

## Nintendo Wii may help improve balance in children with cerebral palsy

June 9 2021

Therapy based on the Nintendo Wii Balance Board can help improve balance in children with cerebral palsy, according to an analysis published in *Developmental Medicine & Child Neurology*.

For the analysis, researchers from the University of Jaén, in Andalusia, Spain examined data from all relevant randomized controlled trial published to date. In 11 trials with 270 children with cerebral palsy, there was very low-quality evidence of a large effect of Nintendo Wii therapy on <u>functional balance</u> (compared with no intervention) and moderate-quality evidence for a benefit to using Nintendo Wii therapy plus conventional physical therapy (compared with conventional physical therapy alone) in sessions of approximately 30 minutes and interventions lasting longer than 3 weeks.

For dynamic balance (involving balance while in motion or when switching positions), investigators found very low-quality evidence for a medium effect for using Nintendo Wii therapy plus conventional physical therapy vs. conventional physical therapy alone.

"Our results suggest that Nintendo Wii therapy may be a useful tool that can be included in neurorehabilitation physiotherapy protocols to improve balance in children with <u>cerebral palsy</u>," said corresponding author Esteban Obrero-Gaitán, PT, Ph.D. "Virtual reality-based rehabilitation using Nintendo Wii is considered a multi-sensory and active therapy that encourages the child's participation, increasing motivation and adherence to <u>therapy</u> due to its playful nature. In



addition, it is a low-cost tool that can be used at home for therapeutic purposes, a fact that is of great relevance during the COVID-19 pandemic."

**More information:** *Developmental Medicine & Child Neurology*, <u>DOI:</u> <u>10.1111/dmcn.14947</u>

Provided by Wiley

Citation: Nintendo Wii may help improve balance in children with cerebral palsy (2021, June 9) retrieved 27 April 2024 from <u>https://medicalxpress.com/news/2021-06-nintendo-wii-children-cerebral-palsy.html</u>

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.