

COMPREHENSIVE EXAM READING LIST: ATTENTION

Current Committee Members

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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.

- *Attention, Perception, & Psychophysics*
- *Journal of Experimental Psychology: Human Perception and Performance*
- *Journal of Experimental Psychology: Learning, Memory, and Cognition*
- *Visual Cognition*
- *Journal of Cognitive Neuroscience*
- *Journal of Neuroscience*
- *Psychonomic Bulletin & Review*

References

Below are two reference books that we have found useful to have on hand when working through topics in the list below.

- Pashler, H. E. (1998). *The psychology of attention*. Cambridge, MA, US: The MIT Press.
- Nobre, K. & Kastner, S. (2014). *The Oxford handbook of attention*. Oxford, UK: Oxford University Press.

Selective Attention and the Fate of the Ignored

1. Wood, & Cowan (1995). The cocktail party phenomenon revisited: How frequent are attention shifts to one's name in an irrelevant auditory channel? *Journal of Experimental Psychology: Learning Memory and Cognition*, 21, 255-260.
2. Lachter, J., Forster, K. I., & Ruthruff, E. (2004). Forty-five years after broadbent (1958): Still no identification without attention. *Psychological review*, 111(4), 880-913.
3. Shapiro, K. L., Raymond, J. E., & Arnell, K. M. (1997). The attentional blink. *Trends in cognitive sciences*, 1(8), 291-296.
4. Simons, D. J. (2000). Attentional capture and inattention blindness. *Trends in cognitive sciences*, 4(4), 147-155.
5. Treisman A. (2006). How the deployment of attention determines what we see. *Visual Cognition*, 14, 411-443.
6. Lavie, N. (2005). Distracted and confused?: Selective attention under load. *Trends in Cognitive Sciences*, 9, 75-82.

Search & Guidance

7. Treisman, A. & Gelade, G. (1980). A feature-integration theory of attention. *Cognitive Psychology*, 12, 97 – 136.
8. Wolfe, J.M. (2018). Visual Search. In Steven's Handbook of Experimental Psychology and Cognitive Neuroscience, Fourth Edition. John Wiley & Sons, Inc., Hoboken, NJ, USA
9. Chun, M. M., & Wolfe, J. M. (1996). Just say no: How are visual searches terminated when there is no target present?. *Cognitive psychology*, 30(1), 39-78.
10. Wolfe, J. M., Horowitz, T. S., & Kenner, N. M. (2005). Cognitive psychology: rare items often missed in visual searches. *Nature*, 435(7041), 439.

11. Williams, L.G. (1966). The effect of target specification on objects fixated during visual search. *Perception & Psychophysics*, 1, 315-318.
12. Yarbus, A. L. (1967). *Eye movements and vision* (B. Haigh, trans.). New York, NY: Plenum Press. Chapter 6.
13. Soto, D., Hodsoll, J., Rotshtein, P., & Humphreys, G. W. (2008). Automatic guidance of attention from working memory. *Trends in Cognitive Sciences*, 12(9), 342-348.
14. Folk, C.L., Remington, R.W., & Johnston, J. C. (1992). Involuntary covert orienting is contingent on attentional control settings. *Journal of Experimental Psychology: Human Perception and Performance*, 18, 1030-44.
15. Moher, J., Lakshmanan, B. M., Egeth, H. E., & Ewen, J. B. (2014). Inhibition drives early feature-based attention. *Psychological science*, 25(2), 315-324.
16. Cunningham, C. A., & Egeth, H. E. (2016). Taming the white bear: Initial costs and eventual benefits of distractor inhibition. *Psychological science*, 27(4), 476-485.
17. Gaspelin, N., & Luck, S. J. (2018). The role of inhibition in avoiding distraction by salient stimuli. *Trends in cognitive sciences*, 22(1), 79-92.

Learning & Motivation

18. Awh, E., Belopolsky, A. V., & Theeuwes, J. (2012). Top-down versus bottom-up attentional control: A failed theoretical dichotomy. *Trends in cognitive sciences*, 16(8), 437-443.
19. Anderson, B. A. (2016). The attention habit: How reward learning shapes attentional selection. *Annals of the new York Academy of Sciences*, 1369(1), 24-39.
20. Anderson, B. A., & Kim, H. (2019). On the relationship between value-driven and stimulus-driven attentional capture. *Attention, Perception, & Psychophysics*, 81(3), 607-613.
21. Henderson, J. M., & Hayes, T. R. (2017). Meaning-based guidance of attention in scenes as revealed by meaning maps. *Nature Human Behaviour*, 1(10), 743.
22. Pessoa, L. (2016). Cognitive Control and Emotional Processing. In *The Wiley Handbook of Cognitive Control*, T. Egner (Ed.). doi:10.1002/9781118920497.ch22.
23. Yiend, J. (2010). The effects of emotion on attention: A review of attentional processing of emotional information. *Cognition and Emotion*, 24(1), 3-47.
24. Phelps, E. A., Ling, S., & Carrasco, M. (2006). Emotion facilitates perception and potentiates the perceptual benefits of attention. *Psychological science*, 17(4), 292-299.

The size, shape, and capacity of attentional focus

25. Fernandez-Duque, D., & Johnson, M. L. (1999). Attention metaphors: How metaphors guide the cognitive psychology of attention. *Cognitive Science*, 23(1), 83-116.
26. Olivers CNL, Peters J, Houtkamp R, Roelfsema PR (2011) Different states in visual working memory: When it guides attention and when it does not. *Trends Cogn Sci* 15:327–33
27. Yeshurun, Y., & Carrasco, M. (1998). Attention improves or impairs visual performance by enhancing spatial resolution. *Nature*, 396, 72-75.
28. Cutzu, F., & Tsotsos, J.K. (2003) The selective tuning model of attention: Psychophysical evidence for a suppressive annulus around an attended item., *Vision Research* 43, 205–19.
29. Martinez-Trujillo JC, Treue S (2004) Feature-based attention increases the selectivity of population responses in primate visual cortex. *Curr Biol* 14:744–751.
30. Fang, M. W., Becker, M. W., & Liu, T. (2019). Attention to colors induces surround suppression at category boundaries. *Scientific reports*, 9(1), 1443..

Neural Models of Attention

31. Moran, J., & Desimone, R. (1985). Selective attention gates visual processing in the extrastriate cortex. *Science*, 229, 782-784.

32. Desimone, R., & Duncan, J. (1995). Neural mechanisms of selective visual attention. *Annual Review of Neuroscience*, 18, 193 – 222.
33. Corbetta, M., Shulman, G.L. (2002). Control of goal-directed and stimulus-driven attention in the brain. *Nature Review of Neuroscience*, 3(3), 201-15.
34. Noudoost, B., Chang, M. H., Steinmetz, N. A., & Moore, T. (2010). Top-down control of visual attention. *Current opinion in neurobiology*, 20(2), 183-190.
35. Pestilli, F., Carrasco, M., Heeger, D. J., & Gardner, J. L. (2011). Attentional enhancement via selection and pooling of early sensory responses in human visual cortex. *Neuron*, 72(5), 832-846.
36. Buschman, T. J., & Kastner, S. (2015). From behavior to neural dynamics: an integrated theory of attention. *Neuron*, 88(1), 127-144.
37. Landau, A. N., & Fries, P. (2012). Attention samples stimuli rhythmically. *Current biology*, 22(11), 1000-1004.

Dual Task Interference And Automaticity

38. Ruthruff, E., Pashler, H. E., & Klaassen, A. (2001). Processing bottlenecks in dual-task performance: Structural limitations or strategic postponement? *Psychonomic Bulletin & Review*, 8, 73-80.
39. Ruthruff, E., Van Selst, M., Johnston, J. C., & Remington, R. (2006). How does practice reduce dual-task interference: Integration, automatization, or just stage-shortening?. *Psychological research*, 70(2), 125-142.
40. Strayer, D. L., & Drews, F. A. (2007). Cell-phone-induced driver distraction. *Current Directions in Psychological Science*, 16(3), 128-131.
41. Green, S. C., & Bavelier, D. (2003). Action video game modifies visual selective attention. *Nature*, 423, 534 – 537.

Feature Based, Objects Based, Location Based, Time Based Systems

42. Posner, M. I. (1980). Orienting of attention. *Quarterly Journal of Experimental Psychology*, 32, 3-25.
43. Jones, M. R., & Boltz, M. (1989). Dynamic attending and responses to time. *Psychological Review*, 96, 459-491.
44. Large, E. W., & Jones, M. R. (1999). The dynamics of attending: How people track time-varying events. *Psychological Review*, 106, 119-159.
45. Jones, M. R., Moynihan, H., MacKenzie, N., & Puente, J. (2002). Temporal Aspects of Stimulus-Driven Attending in Dynamic Arrays. *Psychological Science*, 13, 1313-1319.
46. Scolar, M., Ester, E. F., & Serences, J.T. (2014) Feature-and Object-Based Attentional Modulation in the Human Visual System, in: *Oxford Handbook of Attention*, Oxford University Press, Oxford, UK.
47. Scholl, B. J. (2001). Objects and attention: The state of the art. *Cognition Special Issue: Objects and Attention*, 80(1-2), 1-46.