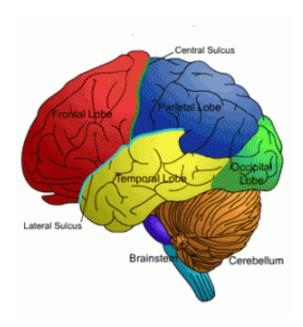


Brain is not fully mature until 30s and 40s

December 22 2010, by Lin Edwards



Brain diagram. Credit: dwp.gov.uk

(PhysOrg.com) -- New research from the UK shows the brain continues to develop after childhood and puberty, and is not fully developed until people are well into their 30s and 40s. The findings contradict current theories that the brain matures much earlier.

Professor Sarah-Jayne Blakemore, a neuroscientist with the Institute of Cognitive Neuroscience at University College London, said until around a decade ago many scientists had "pretty much assumed that the human brain stopped developing in early childhood," but recent research has found that many regions of the brain continue to develop for a long time



afterwards.

The prefrontal cortex is the region at the front of the brain just behind the forehead, and is an area of the brain that undergoes the longest period of development. It is an important area of the brain for high cognitive functions such as planning and decision-making, and it is also a key area for social behavior, social awareness, for empathy and understanding and interacting with other people, and various personality traits. Prof. Blakemore said the prefrontal cortex "is the part of the brain that makes us human," since there is such a strong link between this area of the brain and a person's personality.

Prof. Blakemore said <u>brain</u> scans show the <u>prefrontal cortex</u> continues to change shape as people reach their 30s and up to their late 40s. She said the region begins to change in early childhood and then is reorganized in late adolescence but continues to change after that.

The research could explain why adults sometimes act like teenagers, sulking or having tantrums if they do not get their own way, and why some people remain socially uncomfortable until they are well out of their teens.

In earlier research Professor Blakemore studied the brains of teenagers in detail, as reported in PhysOrg.

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