

Playing games on your smartphone 'a good move'

By JANICE TAI

PLAYING smartphone games an hour a day can improve brain performance. Researchers from the Nanyang Technological University (NTU) have found playing action games can boost spacial awareness while memory games enhance visual search tasks.

Just like building muscles in the gym, playing these games regularly can train the brain, said Dr Michael Patterson, assistant professor at NTU.

Though previous studies established that playing action games can boost cognitive skills, this is the first that compared multiple games and shows how different skills can be improved by playing different games.

The study was published in US scientific journal PLoS ONE in March. It was done in part because Singapore

has one of the highest smartphone penetration rates in the world and many people play games on their phone while commuting, said Dr Patterson.

For the research, his team asked 75 NTU undergrads – none of them gamers – to play one of five games on their smartphone, for an hour a day.

The games, which were played five days a week, over a month, included "match-three" game Bejeweled, virtual life simulation game The Sims and action shooter Modern Combat.

Before and after playing, the students performed four behavioural tasks to assess if playing the games had any effect. The researchers found that those who had played the action game improved their ability to track multiple objects in a short span of time, while the hidden-object, match-three objects and spatial memory

game players improved their performance in visual search tasks.

"These are the skills that are valuable in daily life," noted Dr Patterson. "For example, the ability to track objects helps us better navigate our way around when we walk or drive and visual search skills help us pick out the item we need in a large supermarket more quickly."

He is working on a paper to develop these findings further; such as finding out which game has the strongest impact and how long people need to play the games to achieve the best effect.

This form of research has immense potential, he said. "In future, these games may be used to help (those) who have difficulty paying attention to focus for a longer time or to help others with hand-eye coordination and dexterity."

For instance, a study in 2007 found that surgeons who played video games for more than three hours a week did better in surgery than those who did not play the games. It recommended using video games to train surgeons.

Taxi driver Joshua Foo, who has four children aged five to 16, said he lets his children play the games for about an hour a day. "There is value in those games as they involve strategising and working the reflexes, but of course, playing must be done in moderation," said the 49-year-old.

Associate Professor Angeline Khoo of the National Institute of Education, who studies the Internet and video-gaming issues, said: "While games do have benefits, parents need to help their children exercise self-regulation and develop good gaming habits."

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