

The brain all you
areis here



The Broca's and Wernicke's areas are situated on the left frontal lobe of the brain, and are associated with language. In case Broca's area is damaged, a person can lose his language abilities, whereas damage to Wernicke's area causes a person to lose his language comprehension and ability to make verbal sense. OIS and fMRI record cognitive activity in the brain by observing the increases in blood flow as a gauge to indirectly measure the cognitive activity.

The various systems of a person's brains are connected through synapses formed during the second and third trimesters of the fetus' development when the separate neurons form connections inter se.

Though the sense of " self" can be said to reside in the prefrontal cortex, however, it would be wrong to assume that it is isolated there. The hippocampus stores our long-term memories, and emotions are believed to be stored in the amygdala. The prefrontal cortex controls our judgments and helps moderate our behavior and rein in our impulses. It is also the region associated with future planning.

As our judgment power has not reached maturity throughout puberty and in our early adulthood, we do not know how to control our impulses, therefore, our decision making is quite faulty, based on bad judgment.

Talent and creativity also depend on our brain's activity. The frontal lobe gives us the ability or talent, the temporal lobes and limbic system give us determination and incentive to express it. If the latter part of our brain is impaired, the former is bound to be affected adversely. Temporal lobe epilepsy is associated with symptoms of manic depression and mania.

A study done on Buddhist monks showed that meditation can help alter our brain activity by causing more activity to occur in the left prefrontal cortex.

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The study also showed that meditating subjects showed a better immune response to flu shots than others.

The brain continues to adapt and change throughout our adulthood. The brain has been shown to adapt to injury, molding itself to compensate for the damaged area of the brain. The hippocampus and grey matter have been also been found to grow and increase in size in response to our activities.

Basic emotions can be recognized by the brain regardless of cultural differences, as was shown by a study done by Paul Ekman (in Shreeve 2005).

The amygdala in our brain receives the sensory responses from environments that trigger fear responses and reaction to dangers, which, in turn, processes the stimuli, setting the less urgent information aside.

Sometimes the basic emotional responses are based on our “nurture”, these can be unlearned; however, responses like turning our heads suddenly when we feel something moving on our side, are responses that cannot be unlearned.

Certain unused sensory pathways exist in areas of our brain; however, they only come into action when we lose any of our sensory functions like our sight.

Autism and Asperger’s syndrome, though they may be genetic, are associated with a fast brain growth, whereby the production of cells that transmit nerve impulses in the brain are increased. Moreover, certain areas of the brains of people afflicted with these conditions are less active than those of others. However, as of now, no single or sure cause is known for them. People suffering from these conditions may have trouble speaking; however, the conditions do not affect their ability to think.

Degenerative brain disorders like Alzheimer’s and Parkinson’s could be

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treated with the help of regenerating nerves in the brain.

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