New lie detection technique for terror suspects

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A leading deception expert has called for law enforcement agencies to do away with lie detector tests when questioning terror suspects because they are too unreliable.

Professor Aldert Vrij from the University of Portsmouth said conventional law enforcement lie detection tools that focus on a suspect's 'arousal-based' responses to key questions are not accurate enough against the increased threat of terrorism and international crime.

He called for the introduction of the cognitive-load approach – an innovative new method that cranks up the brainpower a suspect needs under questioning.

This is done by carefully designing questioning protocols to make suspects think significantly harder at specific times during a police interview. The suspect is given secondary tasks such as telling their stories in reverse order, or recalling information relayed through a set of headphones.

The cognitive-load approach is a marked departure from the status quo in law enforcement where most lie detection tools use arousal-based protocols that assume liars will be more aroused under questioning because of the fear of getting caught.

'The trouble with this is that liars do not necessarily reveal more signs of arousal when answering key questions and, conversely, truth tellers

might be anxious and hence show signs of arousal when answering key questions,' Professor Vrij said.

‘The cognitive-load approach is based on the idea that lying in an interview setting is cognitively demanding as liars have to think harder to concentrate on extra demands such as what others are thinking, keeping their story straight, and monitoring and controlling their behaviour so they avoid creating the impression they are lying.

'Liars, whose cognitive resources will already be partially depleted by the act of lying, should find this additional, concurrent task particularly debilitating. This should show up as a poorer performance in the primary task (e.g. providing a statement during the interview), and also on the secondary task.'

Professor Vrij said when people lied they used 'higher' brain areas such as the prefrontal cortex and it had already been proven that increased activity in these areas inhibited ongoing unnecessary motor behaviour such as fidgeting.*

He cited recent experimental tests where police officers watching videos of real-life suspects were more accurately able to discriminate between liars and truth tellers by being asked 'How hard is the person thinking?'

The police officers also thought suspects looked less nervous when lying than when they were telling the truth.

'If lying is cognitively demanding, then attending to signs of cognitive load should improve people's ability to detect deception,' he said.

Professor Vrij was speaking at the BA Festival of Science in Norwich where he presented the paper Why Professionals Fail to Catch Liars and How They Can Improve.

* Spence, S.A. et al. (2004) A cognitive neurobiological account of deception: evidence from functional neuroimaging. Philos. Trans. T.Soc Lond. 359, 1755- 1762.

Source: University of Portsmouth