

Smartphone apps—memory aids for people with brain injuries

August 21 2017



Credit: Monash University

During Brain Injury Awareness Week, new research has emerged from Monash University showing that smartphone apps may actually help people with memory impairment from brain injuries, debunking earlier concerns that technology makes our brain's memory capacity worse.

Over two studies, Monash Institute of Cognitive and Clinical

Neurosciences (MICCN) Dr Dana Wong set out to explore the potential of smartphones as memory aids by investigating how people with traumatic [brain](#) injuries (TBI) or with [stroke](#) used them in comparison to people with no history of TBI or strokes.

Memory difficulties are common after acquired brain injuries such as a stroke. Everyday problems include forgetting appointments, names and details, losing track of conversations and misplacing personal items.

"We found that memory apps like calendars can be helpful for people with brain injuries. Such apps can free their minds to focus on other things, without using up mental resources worrying about what needs to be remembered," Dr Wong said.

Dr Wong said the finding required further analysis, but was not consistent with the idea that memory aids make our brains lazy.

The studies surveyed 29 people with TBI and 33 non-injured people for the TBI study. For the stroke study, they surveyed 29 participants with stroke and 29 with no history of neurological conditions.

The studies also showed that these apps can be useful, not only for people with memory impairments, but for the general population.

Dr Wong said that in both studies, they found that the majority of people used smartphones for three main reasons: for communication, as a memory aid and for internet access.

"When asked about the biggest benefit of using a smartphone, users with TBI and stroke most often cited its helpfulness as a memory aid. This contrasted with those with no history of brain injury, who instead listed portability, convenience and access to the internet as the main benefits," Dr Wong said.

The memory apps used most often by participants with TBI and stroke were calendars, alarms, contacts lists, reminder text messages, notes, cameras, and to-do lists. These apps help the user remember appointments, tasks, details and locations without relying on their internal memory capacity.

They also found, in general, relying on memory aids did not influence intrinsic memory ability; a result that was important in counteracting the fear expressed by some TBI and stroke survivors that using a [memory aid](#) may make their memory abilities worse, just like using a wheelchair may make leg muscles weaker.

"To further increase access to the benefits of smartphone [memory](#) apps, we now need to work out how to help users with brain injuries who may find them difficult to learn," Dr Wong said.

Provided by Monash University

Citation: Smartphone apps—memory aids for people with brain injuries (2017, August 21) retrieved 25 April 2024 from <https://medicalxpress.com/news/2017-08-smartphone-appsmemory-aids-people-brain.html>

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.