

Brains Lose Plot Under Hypnosis

A study into how people can be made to forget offers hope for the treatment of memory loss.

By RUTH HILL - The Dominion Post | Saturday, 02 February 2008

Hypnotism is not all in the mind - it creates real, measurable, changes in the brain, research has found.

New Zealand clinicians said an Israeli study, in which people were hypnotised to forget, might point the way to new treatments for memory loss.

Auckland Hospital neurologist Barry Snow said identifying the parts of the brain involved in repressing memories would be a big step forward.

"Usually memories are not lost - they are just misplaced," he said. "If you can find the mechanism involved in memory suppression, perhaps you can find a way around the side to retrieve those memories."

Volunteers were divided into two groups - those who were susceptible to hypnotic suggestions and those who were not - and shown a documentary depicting a day in the life of a young woman.

A week later, they were hypnotised and told to forget the movie, but at the same time given a "reversibility cue" to restore the memory by asking them a question about the film.

MRI scans of their brains under hypnosis showed reduced activity in some brain regions during memory suppression, and increased activity in others.

When their recall was tested later, the suppressed regions were reactivated when the cue was given to bring back the memory.

The two groups showed different levels of activity, and those who were susceptible to hypnosis had forgotten more of the movie than the others.

Writing in the journal *Neuron*, lead researcher Professor Yadin Dudai, from the Weizmann Institute of Science, said the study gave insights into how the brain stored memory.

It was also proof that hypnotism worked - at least under the conditions scientists had used.

Some forms of clinical amnesia may result from a similar abort mechanism used in hypnosis.

Future research could show how the mind repressed distressing or traumatic memories.

Dr Snow said identifying the parts of the brain involved in memory suppression could lead to better treatments for people with amnesia.

Wellington GP and medical hypnotist Patrick McCarthy said the study confirmed what clinicians had long known - that hypnotism had real, measurable, effects.

"This is very exciting stuff and an example of how new technology is giving us access to what's happening with hypnosis."

Hypnotism was more commonly used to treat anxiety, insomnia and addictions than memory problems, he said.