

## Cognitive Control/Working Memory Reading List (n=45)

**Current Committee Members: Susan Ravizza (chair), Erik Altmann, Zach Hambrick**

### Frontal lobe function in cognitive control

1. Frith, C. D., Friston, K., Liddle, P. F., & Frackowiak, R. S. J. (1991). Willed Action and the Prefrontal Cortex in Man: A Study with PET. *Proceedings: Biological Sciences*, 244(1311), 241-246.
2. Miller, E. K., & Cohen, J. D. (2001). An integrative theory of prefrontal cortex function. *Annual Review of Neuroscience*, 24(1), 167-202.
3. Hazy, T.E., Frank, M.J. & O'Reilly, R.C. (2007). Toward an executive without a homunculus: Computational models of the prefrontal cortex/basal ganglia system. *Philosophical Transactions of the Royal Society - B*, 362, 1601-1613.
4. Badre, D., & D'Esposito, M. (2009). Is the rostro-caudal axis of the frontal lobe hierarchical? *Nat Rev Neurosci*, 10(9), 659-669. [Review]

### Working memory

#### Antecedents of Working Memory

1. Miller (1956). The magical number seven, plus or minus two: Some limits on our capacity for processing information. *Psychological Review*, 63, 81-97.
2. Atkinson & Shiffrin (1971). The control of short-term memory. *Scientific American*, August, Vol. 225(2): 82-90

#### The Emergence of Working Memory

3. Baddeley & Hitch (1974). Working memory. In G. A. Bower (Ed.), *The psychology of learning and motivation* (vol. 8, pp. 47-89). New York: Academic Press.

#### Prominent Models of Working Memory

4. Baddeley (2000). The episodic buffer: A new component of working memory? *Trends in Cognitive Sciences*, 4, 417-423.
5. Cowan (1999). An embedded-process model of working memory. In A. Miyake & P. Shah (Eds.), *Models of working memory: Mechanisms of active maintenance and executive control* (pp. 62-101). New York: Cambridge University Press.
6. Cowan, N. (2010). The magical mystery four: How is working memory capacity limited, and why? *Current Directions in Psychological Science*.
7. Engle, R. W. (2002). Working memory capacity as executive attention. *Current Directions in Psychological Science*, 11, 19-23.
8. Engle, R. W. (2018). Working memory and executive attention: A revisit. *Perspectives on Psychological Science*, 13, 190-193.
9. Cowan et al. (2018). Benchmarks for models of short term and working memory. *Psychological Bulletin*.

## Working Memory Span

10. Daneman & Carpenter (1980). Individual differences in working memory and reading. *Journal of Verbal Learning and Verbal Behavior*, 19, 450-466. Psychometric Approaches: Working Memory and Intelligence
11. Kyllonen, P. C., & Christal, R. E. (1990). Reasoning ability is (little more than) working-memory capacity?! *Intelligence*.
12. Ackerman, P. L., Beier, M. E., & Boyle, M. O. (2005). Working memory and intelligence: The same or different constructs? *Psychological Bulletin*, 131, 30-60.
13. Conway, A. R. A., & Kovacs, K. (2013). Individual differences in intelligence and working memory: A review of latent variable models. *Psychology of Learning and Motivation*, 58, 233-270.
14. Salthouse, T. A., & Pink, J. (2008). Contextual analysis of fluid intelligence. *Intelligence*, 36, 464-486.
15. Zhang, W., & Luck, S. J. (2008). Discrete fixed-resolution representations in visual working memory. *Nature*, 453(7192), 233.
16. Bays, P. M., & Husain, M. (2008). Dynamic shifts of limited working memory resources in human vision. *Science*, 321(5890), 851-854.

## Working Memory and the Brain

17. O'Reilly, Braver & Cohen (1999). A biologically-based computational model of working memory. In A. Miyake & P. Shah (Eds.), *Models of working memory: Mechanisms of active maintenance and executive control* (pp. 375-411). New York: Cambridge University Press.
18. Kane, M.J., & Engle, R.W. (2002). The role of prefrontal cortex in working-memory capacity, executive attention, and general fluid intelligence: An individual-differences perspective. *Psychonomic Bulletin and Review*, 9, 637-671.
19. McNab, F., and Klingberg, T. (2008). Prefrontal cortex and basal ganglia control access to working memory. *Nat Neurosci* 11, 103-107. [103]
20. Harrison, S. A., & Tong, F. (2009). Decoding reveals the contents of visual working memory in early visual areas. *Nature*, 458(7238), 632-635.
21. Buchsbaum, B. R., & D'Esposito, M. (2008). The search for the phonological store: from loop to convolution. *Journal of Cognitive Neuroscience*, 20(5), 762-778.
22. Bettencourt, K. C., & Xu, Y. (2016). Decoding the content of visual short-term memory under distraction in occipital and parietal areas. *Nature Neuroscience*, 19(1), 150.
23. Lee S.-H., Kravitz D. J., Baker C. I. (2013). Goal-dependent dissociation of visual and prefrontal cortices during working memory. *Nat. Neurosci.* 16, 997–999.

## **Monitoring functions/sequential processing**

1. Kerns, J. G., Cohen, J. D., MacDonald, A. W., Cho, R. Y., Stenger, V. A., & Carter, C. S. (2004). Anterior Cingulate Conflict Monitoring and Adjustments in Control. *Science*, 303(5660), 1023-1026.

2. Brown, J. W., & Braver, T. S. (2005). Learned Predictions of Error Likelihood in the Anterior Cingulate Cortex. *Science*, 307(5712), 1118-1121.
3. Hommel, B., Müsseler, J., Aschersleben, G., & Prinz, W. (2001). The theory of event coding (TEC): A framework for perception and action planning. *Behavioral and Brain Sciences*, 24(5), 849-937.
4. Cooper, R. P., & Shallice, T. (2006). Hierarchical schemas and goals in the control of sequential behavior. *Psychological Review*, 113(4), 887-916.

### **Task switching/Multi-tasking:**

1. Rogers, R. D., & Monsell, S. (1995). Costs of a predictable switch between simple cognitive tasks. *Journal of Experimental Psychology: General*, 124(2), 207-231.
2. Kiesel, A., Steinhauser, M., Wendt, M., Falkenstein, M., Jost, K., Philipp, A. M., & Koch, I. (2010). Control and interference in task switching-A review. *Psychological Bulletin*, 136(5), 849-874
3. Meiran, N. (1996). Reconfiguration of processing mode prior to task performance. *Journal of Experimental Psychology: Learning, Memory, and Cognition* 22, 1423-1442.
4. Yeung, N., Nystrom, L.E., Aronson, J.A., and Cohen, J.D. (2006). Between-task competition and cognitive control in task switching. *J Neurosci* 26, 1429-1438.
5. Aron, A.R., Monsell, S., Sahakian, B.J., and Robbins, T.W. (2004). A componential analysis of task-switching deficits associated with lesions of left and right frontal cortex. *Brain* 127, 1561-1573.
6. Salvucci, D. D., & Taatgen, N. A. (2008). Threaded cognition: An integrated theory of concurrent multitasking. *Psychological Review*, 115(1), 101-130.
7. Strayer, D. L., Drews, F. A., & Johnston, W. A. (2003). Cell phone-induced failures of visual attention during simulated driving. *Journal of Experimental Psychology: Applied*, 9(1), 23-32.
8. Pashler, H. (1994). Dual-task interference in simple tasks: Data and theory. *Psychological Bulletin*, 116, 220-244.

### **Inhibition**

1. MacLeod, C. M., Dodd, M. D., Sheard, E. D., Wilson, D. E., & Bibi, U. (2003). In opposition to inhibition. In H. Ross (Ed.), *The psychology of learning and motivation* (Vol. 43, pp. 163-214).
2. Milliken, B., & Tipper, S. P. (1998). Attention and inhibition. In H. Pashler (Ed.), *Attention*. (pp. 191-221). Hove, England: Psychology Press/Erlbaum (UK) Taylor & Francis.
3. Wegner, D. M. (1994). Ironic processes of mental control. *Psychological Review*, 101(1), 34-52.
4. Aron, A.R., Robbins, T.W., and Poldrack, R.A. (2004). Inhibition and the right inferior frontal cortex. *Trends Cogn Sci* 8, 170-17 [528]
5. Picton, T.W., Stuss, D.T., Alexander, M.P., Shallice, T., Binns, M.A., and Gillingham, S. (2007). Effects of focal frontal lesions on response inhibition. *Cereb Cortex* 17, 826-838.

Suggested Journals:

Behavioral and Brain Sciences

Cognition

Cognitive Psychology

JEP:General

JEP:HPP

JEP:LMC

Journal of Cognitive Neuroscience

Memory and Cognition

Nature Neuroscience

Psychological Research

Psychological Science

Trends in Cognitive Science

Suggested background reading:

- Working Memory, Thought, and Action – Alan Baddeley
- Chapter 13, “Cognitive Control” in Cognitive Neuroscience: The Biology of the Mind. – Gazzaniga, Ivry, & Mangun