

Out of mind, out of sight: Blinking eyes indicate mind wandering

April 29 2010

When your mind wanders, you're not paying attention to what's going in front of you. A new study suggests that it's not just the mind, it's the body, too; when subjects' minds wandered, they blinked more, setting up a tiny physical barrier between themselves and the outside world.

Cognitive neuroscientist Daniel Smilek, of the University of Waterloo, studies how people pay attention — and don't. For this study, he was inspired by [brain](#) research that shows, when the [mind](#) wanders, the parts of the brain that process external goings-on are less active. "And we thought, ok, if that's the case, maybe we'd see that the body would start to do things to prevent the brain from receiving external information," Smilek says. "The simplest thing that might happen is you might close your eyes more." So, Smilek and his colleagues, Jonathan S.A. Carriere and J. Allan Cheyne, also of the University of Waterloo, set out to look at how often people blink when their mind wanders.

Fifteen volunteers read a passage from a book on a computer. While they read, a sensor tracked their [eye movements](#), including blinks and what word they were looking at. At random intervals, the computer beeped and the subjects reported whether they'd been paying attention to what they were reading or whether their minds were wandering — which included thinking about earlier parts of the text.

The participants blinked more when their minds were wandering than when they were on task, the team reports in [Psychological Science](#), a journal of the Association for Psychological Science. "What we suggest

is that when you start to mind-wander, you start to gate the information even at the sensory endings — you basically close your eyelid so there's less information coming into the brain," says Smilek.

This is part of a shift in how scientists are thinking about the mind, he says. Psychologists are realizing that "you can't think about these mental processes, like [attention](#), separately from the fact that the individual's brain is in a body, and the body's acting in the world." The mind doesn't ignore the world all by itself; the eyelids help.

Provided by Association for Psychological Science

Citation: Out of mind, out of sight: Blinking eyes indicate mind wandering (2010, April 29) retrieved 5 May 2024 from <https://medicalxpress.com/news/2010-04-mind-sight-eyes.html>

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