

BBC

News Sport Weather World Service Languages

Search

Low Graphics version | Change edition

Contact us | Help

BBC NEWS WORLD EDITION

LATEST NEWS IN VIDEO AND AUDIO

News Front Page



Africa

Americas

Asia-Pacific

Europe

Middle East

South Asia

UK

Business

Health

Medical notes

Science/Nature

Technology

Entertainment

Have Your Say

In Pictures

Week at a Glance

Country Profiles

In Depth

Programmes

BBC SPORT

BBC WEATHER

BBC ON THIS DAY

Last Updated: Friday, 9 January, 2004, 02:07 GMT

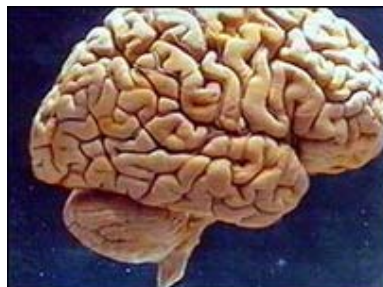
E-mail this to a friend

Printable version

Brain 'can be trained to forget'

It is possible to persuade the brain to consciously suppress unwanted memories, say experts.

Research from US universities used brain scans to show that people can use willpower to "block" thoughts in the same way they stop unwanted actions.



The brain can suppress memories, say researchers

There has been controversy for years over whether a mechanism exists to hide away unpleasant memories.

Experts say it could help psychiatrists aid people scarred by traumatic experiences.

Some experts previously held the view that there was no mechanism in the brain capable of helping someone suppress an unwanted memory.

This was supported by what seemed an intuitive fact about humans - that the more you try to forget something, the more often it comes back to haunt you.

Clean slate

Now, however, the US research teams from Stanford and Oregon universities seem to have demonstrated that, given the right circumstances, an individual can wipe a memory out - or at least suppress it deeply.

It backs the original thesis from Sigmund Freud suggesting the existence of "voluntary memory suppression".

In the study, MRI scans were used to measure activity in different areas of the brain.

Scientists already broadly know what functions are represented by activity in various different areas, so by testing activity, they can work out what is going on in the minds of their volunteers.

“ Survivors of natural disasters, crime, acts of terror such as 9/11, the loss of someone close all undergo a process that may continue for a very long time

”

Professor Michael Anderson,
University of Oregon

A word test was given to the volunteers, involving pairs of words such as ordeal-roach, steam-train and jaw-gum.

SEE ALSO:

[Post-traumatic stress disorder](#)

20 Dec 00 | Medical notes

[TB drug may help to cure phobias](#)

01 Dec 03 | Health

RELATED INTERNET LINKS:

[Science](#)

The BBC is not responsible for the content of external internet sites

TOP HEALTH STORIES NOW

[EU plans fight against flu threat](#)

[Drug halves breast cancer returns](#)

[Female twins risk early menopause](#)

[Pollution 'cuts boy baby numbers'](#)

[RSS](#) | [What is RSS?](#)

The participants were ordered to learn the word pairs, then given the first word and either asked to remember its other half or suppress it.

Word test

Remarkably, when a formal test on the dozens of word pairs was later given, the researchers found that their volunteers had more trouble remembering those they had been asked to suppress than the others.

While this suppressing process was going on, the brain scans revealed that the activity in the brain was similar to that spotted when a person sets out to complete a physical manoeuvre, but pulls back at the last minute because of a perceived danger.

Professor Michael Anderson, one of the researchers, explained that mechanism by describing an incident where he knocked a pot plant off his windowsill.

"As I saw the plant falling off the sill out of the corner of my eye, I reflexively went to catch it - but at the very last second, I stopped myself, midstream, when I realised the plant was a cactus."

He said that understanding how the brain in normal circumstances could be trained to "forget" might enable doctors to help those plagued by traumatic memories.

"Survivors of natural disasters, crime, acts of terror such as 9/11, the loss of someone close all undergo a process that may continue for a very long time.

"My goal is to expand on this model so we can better understand these important experiences."

 [E-mail this to a friend](#)

 [Printable version](#)

LINKS TO MORE HEALTH STORIES

Select



[News Alerts](#) | [E-mail services](#) | [Mobiles/PDAs](#)

[Back to top](#)

[Help](#) | [Privacy and Cookies Policy](#) | [News sources](#) | [About the BBC](#) | [Contact us](#)

[News Front Page](#) | [Africa](#) | [Americas](#) | [Asia-Pacific](#) | [Europe](#) | [Middle East](#) | [South Asia](#)
[UK](#) | [Business](#) | [Entertainment](#) | [Science/Nature](#) | [Technology](#) | [Health](#)
[Have Your Say](#) | [In Pictures](#) | [Week at a Glance](#) | [Country Profiles](#) | [In Depth](#) | [Programmes](#)