

The brain all you
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The different readings assigned revealed significant findings about the functions of the brain, potential of the brain to develop as people gain experience, injuries and their effect on certain parts of the brain, as well the " self" within the brain. The article titled " corina's brain" is about a sensitive brain tumor operation that points out the location of Broca's and Wernicke's on the frontal part of the brain. Damage on the left temporal lobe has effect on the brain's language process which was established on the case of a patient of Broca whose brain has liquefied due to a massive stroke. Through the use of fMRI, which is a non-invasive scan as compared to the X-ray, brain tumors are detected. It can also detect brain activities such as blood flow which is helpful recognizing brain activity according to the article. The article also suggests that the prefrontal cortex contains the sense of " self" in the young child. But as people mature, this " self" maybe located in different regions of the brain especially when higher order thinking skills are involved. Synapses also play a crucial role in brain development since they are points of contact during the exchanges of neurons firing to one another. These synapses grow or develop inside the brain of a fetus.

Long-term memories are believed to be stored in the hippocampus (part of limbic system) which is not yet fully developed on a child. Likewise, the amygdala can also hold " highly emotional memories" (The Mind, p. 12). Interestingly a research made by the NIMH in Maryland reveals that is during puberty period that the brain experiences another round of growth. The basic functions as well as sensory processing usually develops first in the extreme back and front portions of the brain. Next to develop in the parietal lobes of the brain are language functions and spatial orientation. This is also the reason why curriculum in the educational system is attuned to the level

of development of the brain. Students in lower levels cannot process higher thinking activities unless their brain is developed. Last to develop is the prefrontal cortex where most decision making are processed. This meant weighing alternatives , making short term plans or even checking one's self on ethical conduct is involved. Indeed, such complex mental functions can only be given to mature individuals. This just attests to the fact that people's brain gradually develop and mature through adulthood. Aside from experiencing development, certain regions or parts of the brain also shows increase in size when that portion is in use. The somatosensory cortex of blind people usually attests to this growth (Mind, p. 13). A more interesting concept presented by the articles is the fact that the brain can reorganize itself through adulthood as presented by the case of pre-senile individuals whose memories were rejuvenated. However, certain parts like the Brocas' area when physiologically injured cannot retain its normal functions anymore. The left frontal lobe which also contains personality can suffer from damage caused by a stroke thereby altering an individual's personality. Another collection of articles such as " In Your Face", " Blink of An Eye", and " Autistic genius" suggests many interesting findings about the brain's capacity to unlearn emotional responses, universality of basic emotions, and other brain disorders. One article asserts that certain parts of the brain such as hippocampus can grow as brought about by stimulation and learning as in the case of the taxi driver. Even the proposition that brain cells can grow was presented in such articles which can lead to possible cure of certain diseases such as Alzheimer's and other degenerative disorders. When it comes to recognizing basic emotional responses, the InYour Face article argues that Darwin was right after all in his survey of human emotions in different

cultures. There are universal emotional facial responses that can be identified regardless of culture. Also, nurture seems to play more role in instilling fear as in the case of lab-grown monkeys who were unafraid of snakes.

The article “ Extreme Depression ” presents an unusual manic disorder (experienced by a neurologist) known as hypergraphia which was exacerbated by traumatic personal loss. It was also emphasized in this article the significance of the temporal lobes and limbic system in driving motivation in a person. Similarly, the article “ Austistic Genius” points out the possible regions of the brain that when underdeveloped can lead to autism or Asperger’s syndrome aside from heredity. Lastly, the article” Spiritual State” presents the connection between meditation and happiness. The study presented in the article also concludes that having a happy state of mind can create a healthier immune system(p. 31) Indeed, the brain is amazing and as time goes by, scientists learn that is at pace with the changing demands of modern life.

References:

Shreeve, J. Beyond the Brain .(2005)National Geographic. com , March 2005.

Retrieved from National Geographic. com., March 12, 2010