

Alcohol boosts recall of earlier learning

July 24 2017



Credit: CC0 Public Domain

Drinking alcohol improves memory for information learned before the drinking episode began, new research suggests.

In the University of Exeter study, 88 social drinkers were given a word-learning task. Participants were then split in two groups at random and

told either to drink as much as they liked (the average was four units) or not to drink at all.

The next day, they all did the same task again – and those who had drunk [alcohol](#) remembered more of what they had learned.

The researchers are keen to stress that this limited positive [effect](#) should be considered alongside the well-established negative effects of excessive alcohol on [memory](#) and mental and [physical health](#).

"Our research not only showed that those who drank alcohol did better when repeating the word-learning task, but that this effect was stronger among those who drank more," said Professor Celia Morgan, of the University of Exeter.

"The causes of this effect are not fully understood, but the leading explanation is that alcohol blocks the learning of new information and therefore the brain has more resources available to lay down other recently learned information into [long-term memory](#).

"The theory is that the hippocampus – the brain area really important in memory – switches to 'consolidating' memories, transferring from short into longer-term memory."

The effect noted by the researchers has been shown under laboratory conditions before, but this is the first study to test it in a natural setting, with people drinking in their homes.

There was also a second task which involved looking at images on a screen.

This task was completed once after the drinkers had drunk alcohol and again the following day, and the results did not reveal significant

differences in memory performance post-drinking.

The study's participants were 31 males and 57 females, aged 18-53.

The paper, published in Nature journal *Scientific Reports*, is titled "Improved memory for information learnt before alcohol use in [social drinkers](#) tested in a naturalistic setting."

More information: Molly Carlyle et al. Improved memory for information learnt before alcohol use in social drinkers tested in a naturalistic setting, *Scientific Reports* (2017). [DOI: 10.1038/s41598-017-06305-w](#)

Provided by University of Exeter

Citation: Alcohol boosts recall of earlier learning (2017, July 24) retrieved 7 May 2024 from <https://medicalxpress.com/news/2017-07-alcohol-boosts-recall-earlier.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--