

Smartphones revolutionize our lives—but at what cost?

By Yudhijit Bahtcharjee, January 25, 2019. National Geographic

Not long ago, as happens almost every day, I got a Skype call on my smartphone from my dad, who lives in Kolkata, India. My dad is 79 and doesn't get out very much, having become increasingly housebound. On this day, I was traveling by train from Denmark to Sweden. Speaking to him, I held my phone up against the window, its camera lens facing out. We both took in the view of the Swedish countryside as the train pulled out from Malmo and sped toward Lund. For a brief while, it felt like we were traveling together.

For that moment of connection, and many others like it, my phone deserves my gratitude. But the same device has become a source of relentless distraction in my life, intruding upon my attention with frightening regularity and diminishing my in-person interactions with family and friends. On a visit to Kolkata to see my dad, I found myself reaching for my phone every few minutes in the middle of our conversation to scan my Facebook feed and see if a photo I'd recently posted had garnered any fresh likes. (It had! And comments, too!)

Researchers have begun documenting the impact of smartphones on our ability to focus. In one study, Adrian Ward, a psychologist at the University of Texas at Austin, and his colleagues gave 800 participants two challenging mental tasks—solving a math problem while memorizing a random sequence of letters and selecting an image out of a few options to complete a visual pattern. Some participants were asked to leave their smartphones in another room while others were allowed to keep their smartphones in their pockets. Still other participants kept their smartphones on a desk in front of them. Although the phones played no role in the tasks, how accessible the phones were had an effect on how well the participants were able to perform them. Those who had left their phones in another room fared the best. Those with the phones placed in front of them did the worst. But even those who had tucked their phones in their pockets were found to have diminished cognitive capacity. (...)

The reason why it's become so hard for us to set aside our phones isn't hard to understand. "It's well known that if you want to keep a person dialed into something, give them a reward at variable times," explains Ethan Kross, a psychologist at the University of Michigan in Ann Arbor. "Turns out, that's exactly what email or social media does—you don't know when you'll get another like or receive your next email, and so we keep checking."

Some of the blame lies with notifications, which can be turned off. A third and more insidious factor is the way technology companies have carefully orchestrated their apps and their websites to get your eyeballs there, to keep them there and to keep them coming back.

Responding to these criticisms, phone makers have developed apps to help users monitor their phone screen time. But it's unclear if apps like Apple's Screen Time and Google Android's Digital Well Being will help users curtail the time they spend on their phones.

Learning to live with the technology without surrendering to it may be one of the biggest challenges we face in the digital era. "We are playing catch-up," says Kross, who describes the experiential universe opened up by smartphones as a new ecosystem that we're still adapting to. "There are helpful or harmful ways of navigating the offline world, and the same is true of the digital world."