**Little white lies are NOT as innocent as you think: Over time, small fibs may desensitise our brains to dishonesty**

* **Tiny self-serving lies can desensitise our brains to negative emotions**
* **This means the lies can easily escalate as the emotional response lessens**
* **The amygdala, the part of the brain associated with emotion, was most active when people first lied for personal gain, said the study**

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White lies may not be more harmful than you think.

Telling small lies can actually lead to us telling bigger lies in future, according to a new study.

Small, self-serving lies can actually desensitise our brains to the negative emotions connected to fibbing, says the research.

Researchers from University College London (UCL) scanned volunteers' brains while they took part in tasks where they could lie for personal gain.

The results showed that the amygdala, a part of the brain associated with emotion, was most active when people first lied for personal gain.

However, they noticed that the amygdala's response to lying gradually declined with every lie, while the magnitude of the lies escalated.

Crucially, they found that the larger drops in amygdala activity predicted bigger lies in future.

'When we lie for personal gain, our amygdala produces a negative feeling that limits the extent to which we are prepared to lie,' explains senior author Dr Tali Sharot from UCL's Experimental Psychology division.

'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.'

The study saw 80 volunteers partaking in a group task that involved guessing the number of pennies in a jar and sending their estimates to unseen partners using a computer.

The same process was repeated across several different scenarios.

In the baseline scenario, participants were told that attempting the most accurate estimate would benefit them and their partner.

**CAN YOU TELL IF YOUR CHILD IS LYING?**

It is bad news for parents - adults are far worse at telling when a child is lying than thought, researchers have found.

In fact, you may as well guess, they concluded.

Researchers discovered on average adults were able to distinguish truth from lies 54 per cent of the time, making them only slightly more successful than chance.

The major new study into children and lying builds on previous studies that have shown that children learn to lie from the age of two.

The University of California, Irvine, team analysed the results of 45 experiments into detecting deception in children up to the age of 15.

They involved almost 8,000 adult 'judges' — many of them parents — and almost 2,000 children.

They found that on average adults were able to distinguish truth from lies 54 per cent of the time.

One reason for the poor performance is simply that children looked guilty - even if they weren't, the team said.

In subsequent scenarios, they were told that over- or under-estimating the amount either benefit them at their partner's expense, benefit both of them, benefit their partner at their own expense, or just benefit one of them with no effect on the other.

When the volunteers were over-estimating the amount at their partner's expense, they began by slightly exaggerating their estimates, eliciting strong amygdala responses.

These exaggerations escalated as the experiment went on, while their amygdala responses declined.

'It is likely the brain's blunted response to repeated acts of dishonesty reflects a reduced emotional response to these acts,' says lead author Dr Neil Garrett from UCL.

'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 research, which was funded by the Wellcome Trust and the Center for Advanced Hindsight, was published in the journal Nature Neuroscience.

Dr Raliza Stoyanova, Senior Portfolio Developer, in the Neuroscience and Mental Health team at Wellcome, 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.'

Read more: <http://www.dailymail.co.uk/sciencetech/article-3860124/Little-white-lies-NOT-innocent-think-Small-fibs-slippery-slope-bigger-whoppers.html#ixzz4W0zUGowO>   
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