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‘Digitally Distracted’ Kids Aren’t Reading Anymore — Here’s Why That’s a Problem

Researchers who study human-computer interaction, technology design and literacy said there’s a “cognitive cost” — especially for children — that comes with spending too much time on digital devices.

By The Conversation

By Nehal El-Hadi and Daniel Merino

Staying focused on a single task for a long period of time is a growing concern. We are confronted with and have to process incredible amounts of information daily, and our brains are often functioning in overdrive to manage the processing and decision-making required.

In an era of ceaseless notifications from apps, devices and social media platforms, as well as access to more information than we could possibly consider, how do we find ways to manage?

And is the way we think, focus and process information changing as a result?

In an episode of “The Conversation Weekly Podcast” (see below) we speak with three researchers who study human-computer interaction, technology design and literacy about how all of these demands on our attention are affecting us, and what we can do about it.

Enhancing learning

Maryanne Wolf is the director of the UCLA Center for Dyslexia, Diverse Learners and Social Justice in the U.S. Her book, “Proust and the Squid,” presents a history of how the reading brain developed.

Since its publication in 2008, Wolf has published extensively on literacy and reading research.

Wolf believes that reading is important because it contributes to a person’s potential and enhances the ability to learn, think and be discerning:

“I’ve become, in essence, obsessed with the deep reading processes that expand the reading brain of the child to achieve their academic potential. But that foundation expands over time with everything we read and learn, so that we begin to be human beings who have the ability to take their background knowledge, use with logical thinking to infer what is the truth — or the lack of truth — in what they are reading.”

Wolf is concerned that the amount of interaction we have with our screens and devices — and the speed at which we necessarily have to function — has changed us by removing from us the ability to be present.

Wolf continues:

“We have all changed. We don’t even realize it, but there’s a patience that’s needed inside ourselves to give attention to inference, empathy, critical analysis. It takes effort. And we’re so accustomed to going so fast that the immersiveness is difficult.”

Capturing attention

Kai Lukoff is an assistant professor at Santa Clara University in the U.S., where he directs the Human-Computer Interaction Lab. He researches how apps, platform and technology designers attempt to capture a user's attention.

Lukoff said:

"There are a thousand or more engineers, developers, designers on the other side of the screen who are purposefully or intentionally designing these services in order to capture your attention, to get you to spend more time on the site, to get you to click on more ads.

"And it can be difficult to resist or even understand what's happening to you when you feel tempted or lost. But of course, that's not by accident."

And so as a response, we learn how to quickly sift through content. In other words, we skim as an adaptive strategy. Skimming undermines the kind of attention Wolf notes is required to reap the intellectual, mental and cognitive benefits of deeper reading.

Cognitive cost

Daniel Le Roux, a senior lecturer at Stellenbosch University in South Africa, is a computer scientist who investigates the psychology of human-computer interaction.

He looks at the effects of what we're doing when we're "media multitasking," how we navigate multiple platforms, events and processes — both online and offline — at the same time.

He said:

"Everybody's doing it, and it's, in a large way, a natural adaptation to the technological environment that has been created around us."

Media multitasking, like skimming, is an adaptive response to an environment inundated with information. And media multitasking comes at a cognitive cost, Le Roux points out.

Le Roux continues:

"We incur what we might call a switch cost; that means our performance in our focal task is going to suffer. If you think of driving as the focal task, the reason we prohibit drivers from using their smartphones while they're driving is it because it distracts them from the task of driving."

Listen here:

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Nehal El-Hadi is The Conversation's science and technology editor and co-host of The Conversation Weekly Podcast.

Daniel Merino is The Conversation's associate science editor and co-host of The Conversation Weekly Podcast.

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