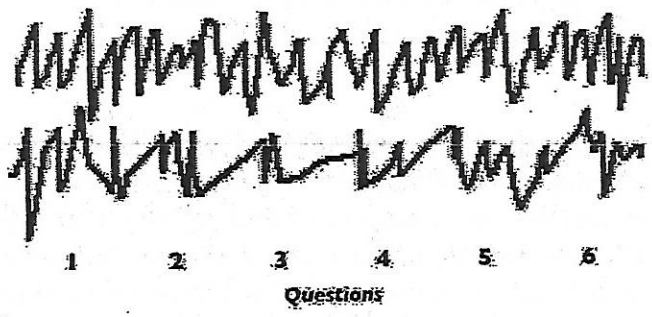
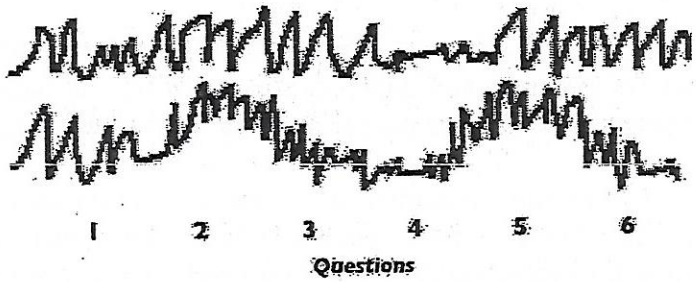
so that the legal system can decide whether pathological liars should be held responsible for their behavior. This could help determine how to deal with pathological liars who provide false testimony while under oath in criminal court cases.

Below = An example polygraph reading from a truthful individual.



Below = An example polygraph reading from a deceptive individual.



Children are not good at lying, however this changes at about the age of 10 at which time a rapid growth of white matter in the cerebrum occurs – after this point they can become proficient at lying.

- Swaminathan, Nikhil. *Pathological Liars' Brains Physically Different.* (www.seedmagazine.com), September 30, 2005.

Pathological Lying

"The pathological liar may become a prisoner of his lies and the desired personality of the pathological liar may overwhelm the actual one."

- Dr. Charles Dike: Forensic Psychiatrist & Clinical Instructor of Psychiatry at Yale University School of Medicine

The only type of person that could lie repeatedly and not exhibit a sympathetic nervous system reaction related to deception would be the pathological liar. It would be difficult to obtain any conclusive results from a pathological liar during a polygraph examination. The pathological liar tells repeated lies over a number of years for no clear reason. Often when a pathological liar tells the same lie repeatedly, he/she begin to believe that it is in fact true; when this occurs they will likely be able to pass a polygraph exam because they think they are telling the truth. The lies from a pathological liar are unplanned, impulsive and often woven into complex stories. Pathological liars may admit that what they have said is false when confronted but then will often proceed to change their stories.

It has still not understood whether pathological liars have control over their lies. Currently the medical community consider pathological lying to be a symptom of a pre-existing psychiatric disorder and not a distinct mental disorder. However, new scientific evidence has emerged that may change this assumption.

A study out of the *University of Southern California* (USC) has shown that the brains of some pathological liars are different and therefore this suggests that pathological lying could be an unconscious behavior in some people, making it a distinct mental disorder.

In the *British Journal of Psychiatry* (October 2005) the USC researchers reported that they found pathological liars had 14% fewer neuron cells in their brains and greater than 20% more white matter in the prefrontal cortex of their cerebrums as compared to normal people. The prefrontal cortex is the top layer of the cerebrum which controls cognitive functions such as critical thinking and learning, while white matter contains cells that connect brain cells to one another. Conclusions from this study were established using the results from a series of psychological tests, interviews and magnetic resonance images (MRI) of 49 subjects. It is believed the excess of white matter may is associated to a pathological liar's pattern of deceit.

Dr. Charles Dike, a forensic psychiatrist and clinical instructor in psychiatry at *Yale University School of Medicine*, has said that a better understanding of this field of study is necessary

Pathological Lying: Related Questions

Name: _____ Date: _____

Match each of the following terms with the appropriate definition.
(1 mark each = 10 marks total)

A. Change
B. Complex
C. Impulsive
D. Neuron cells
E. White matter
F. Legal system
G. Pathological liar
H. Sympathetic nervous
I. Polygraph examination
K. Distinct mental disorder

1. _____ The lies told by a pathological liar are _____.

2. _____ A pathological liar often weaves his lies into these types of stories.

3. _____ This system tends not to react when a pathological lair is being dishonest.

4. _____ When confronted, pathological liars may often to do this to their stories.

5. _____ Currently the medical community does not consider pathological lying to fall within this category.

6. _____ A person that lies repeatedly and does not exhibit the symptoms related to deception.

7. _____ It would be difficult to obtain conclusive results from a pathological liar who participates in this type of test.

8. _____ USC researchers reported that they found pathological liars had 14% fewer of these in their brains.

9. _____ USC researchers found pathological liars had 20% more of this substance in the prefrontal cortex of their cerebrums when compared to normal people.

10. _____ A better understanding of pathological lying would help this public institution in deciding whether pathological liars should be held responsible for their actions.