

THE CONVERSATION

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Why being dishonest is a slippery slope

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Imagine you are a lawyer faced with the task of sending out an invoice to your client. As you sit there, it occurs to you that no one would be any the wiser (but you would be somewhat richer) if you surreptitiously added a few extra hours to your client's bill. You've never done this before and it feels bad. But is there any real harm?

Aside from any negative impact for the client, there could well be a problem for the person being dishonest. Assuming you don't get caught, taking the first step towards dishonesty can cause you to be more and more dishonest when similar opportunities present themselves in the future.

In an experiment we carried out with colleagues Stephanie Lazzaro and Dan Ariely – published in *Nature Neuroscience* – we gave 80 people the opportunity to lie again and again on a financial task in order to gain money at another person's expense. We found that people started with small lies, but slowly, over the course of the experiment, lied more and more. This escalation of dishonesty was observed only when participants lied for their own benefit, not when they did so solely for the benefit of others.

Outside the laboratory, there are many reasons for why dishonesty may escalate – incentives may become larger or past lies might need to be covered up. Examining people's brain activity while they

were being dishonest in our task revealed another reason – a biological process called emotional adaption.

What does emotion have to do with dishonesty? Well, that bad feeling you have when you think about cheating can stop you from doing it. In its absence, you are more likely to lie. In one study, a group of students were given pills called beta-blockers that reduced emotional arousal just before taking an exam. These students were twice as likely to cheat on the exam compared to students who received a placebo.

Most of us do not pop a pill before we lie. But the results of our experiment showed that the brain's emotion network responds less and less with each additional lie. The greater the drop in the brain's sensitivity to dishonesty, the more people lied the next time they got a chance. In other words, people adapted to their own dishonesty and less was holding them back from telling bigger lies.

It was not the case that brain activity simply decreased over time. The reduction in sensitivity was very specific – it was specific to the exact amount someone lied and it was detected only in the brain's emotion network, not in other brain areas. We also knew the brain activity we were looking at was specific to that person's lies, because one person's brain response only predicted that person's subsequent dishonesty and the results could not be used to predict the dishonesty of anyone else.

An easy way to think about this process is to compare it to smelling perfume. Imagine you bought a brand new perfume. You apply it in the morning and instantly you can detect its powerful scent. The next day you do the same, but now the smell is not as strong. Two months pass and you can hardly sense its presence. So you start applying it more liberally, baffled by the fact that no one will sit beside you on your commute to work anymore. This happens because neurons in your olfactory bulb desensitise to the smell of the perfume.

Repeated dishonesty is a bit like a perfume you apply over and over. Initially your response to your own acts of dishonesty is strong, but over time it decreases. Like the students taking the beta-blockers, your capacity for being dishonest increases.

This may sound bleak. Yet, our data also revealed a positive side of human nature. Participants could have cheated much more than they did, but they didn't. They were also more likely to cheat when cheating helped others as well as themselves compared to when cheating was purely selfish.

Previous research by Ariely and others shows that dishonesty can be curbed through interventions such as reminding people of their values, emphasising the honest actions of others and wiping the slate clean through acts of confession. Interventions like these could be used to nudge people away from dishonest acts before they escalate.



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