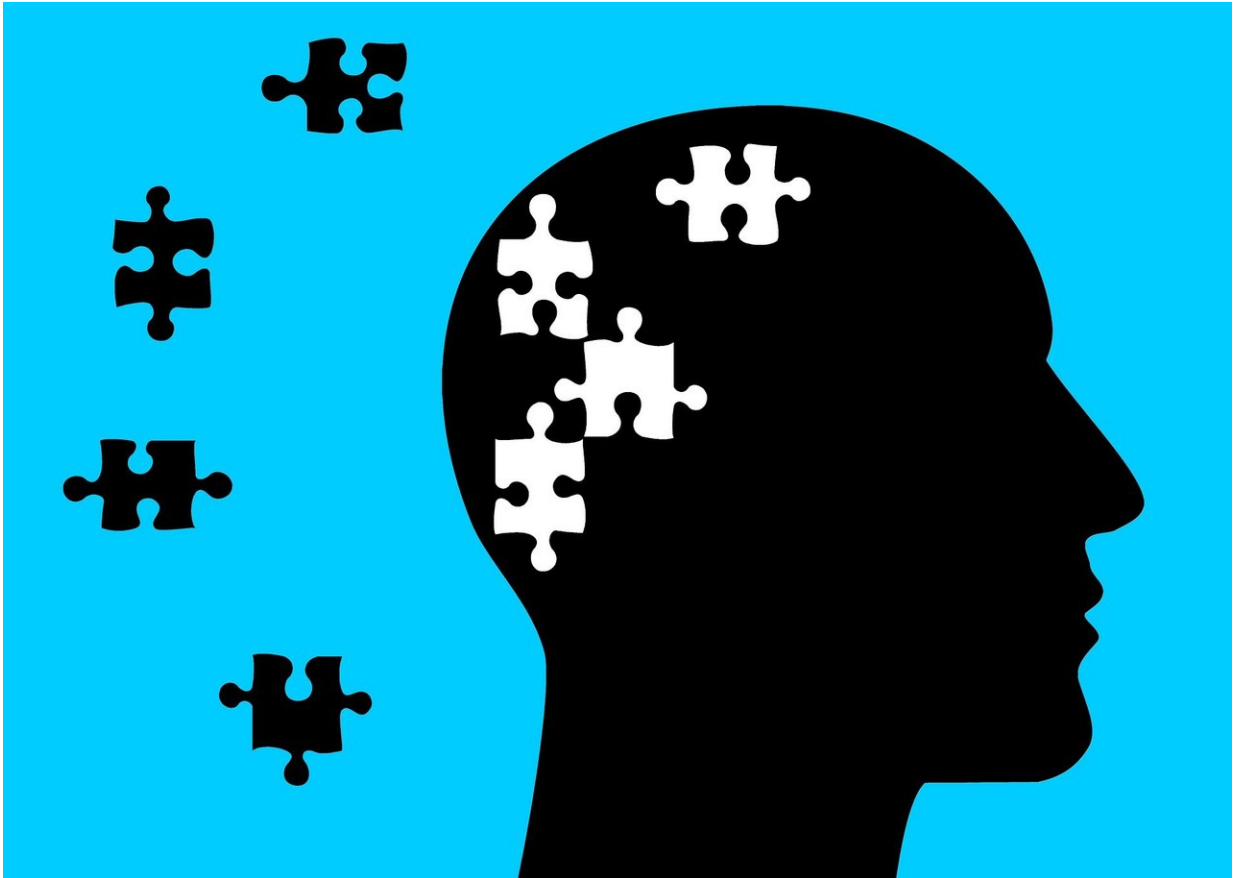


Working memory in psychotic disorders

July 15 2019, by Kelsey Herbers



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Working memory—the ability to temporarily store information for decision making and guiding behavior—is impaired in psychotic disorders.

It is generally assumed that impaired working memory is caused by dysfunction in the prefrontal cortex. However, little is known about how subprocesses involved in working memory, such as encoding and memory maintenance, and the neural systems supporting these subprocesses are affected in psychosis.

To address these questions, Anna Huang, Ph.D., and colleagues used functional MRI to determine whether individuals with schizophrenia and bipolar disorder exhibit similar abnormalities in [brain function](#) during encoding, maintenance and response subprocesses of working memory.

Reported in *Neuropsychopharmacology*, the results indicate encoding and maintenance-related impairments in both schizophrenia and psychotic bipolar disorder in the [posterior parietal cortex](#) (PPC) and frontal eye fields, which were associated with working memory performance and general neuropsychological functioning.

The findings suggest interventions targeting activation in the PPC may improve working memory and general cognitive abilities in [psychotic disorders](#).

More information: Anna S. Huang et al. Brain function during stages of working memory in schizophrenia and psychotic bipolar disorder, *Neuropsychopharmacology* (2019). [DOI: 10.1038/s41386-019-0434-4](https://doi.org/10.1038/s41386-019-0434-4)

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