

Computer game reduces issues associated with AD/HD in children in China

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Children diagnosed with AD/HD can improve their behavior and social interactions in the classroom by playing a computer game that exercises their concentration, finds new research out today. The study marks the 1000th article published in *SAGE Open*, a peer-reviewed, open-access journal launched in 2011 which covers the full spectrum of the social and behavioral sciences and the humanities.

The software studied in the research syncs with a wireless headband that monitors brainwaves during game-play, and works by adjusting the level of difficulty and scoring system in order to target and train the attention control, working memory, and impulse-control. This neurocognitive training was administered in case studies of five elementary school students in China and resulted in overall improved behavior, assignment completion, and relationships with peers and teachers.

"The present study implies that the neurocognitive training can result in broader and more socially meaningful outcomes than improvement of AD/HD symptoms," wrote study authors Han Jiang and Stuart Johnstone. "Two reasons possibly explain the side effect. First, the increased attentive behavior in class and improved quality of schoolwork improved these children's social status. Second, game-driven and task-directed features of the training increased the children's confidence in doing tasks."

Prior to the study, all of the parents gave their children ratings indicating problems in the categories of hyperactivity, inattention, and acceptance



by peers and teachers. After the training, parents rated their children's behavior at the normal level and teachers reported less frequency of AD/HD symptoms. Additionally, four of the five groups of parents saw improvements in their child's interactions with teachers and peers. The study found that increases in teacher acceptance, such as public praise and greater inclusion in classroom activities, resulted in improved peer acceptance.

Jiang and Johnstone commented, "These findings indicate that once the children have received positive support and technical aids, they can achieve dramatic improvements. The outcomes have provided the foundation for a large randomized control trial which is currently underway in Australia, as well as two further controlled studies in China."

Find out more by reading the full article, "A Preliminary Multiple Case Report of Neurocognitive Training for Children with AD/HD in China," the 1000th paper published in *SAGE Open*.

"This milestone is a testament to the continuing success of *SAGE Open*, and the growth of *SAGE Open* is a testament to how far the OA movement has come in a relatively short period of time in the social sciences," commented David Ross, Executive Publisher of Open Access, SAGE. "When we launched SAGE Open four years ago, OA had not really been embraced by the humanities and social science community - to have published 1000 papers in that short space of time is truly impressive. We are immensely proud of what we have achieved so far and plan to continue to innovate, experiment, and grow even further to reflect the needs of the global research community."

Provided by SAGE Publications



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