

Scientists launch virtual reality game to detect Alzheimer's

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Sea Quest Hero is more than just the usual computer game in which players find their way through mazes, shoot and chase creatures—it also doubles as scientists' latest tool for studying Alzheimer's disease.

The game—downloadable from Tuesday in its virtual reality version—seeks to stimulate players' brains through a series of tasks based on memory and orientation skills, while gathering data to research [dementia](#).

One of the first symptoms of Alzheimer's is loss of navigational skills. But data comparing cognitive response across a broad spectrum of ages is rare, and this is what the game seeks to provide.

The game—billed as the "largest dementia study in history"—has been developed by Deutsche Telekom, Alzheimer's Research UK and scientists from University College London and the University of East Anglia.

The mobile version, which came out in 2016, has already been downloaded three million times in 193 countries.

Playing the game for just two minutes, the website said, generates the same amount of data scientists would take five hours to collect in similar lab-based research.

With the equivalent of 63 years already played, scientists now have some 9,500 years worth of dementia research to go through.

"That gave us an enormous amount of information and it really allowed us to understand how men and women of different ages navigate in the game," David Reynolds, chief scientific officer at Alzheimer's Research UK, told AFP.

Resolving the tasks requires the use of "different parts of your brain and different parts of your brain are used in different ways by different types of dementia—so it allows us to link what someone can do to what is going on in their brain," Reynolds added.

50 million sufferers

The addition of [virtual reality](#) will provide yet another layer of data.

"The headset technology is helping to track where the person is looking at all times as well as where they're going," Lauren Presser, one of the game's producers, told AFP.

"So we get to know whether people are lost and how they behave in those situations... Every single one of those experiments is helping us gather data around spatial navigation."

Nearly 50 million people around the world suffer from dementia and Alzheimer's according to the latest estimates.

This figure could balloon to 132 million by 2050.

There is no cure for the disease, but the game's creators hope it could eventually enable diagnosis and treatments of patients far earlier than is currently possible.

Reynolds said playing the game could in itself help with prevention.

"We know keeping your [brain](#) fit and active, like keeping your body fit and active, is good and is helping to reduce your risk of dementia or slowing its progression down if you have it," he said.

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