

Feeling the heat? Why a hot nose is the tell-tale sign of a liar

- Scientists from the University of Granada used thermal imaging to prove anxiety makes the nose heat up
- The academics claim the technique can also detect sexual desire and arousal in men and woman

By [Mail Foreign Service](#)

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Feeling the heat: Anxiety caused by telling lies makes the tip of the nose grow warm, the scientists claim

Contrary to what you may say to your children, telling a lie doesn't, of course, make your nose grow like Pinocchio's. But it does make it hotter.

Scientists claim that a rise in anxiety produced by lying will increase the temperature of the tip of your nose.

And if you're worried that your fib will be uncovered, they also suggest a way of cooling the nose down – making 'a great mental effort'.

The scientists, from the University of Granada, discovered the phenomenon by using thermal imaging cameras to monitor volunteers.

They have called it 'The Pinocchio Effect', in honour of the 19th century Italian tale of the wooden puppet whose nose grew when he failed to tell the truth.

In their doctoral thesis, released yesterday, Emilio Gómez Milán and Elvira Salazar López suggest that the temperature of the nose increases or decreases according to mood, as does the orbital muscle area in the inner corner of the eyes.

The scientists also claim thermal imaging can detect sexual desire and arousal in men and women, indicated by an increase in temperature in the chest and genital areas.

And the technique also allowed the pair to produce thermal footprints – body patterns with specific temperature changes – for aerobic exercise and distinct types of dance, such as ballet.



The Pinocchio effect: Researchers at the University of Granada found that the temperature of the nose rises as a person becomes anxious

They explained: 'When someone dances Flamenco, the temperature in their buttocks lowers and it rises in their forearms.

'This is the thermal footprint for Flamenco, although each type of dance has its own.'

The pair reached their conclusions after discovering that when the volunteers lied about their feelings, the brain's insular cortex was altered.

They said: 'The insular cortex is involved in the detection and regulation of body temperature, so there is a large negative correlation between the activity of this structure and the magnitude of the temperature change.

'The more activity in the insular cortex (the higher the visceral feeling), lower heat exchange occurs, and vice versa.'

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