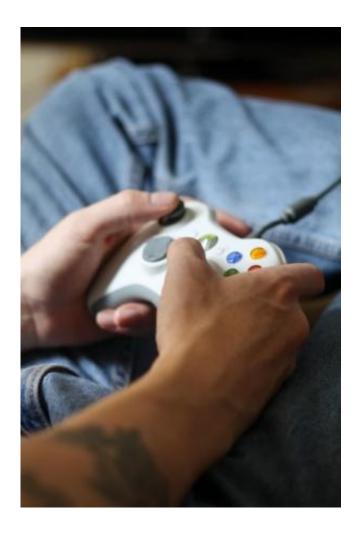


## How long should children play video games?

## September 9 2016



Credit: Cristie Guevara/public domain

A new study indicates that playing video games for a limited amount of time each week may provide benefits to children, but too much can be detrimental. The findings are published in the *Annals of Neurology*.



There's much debate over the potential benefits and risks of <u>video</u> gaming in <u>children</u> and teens. To provide some clarity, Jesus Pujol, MD, of the Hospital del Mar in Spain, and his colleagues investigated the relationship between weekly video game use and certain cognitive abilities and conduct-related problems.

In their study of 2442 children aged 7 to 11 years, the researchers found that playing video games for one hour per week was associated with better motor skills and higher school achievement scores, but no further benefits were observed in children playing more than two hours each week.

The team also found that weekly time spent gaming was steadily linked with conduct problems, peer conflicts, and reduced social abilities, with such negative effects being especially prominent in children who played nine or more hours of video games each week.

"Video gaming per se is neither good nor bad, but its level of use makes it so," said Dr. Pujol.

When the investigators looked at <u>magnetic resonance imaging</u> scans of the brains of a subgroup of children in the study, they noted that gaming was linked with changes in basal ganglia white matter and functional connectivity. "Gaming use was associated with better function in brain circuits critical for learning based on the acquisition of new skills through practice," Dr. Pujol explained. "Children traditionally acquire motor skills through action, for instance in relation to sports and outdoor games. Neuroimaging research now suggests that training with desktop virtual environments is also capable of modulating brain systems that support motor skill learning."

**More information:** Jesus Pujol et al. Video gaming in school children: How much is enough?, *Annals of Neurology* (2016). DOI:



## 10.1002/ana.24745

## Provided by Wiley

Citation: How long should children play video games? (2016, September 9) retrieved 3 May 2024 from <a href="https://medicalxpress.com/news/2016-09-children-video-games.html">https://medicalxpress.com/news/2016-09-children-video-games.html</a>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.