

Published on *Science/AAAS / News* (<http://news.sciencemag.org>)

[Home](#) > *Science*Shot: Pupils Predict the Future

**Article Title:**

*Science*Shot: Pupils Predict the Future

January 23, 2014

Sarah C. P. Williams



Want to read someone’s mind? Look at their pupils. A person about to answer “yes” to a question, especially if they are more used to answering “no,” will have more enlarged pupils than someone about to answer “no,” according to a new study. Normally, pupils dilate when a person is in a darkened environment to let more light into the eye and allow better vision. But pupil size can also be altered by levels of signaling chemicals

naturally produced by the brain. In the study, published online this week in the *Proceedings of the National Academy of Sciences*, scientists observed the pupils of 29 people as they pressed a “yes” or “no” button to indicate whether they’d seen a difficult-to-detect visual cue on a screen in front of them. When a person was deciding how to answer—in the seconds before pressing a button—their pupils grew larger [1]. And if a person was normally biased toward answering “no” when they weren’t sure on the visual cue, then the pupil change was even more profound in the decision-making seconds before a “yes” answer. The finding could lead to new ways to detect people’s intrinsic biases and how confident they are in an answer given, important variables in many sociological and psychological studies.

See more [Science](#) [2] [Shots](#) [2].

(Credit: *iStockphoto/Thinkstock*)

**Links:**

[1] <http://www.pnas.org/cgi/doi/10.1073/pnas.1317557111>

[2] <http://news.sciencemag.org/scienceshots>