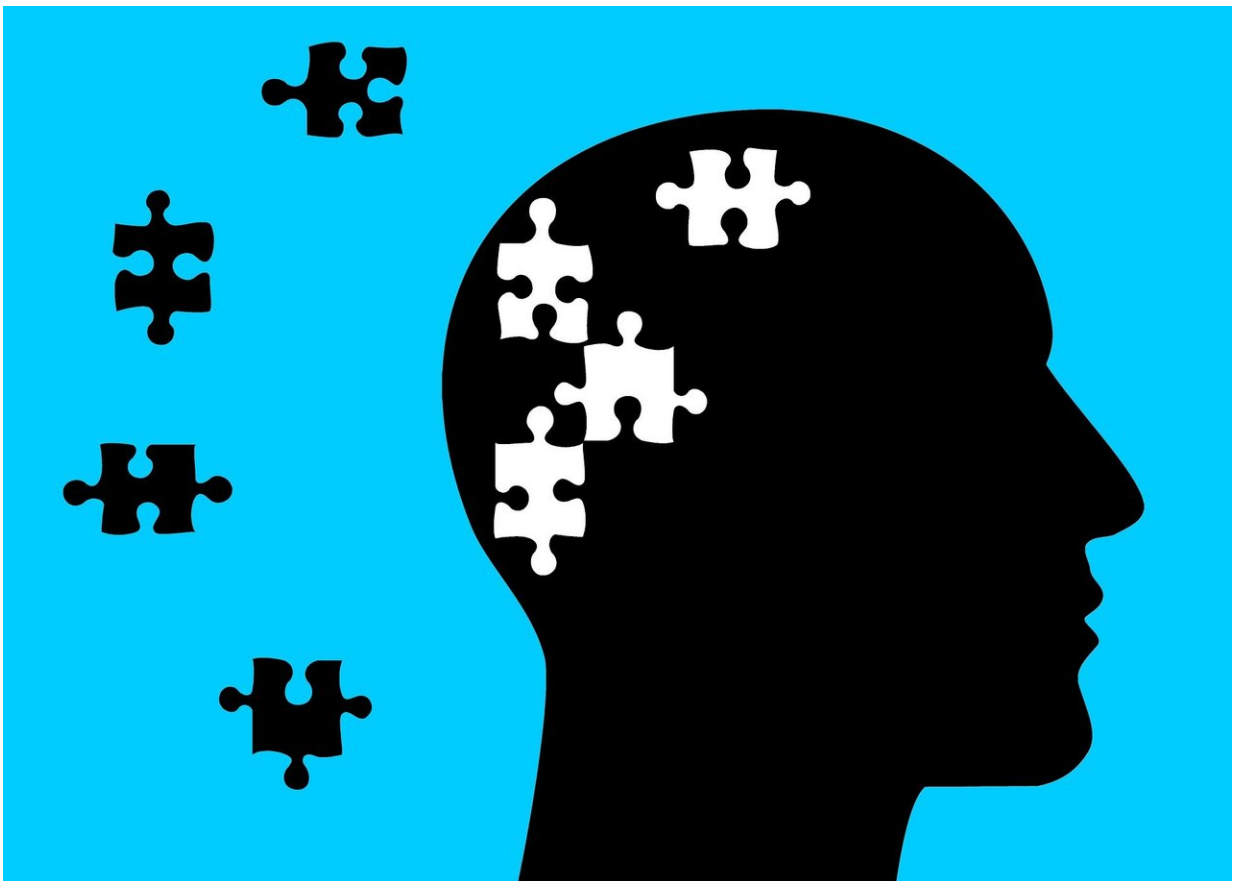


Human brain blocks retention of some memories even when actively trying to remember them

November 22 2021, by Bob Yirka



Credit: CC0 Public Domain

A team of researchers at Zhejiang University in China has found

evidence suggesting that the brain blocks retention of some memories even when a person actively attempts to remember them. In their paper published in the journal *Science Advances*, the group describes multiple experiments they conducted with different groups of volunteers.

Common sense suggests that human beings should be able to better remember things about given events when they focus on them while they are occurring as a means to help them remember them later on. In this new effort, the researchers have found evidence that suggests that might not always be the case, because the subconscious [brain](#) knows that the [information](#) (such as a temporary password for a banking system) will not be needed again.

The experiments involved asking volunteers to look at various objects and to focus on certain elements while ignoring others, focusing on their color for example, while ignoring their shape. They were then tested to see what they remembered. A similar experiment asked volunteers to focus on a given feature, such as a tilted line in multiple different shapes. Other tests showed volunteers similar objects and then asked them if they had changed in shape or color. The researchers ran all of their experiments on multiple groups of people of different sizes and ages.

They discovered that the volunteers were often distracted by things they were told to ignore and often forgot those things they were asked to focus on so that they would remember them later. The researchers suggest some of their findings indicate that the [unconscious mind](#) is involved in filtering some of the information that is presented to the brain because it knows that it will not be needed later. They believe that their findings could have practical applications, such as the way that people are treated for PTSD or how to better interpret information given by eyewitnesses to crimes.

More information: Yingtao Fu et al, More attention with less working

memory: The active inhibition of attended but outdated information, *Science Advances* (2021). [DOI: 10.1126/sciadv.abj4985](https://doi.org/10.1126/sciadv.abj4985)

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