

Smart technology is not making us dumber: study

July 2 2021



Credit: CC0 Public Domain

There are plenty of negatives associated with smart technology—tech neck, texting and driving, blue light rays—but there is also a positive: the digital age is not making us stupid, says University of Cincinnati



social/behavioral expert Anthony Chemero.

"Despite the headlines, there is no <u>scientific evidence</u> that shows that smartphones and digital technology harm our biological cognitive abilities," says the UC professor of philosophy and psychology who recently co-authored a paper stating such in *Nature Human Behaviour*.

In the paper, Chemero and colleagues at the University of Toronto's Rotman School of Management expound on the evolution of the <u>digital</u> age, explaining how smart technology supplements thinking, thus helping us to excel.

"What smartphones and <u>digital technology</u> seem to do instead is to change the ways in which we engage our biological cognitive abilities," Chemero says, adding "these changes are actually cognitively beneficial."

For example, he says, your smart phone knows the way to the baseball stadium so that you don't have to dig out a map or ask for directions, which frees up brain energy to think about something else. The same holds true in a professional setting: "We're not solving complex mathematical problems with pen and paper or memorizing phone numbers in 2021."

Computers, tablets and <u>smart phones</u>, he says, function as an auxiliary, serving as tools which are good at memorization, calculation and storing information and presenting information when you need it.

Additionally, smart technology augments decision making skills that we would be hard pressed to accomplish on our own, says the paper's lead author Lorenzo Cecutti, a Ph.D. candidate at the University of Toronto. Using GPS technology on our phones, he says, can not only help us get there, but lets us choose a route based on traffic conditions. "That would



be a challenging task when driving round in a new city."

Chemero adds: "You put all this technology) together with a naked human brain and you get something that's smarter...and the result is that we, supplemented by our technology, are actually capable of accomplishing much more complex tasks than we could with our unsupplemented biological abilities."

While there may be other consequences to <u>smart technology</u>, "making us stupid is not one of them," says Chemero.

More information: Lorenzo Cecutti et al, Technology may change cognition without necessarily harming it, *Nature Human Behaviour* (2021). DOI: 10.1038/s41562-021-01162-0

Provided by University of Cincinnati

Citation: Smart technology is not making us dumber: study (2021, July 2) retrieved 27 April 2024 from <u>https://phys.org/news/2021-07-smart-technology-dumber.html</u>

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.