivation: Advances in research and theory* (pp. 89-195). New York, NY: Academic Press, New York.
37. Gillund, G., & Shiffrin, R.M. (1984). A retrieval model for both recognition and recall. *Psychological Review*, *91*, 1-67.
38. Hintzman, D. L. (1986). "Schema abstraction" in a multiple-trace model. *Psychological Review*, *93*, 411-428.
39. Jacoby, L.L. (1991). A process dissociation framework: Separating automatic from intentional uses of memory. *Journal of Memory and Language*, *30*, 513-541.
40. Shiffrin, R.M. (2003). Modeling memory and perception. *Cognitive Science*, *27*, 341-378.

### **Neuroanatomy of Memory: Cellular/Synaptic**

41. Bliss, T.V., & Lomo, T. (1992). Long-lasting potentiation of synaptic transmission in the dentate area of the anaesthetized rabbit following stimulation of the perforant path. *Journal of Physiology*, *23*(2), 331-356.

42. Hebb, D.O. (1949). *The Organization of Behavior: A Neuropsychological Theory*. New York, NY: John Wiley. (possibly restrict to pages 60-78 of the new printing).
43. Leuner, Gould, & Shors (2006). Is there a link between adult neurogenesis and learning? *Hippocampus*, *16*, 216-224.

### **Neuroanatomy of Memory: Neural Substrates**

44. Brewer, J.B., Zhao, Z., Desmond, J.E., Glover, G.H., & Gabrieli, J.D.E. (1998). Making memories: Brain activity that predicts how well visual experience will be remembered. *Science*, *281*, 1185-1187.
45. Eichenbaum, H., Yonelinas, A.R., Ranganath, C. (2007) The medial temporal lobe and recognition memory. *Annual Review of Neuroscience* *30*, 123–152.
46. Gabrieli J.D.E. (1998). Cognitive neuroscience of human memory. *Annual Review of Psychology*, *49*, 87–115.
47. Squire, L.R., Zola-Morgan, J.T., Clark, R.E. (2007). Recognition memory and the medial temporal lobe: a new perspective. *Nature Reviews Neuroscience*, *8*, 872-883.
48. Wheeler, M.E., Petersen, S.E., & Buckner, R.L. (2000). Memory's echo: Vivid remembering reactivates sensory-specific cortex. *Proceedings of the National Academy of Sciences, U.S.A.*, *97*(20), 11125-11129.
49. Hannula, D.E., & Ranganath, C. (2008). Medial Temporal Lobe Activity Predicts Successful Relational Memory Binding. *The Journal of Neuroscience*, *28*(1), 116-124.

### **Memory and Aging**

50. Rosen, A.C., Prull, M.W., O'Hara, R., Race, E.A., Desmond, J.E., Glover, G.H., Yesavage, J.A., Gabrieli, J.D.E. (2002). Variable effects of aging on frontal lobe contributions to memory. *NeuroReport*, *13*(18), 2425-2428.
51. Glisky, E. L., Rubin, S. R., & Davidson, P. S. R. (2001). Source memory in older adults: an encoding or retrieval problem? *Journal of Experimental Psychology: Learning Memory and Cognition* *27*, 1131–1146.
52. Cabeza, R., Anderson, N. D., Locantore, J. K., & McIntosh, A. R. (2002). Aging gracefully: compensatory brain activity in high performing older adults. *Neuroimage*, *17*, 1394–1402.
53. Colcombe, S.J., Erickson, K.I., Raz, N., Webb, A.G., Cohen, N.J., McAuley, E., & Kramer, A.F. (2003). Aerobic fitness reduces brain tissue loss in aging humans. *Journal of Gerontology Series A: Biological and Medical Sciences*, *58*, 176-180.

### **Recommended Additional Readings**

1. Abbott, L. F., & Nelson, S. B. (2000). Synaptic plasticity: taming the beast. *Nature Neuroscience*, *3*, 1178–1183.
2. Abraham & Robins (2005). Memory retention – the synaptic stability versus plasticity dilemma. *Trends in Neurosciences*, *28*, 73-78.
3. Bliss, T.V., & Collingridge, G.L. (1993). A synaptic model of memory: long-term potentiation in the hippocampus, *Nature*, *361*(6407), 31-39.
4. McEwen, B.S. (1999). Stress and hippocampal plasticity. *Annual Review of Neuroscience*, *22*, 105-122.
5. McClelland, J.L., McNaughton, B.L., & O'Reilly, R.C. (1995) Why are there complementary learning systems in the hippocampus and neocortex: insights from the successes and failures of connectionist models of learning and memory. *Psychological Review*, *102*, 419-457.
6. Cahill, L., & McGaugh, J. (1998). Mechanisms of emotional arousal and lasting declarative memory. *Trends in Neurosciences*, *21*(7), 294-299.