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Subliminal study shows subconscious learning is possible

10:48 25 October 2001 by [Alison Motluk](#)

Subconscious learning probably is possible, say US researchers. What's more, subconscious learning may affect our conscious decisions - without our realising it.

Takeo Watanabe and his colleagues at Boston University found that people who had watched a particular direction of subliminal dot movement during a letter-naming trial were significantly better at picking it out later.

The finding challenges the idea that attention is an essential element of the learning process. "Attention can make learning more efficient," says Watanabe, "but it's not necessary."

Watanabe dismisses gimmicks such as cassettes that purport to teach you while you sleep. But he speculates that listening to a foreign language being spoken at low volume - loud enough that your brain can perceive it but not so loud that you are aware - could improve a person's pronunciation and listening skills. "It could be useful," he says.

Cognitive aspects such as sentence structure and semantics would not be affected, he suspects.

Dancing dots

Watanabe's team asked volunteers to name certain letters presented on a screen. Meanwhile, behind the letters, dots danced randomly - or so it appeared. In fact, one in 20 shared a direction. This was just below the threshold of conscious perception.

The volunteers did this letter-naming task for an hour every day for a month. Then they were asked to do another series of tests. These involved watching moving dots and identifying any underlying pattern, or saying whether two displays of dots moved in the same direction. In both of these cases only about one in 10 dots were moving coherently - an activity that was just above the conscious threshold.

The team found that people who had watched a particular direction of movement during the first series of tests were significantly better at picking it out later.

Advertising influence

"I think it's one of the nicest sets of data I've seen for learning outside of perceptual awareness," says Phil Merikle, at the University of Waterloo in Canada.

But there's an important conclusion that the authors don't stress, he says. The study shows that what the volunteers learned subconsciously during the trials influences their conscious experience.

"This perceptual learning is influencing how they see the world," says Merikle. Subconscious learning may affect our conscious decisions - without our knowing it. "It's what advertisers have known all along: if we just keep the exposure rate up, people will be influenced."

Journal reference: *Nature* (vol 413, p 844)

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Subconscious Learning

Fri May 02 20:17:43 BST 2008 by **Corey Riebow**

Would you be able to possibly learn a form of martial arts by dreaming about it in a coma or just a simple sleep?

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Subconscious Learning

Fri May 09 19:11:09 BST 2008 by **Seamuspr**

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Subconscious Learning

Thu Jul 03 08:54:55 BST 2008 by **Raymond**

It depends,

there is a Hong Kong Movie which talks about the subconscious injection of martial arts into human brains and bodies by a machine.

However, personally I believe that by watching many martial movies you do learn abit martial arts subconsciously as well as consciously, right?

I wanna do some subconscious learing about social intelligence as well, but I believe that from daily life interacting with people we all learn bit by bit subconsciously.

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Subconscious Learning

Tue Sep 16 13:08:23 BST 2008 by **Russell N**

I have been doing an assignment for science and I am testing this theory and i have found very interesting results, even though I have only tested one friend but she has shown habbits of word replacement with out proper thought of it (Japanese words are being used on a CD played everynight for about a week)but the thing is she can verbally resight them when the word in English is said but she could not write them down with out the English words in front of her.

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