

# Moderate video gamers show enhanced perception and attention skills, research reveals

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The study found moderate gamers could more accurately process visual information. Credit: Nottingham Trent University

People who play video games for even a small amount of time have superior perception and attention skills to those who don't play at all, new research suggests.

A study by psychologists at Nottingham Trent University found participants who played action games for between one and five hours a week could more accurately process [visual information](#) than those who didn't play at all.

As part of the study, published in the journal *Perception*, [participants](#) were challenged to perform observation tasks on a screen.

This involved being rapidly presented with a stream of items – at a speed of ten per second – before being asked to recall details of two of the items in the stream. People had to say which item had appeared in a different colour and also to correctly identify the rotation of another.

The researchers found that [video gamers](#) were able to perform this dual task on average 5% more accurately than non-gamers, suggesting faster and more efficient processing of rapidly-presented stimuli.

It is the first time research has examined improved attention of moderate video gamers in this way, with previous work tending to focus on those who game more regularly.

"It appears that even very moderate gamers have enhanced processing ability, leading to better performance in perceptual and attentional tasks," said lead researcher Dr Christina Howard, a psychologist in the University's School of Social Sciences.

She said: "5% could have a significant impact if you think of 5 out of 100 rapid events potentially being missed by non-gamers but seen by videogame players.

"It could be the case that people who already have these superior perception and attention skills are drawn to gaming – or it might be that they develop these skills as a result of their video gaming activity.

"Either way, we believe the findings might have implications for everyday activities which require enhanced rapid perception. This might include driving, sports – playing, refereeing or judging for instance – or professions which require close monitoring of systems, such as CCTV."

**More information:** C. J. Howard et al. Light Video Game Play is Associated with Enhanced Visual Processing of Rapid Serial Visual Presentation Targets, *Perception* (2016). [DOI: 10.1177/0301006616672579](https://doi.org/10.1177/0301006616672579)

Provided by Nottingham Trent University

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