

Video game 'exercise' for an hour a day may enhance certain cognitive skills

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Playing video games for an hour each day can improve subsequent performance on cognitive tasks that use similar mental processes to those involved in the game, according to research published March 13 in the open access journal *PLOS ONE* by Adam Chie-Ming Oei and Michael Donald Patterson of Nanyang Technological University, Singapore.

Non-gamer participants played five different games on their smartphones for an hour a day, five days of the week for one month. Each participant was assigned one game. Some played games like Bejeweled where participants matched three identical objects or an agent-based virtual life simulation like The Sims, while others played action games or had to find hidden objects, as in Hidden Expedition.

After this month of 'training', the researchers found that people who had played the action game had improved their capacity to track multiple objects in a short span of time, while hidden object, match three objects and <u>spatial memory</u> game players improved their performance on visual search tasks. Though previous studies have reported that action games can improve cognitive skills, the authors state that this is the first study that compared multiple video games in a single study and show that different skills can be improved by playing different games. They add that video games don't appear to cause a general improvement in mental abilities. Rather like muscles that can be trained with repetitive actions, repeated use of certain cognitive processes in video games can improve performance on other tasks as well.



More information: Oei AC, Patterson MD (2013) Enhancing Cognition with Video Games: A Multiple Game Training Study. *PLoS ONE* 8(3): e58546. doi:10.1371/ journal.pone.0058546

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