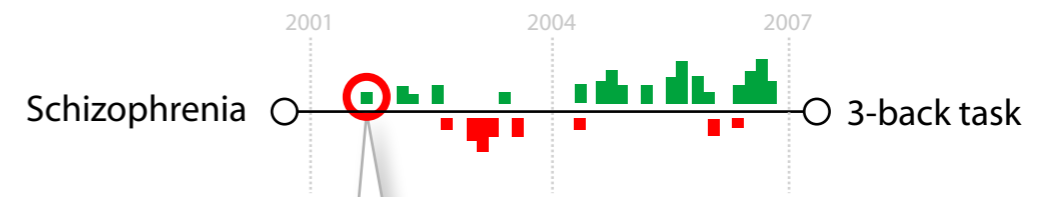


Evidence linking Schizophrenia to the 3-back task



[Edit this page](#) [Discuss](#) [History](#)

Evidence supporting: Schizophrenia correlated with 3-back task

28 of 30 people found this convincing

Perlstein et al., 2001. *Relation of Prefrontal Cortex Dysfunction to Working Memory and Symptoms in Schizophrenia*. *Am J Psychiatry* 158: 1105-13.

These results are consistent with the hypotheses that working memory dysfunction in patients with schizophrenia is caused by a disturbance of the dorsolateral prefrontal cortex and that this disturbance is selectively associated with cognitive disorganization. Further, the pattern of behavioral performance suggests that dorsolateral prefrontal cortex dysfunction does not reflect a deficit in the maintenance of stimulus representations per se but points to deficits in more associative components of working memory.

This evidence is also linked to:

- [Prefrontal cortex](#)
- [Dorsolateral prefrontal cortex](#)
- [Working memory](#)
- [fMRI](#)
- [n-back task](#)
- [1-back task](#)

[Edit this page](#) [Discuss](#) [History](#)

Phonological Buffer

...auditory verbal information is assumed to enter automatically into the phonological buffer. Visually presented language can be transformed into phonological code by silent articulation and thereby be encoded into the phonological buffer. The phonological buffer acts as an 'inner ear', remembering speech sounds in their temporal order, whilst the articulatory process acts as an 'inner voice' and repeats the series of words (or other speech elements) on a loop to prevent them from decay.

Evidence For

14 of 15 people found this convincing

Baddeley, A.D., & Hitch, G. (1974). Working memory. In G.H. Bower (Ed.), *The psychology of learning and motivation*. New York: Academic Press.

[Discuss \(14 comments\)](#)

Evidence Against

4 of 6 people found this convincing

Jones, D. M., Macken, W. J., & Nicholls, A. P. (2004). The phonological store of working memory: is it phonological and is it a store? *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 30, 656-674

[Discuss \(7 comments\)](#)