



NeuRA

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SCHIZOPHRENIA Factsheet

March 2019

What is the occipital lobe?

The occipital lobe is located at the posterior section of the brain and primarily comprises the brain's visual cortices. There are two streams of visual information through the visual primary and association cortices, which deal separately with broad object details and motion, and fine detail and colours.

What is the evidence for changes in the occipital lobe?

Structural changes

Moderate quality evidence suggests reduced white matter integrity in the occipital cortex and fusiform gyrus in people with schizophrenia compared to controls. Moderate to low quality evidence suggest a higher frequency of abnormal (reversed) asymmetry in the occipital lobe in people with schizophrenia.

Functional changes

Moderate quality evidence suggests reduced activity in the middle occipital gyrus during executive functioning tasks in people with schizophrenia. There is reduced functional activity in the right lingual gyrus during episodic memory encoding, and reduced activation of the right cuneus and fusiform gyrus during episodic memory retrieval. There is decreased activation during emotion processing tasks in the fusiform, lentiform and middle occipital gyri of people with schizophrenia. During explicit emotion tasks, there is decreased activation in the fusiform gyrus, and during implicit emotion tasks, there is decreased activation in the middle occipital gyris.



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NeuRA (Neuroscience Research Australia) is one of the largest independent medical and clinical research institutes in Australia and an international leader in neurological research.

Diseases of the brain and nervous system pose the greatest health, economic and social burden of any disease group because they are chronic, debilitating and have no known cures.

Medical research is the cornerstone of efforts to advance the health and wellbeing of families and the community. Our dedicated scientists are focussed on transforming their research into significant and practical enefits for all patients.

While we hope you find this information useful, it is always important to discuss any questions about schizophrenia or its treatment with your doctor or other health care provider.

For more information see the technical table

HOW YOUR SUPPORT HELPS

We are able to make significant advances due to the generosity of countless people. Your donation allows us to continue to work towards transforming lives. For information on how you can support our research, phone **1300 888 019** or make a secure donation at neura.edu.au/donate/schizophrenia.