

# New tablet game may help detect cognitive decline early

Tracking users' scores over time could potentially lead to earlier diagnoses and treatment

Ivan Kwee

Mr S. Rajakumar, 67, is familiar with physical therapy – he has gone for help for his hand, leg and shoulder over the years.

Yesterday, he tried what he calls “brain therapy”, with a tablet game that requires players to control a flight within the game.

Players have to multitask – they may have to hit a specific target, re-fuel oil tanks and respond to audio commands at the same time. Their scores after each session will determine the difficulty level of the next one.

Mr Rajakumar, a retiree who last worked for a statutory board, said he is not good with electronic gadgets, but picked up the game easily and enjoyed playing it.

“They taught us for three to five minutes, and asked us to practise. After 15 minutes, (I was a) champion already,” he said.

He was one of four seniors who tried the game, which was developed by the National University of Singapore's Yong Loo Lin School of Medicine, in partnership with Marsiling Grassroots Organisations and Sunlove Marsiling Senior Activity Centre.

The game is aimed at helping to combat cognitive decline in seniors. Researchers from the medical school's Institute for Digital Medicine believe that by tracking



Professor Dean Ho from Yong Loo Lin School of Medicine's Institute for Digital Medicine explaining the game to Mr Lee Keng Wee, 70, at the Sunlove Marsiling Senior Activity Centre yesterday. PHOTO: LIANHE ZAOBAO

the users' scores, they will be able to detect early indications of cognitive decline, resulting in earlier diagnoses and treatment.

Dr Alexandria Remus, one of the researchers, said: “It's tracking your

performance over time. Maybe you're always scoring very high, but for maybe like a week, you've been scoring really low. It would be an indication to go see a doctor, because something's wrong.”

The game is part of a study led by Professor Dean Ho from the institute.

The study, which started last March, focuses on improving the ability to better predict and

monitor diseases and illnesses, and with the use of technology, empower seniors to take control of their own health.

Prof Ho said that his team will be working closely with the Sunlove Marsiling centre and Marsiling Grassroots Organisations to co-develop the game, ensuring its optimal and sustained use by the community in the future.

Depending on the feedback gathered, the digital therapeutics tool could potentially see deployment by the end of this year.

The team may, for instance, have to consider ways to incentivise users to keep playing.

Mr Aloysius Koh, 81, who played the game yesterday, said that he picked up the game quickly and did not find it challenging.

“It's just like an ordinary game to me, just as every day, I play solitaire. But they said it would improve your brain, so I hope that it does,” the retired marketing employee said.

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## EASY TO PICK UP

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## HOPING FOR IMPROVEMENT

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