

## Shoot-'em-up games may be good for your eyesight

- 01 April 2009 by [Alison Motluk](#)
  - New Scientist Magazine issue [2702](#).
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DOCTORS may start prescribing a dose of violent conflict, if a trial confirms evidence that computer gaming improves eyesight.

Six years ago [Daphne Bavelier](#) at the University of Rochester, New York, exploded the myth that gaming is bad for your eyes by showing that expert gamers outperform non-gamers at a variety of visual tasks ([New Scientist, 31 May 2003, p 11](#)). Now she has demonstrated that playing action-packed video games improves a person's ability to perceive contrast, a skill we rely on in dark conditions.

The finding raises the prospect that people with amblyopia, which affects contrast perception, could be treated with games. A trial has begun to test that theory.

Amblyopia, sometimes known as "lazy eye", affects around 3 per cent of people in western populations and happens when the brain fails to correctly register signals from one eye. It can be treated in children but often goes undetected until adulthood, when there is no established fix.

Bavelier's team randomly assigned 13 healthy young adults, who did not previously play video games, to play either action games like the first-person shooter Unreal Tournament or more sedate titles such as The Sims, for 50 hours over nine weeks ([Nature Neuroscience, DOI: 10.1038/nn.2296](#)).

Tests before and after showed that the contrast perception of both groups improved. But the action-game group showed 43 per cent improvement on average, compared with just 11 per cent in the other group. The effect persisted for months, even when people didn't play games at all.

The study is the first indication that contrast sensitivity can be altered without corrective lenses or surgery, says Bavelier. Her work has inspired Dennis Levi and colleagues at the University of California, Berkeley, to begin a trial to see whether gaming can help people with amblyopia.

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