

# Little white lies help the brain prepare for telling whopping fibs, study reveals

18:07, 24 OCT 2016 | UPDATED 18:07, 24 OCT 2016 | BY MIRROR.CO.UK

Our brain's moral 'policeman' is increasingly likely to look the other way the more we lie

f t G+ p SHARE COMMENTS

Enter your e-mail for our daily newsletter

Subscribe



Getty

Telling small lies means we find it easier to tell big ones, scientists discovered

Little white lies are the thin edge of a wedge leading to bigger whoppers as the brain gets used to fibbing, research has shown.

A moral "policeman" in the brain called the amygdala becomes increasingly likely to look the other way the more we lie, the study suggests.

Scientists believe the same principle might also explain how violence can escalate, leading to horrific crimes or a willingness to inflict torture.

Researchers conducted tests on 80 volunteers, working in pairs, who had to guess the number of pennies in a jar.

In a series of trials, participants were first told that aiming for accurate estimates would secure financial rewards for both them and their partners.

The experiment was conducted repeatedly under different reward scenarios, some of which benefited participants if they deliberately over-estimated the number of pennies.

When told that lying about the amount would benefit them but disadvantage their partners, volunteers initially exaggerated only slightly. This prompted a strong amygdala response, revealed in brain scans.

## Recommended In UK News

## Most Read In News



1 **ASDA**  
**Chaos at Asda stores across the country as tills and card machines break due to system error**

2 **UBER**  
**Drone captures hapless Uber driver racing rising sea tide at Holy Island with stranded Buddhist monk in back**

3 **PRINCE HARRY GIRLFRIEND**  
**Prince Harry 'secretly dating US actress Meghan Markle and the royal is besotted'**

4 **CRIME**  
**Innocent husband spent 24 years in prison after being wrongly convicted of murdering his wife**

READ MORE

► [Teen accused of faking crippling migraines is diagnosed with an incurable brain tumour](#)



Part of the brain called the amygdala decides how acceptable we find it to lie

But over several runs using the same scenario, the exaggerations became more and more pronounced while amygdala responses declined.

Larger drops in amygdala activity predicted bigger future lies, the study found.

Experimental psychologist Dr Tali Sharot, a member of the [University College London](#) (UCL) team, said: "When we lie for personal gain, our amygdala produces a negative feeling that limits the extent to which we are prepared to lie.

"However, this response fades as we continue to lie, and the more it falls the bigger our lies become. This may lead to a 'slippery slope' where small acts of dishonesty escalate into more significant lies."

Lead author Dr Neil Garrett, also from UCL, said it was likely that the findings reflected a blunted emotional response to lying.

He added: "This is in line with suggestions that our amygdala signals aversion to acts that we consider wrong or immoral. We only tested dishonesty in this experiment, but the same principle may also apply to escalations in other actions such as risk taking or violent behaviour."

The amygdala consists of two almond-shaped nerve bundles embedded deep in the brain which are linked to fear, anxiety and social phobias. They also play a role in controlling aggression.

Studies have shown that many psychopaths, who lack empathy and are often accomplished liars, have unusually small amygdalas.

The new research is reported in the journal *Nature Neuroscience*.

Dr Raliza Stoyanova, a member of the neuroscience and mental health team at the [Wellcome Trust](#) charity, which co-funded the research, said: "This is a very interesting first look at the brain's response to repeated and increasing acts of dishonesty.

"Future work would be needed to tease out more precisely whether these acts of dishonesty are indeed linked to a blunted emotional response, and whether escalations in other types of behaviour would have the same effect."

5 [When is Diwali 2016? Dates and information about the celebration of the Hindu festival of Lights](#)

**Recommended On The Mirror**

**Like Us On Facebook**

[The Mirror](#)

# Comments

---

## RECENTLY PUBLISHED

### Extraordinary courage of girl with facial disfigurement who helped millions by sharing her story on YouTube



12-year-old Nikki shared her story with millions after she was diagnosed with a potentially life threatening facial disfigurement at the age of just six

---

## PREVIOUS ARTICLES

### Teen accused of faking crippling migraines is diagnosed with an incurable brain tumour



Amanda Day said she 'got to the stage where I began to doubt myself' after a doctor said she was lying about her crippling headaches and back pain - but her mum refused to give up

### Stephen Hawking says artificial intelligence could DESTROY society by taking over humans

---

## RELATED TAGS

### ORGANISATIONS

[THE WELLCOME TRUST](#) [UNIVERSITY COLLEGE LONDON](#)

---