

Children with good memories are better liars, research shows

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Credit: Robert Kraft/public domain

Children who benefit from a good memory are much better at covering up lies, researchers from the University of Sheffield have discovered.

Experts found a link between [verbal memory](#) and covering up lies following a study which investigated the role of working memory in verbal deception amongst children.

The study saw six to seven year old children presented with the opportunity to do something they were instructed not to - peek at the final answers on the back of a card during a trivia game.

A hidden camera and correct answers to the question, which was based on the name of a fictitious cartoon character, enabled the researchers to identify who had peeked, despite denials.

Further questioning, including about the colour of the answer on the cards, allowed researchers to identify who was a good liar, by [lying](#) to both

entrapment questions; or a bad liar, by lying about one or none of the entrapment questions.

During the experiment, researchers from the Universities of Sheffield and North Florida then measured two elements: verbal and visuo-spatial working memory in the children.

Verbal working memory is the number of words a person can remember all at the same time. Visuo-spatial working memory is the number of images a person can remember all at the same time.

Results showed that the good liars performed better in the verbal working memory test in both processing and recall, compared to the bad liars.

The link between lying and verbal memory is thought to stem from the fact that covering lies involves keeping track of lots of verbal information. As a result, kids who possessed better memories and could keep track of lots of information were able to successfully make and maintain a cover story for their lie.

In contrast, there was no difference in visuo-spatial working scores between good and bad liars. The researchers suspect this is because lying usually doesn't involve keeping track of images, so visuo-spatial information is less important.

The results have been published today in the *Journal of Experimental Child Psychology* and are the first time it has been shown that verbal working memory in particular has strong links to lying, not just any working memory.

Dr Elena Hoicka, from the University of Sheffield's Department of Psychology, said: "While parents are usually not too proud when their kids lie, they can at least be pleased to discover that when their children are lying well, it means their children are becoming better at thinking and have good memory skills.

"We already know that adults lie in approximately a fifth of their social exchanges lasting 10 or more minutes, so it's interesting to know why some children are able to tell more porkies than others. We'll now be looking to move the research forward to discover more about how children first learn to lie."

Dr Tracy Alloway, project lead from the University of North Florida, said: "This research shows that thought processes, specifically verbal [working memory](#), are important to complex social interactions like lying because the [children](#) needed to juggle multiple pieces of information while keeping the researcher's perspective in mind."

More information: Parents with children between 0-4 years can participate in further research conducted by the University of Sheffield by signing up at: [www.shef.ac.uk/psychology/rese ... /developmental/index](http://www.shef.ac.uk/psychology/rese.../developmental/index)

Provided by University of Sheffield

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