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## Smartphones Don't Make Us Dumb

By DANIEL T. WILLINGHAMJAN. 20, 2015

AS much as we love our digital devices, many of us have an uneasy sense that they are destroying our attention spans. We skitter from app to app, seldom alighting for long. Our ability to concentrate is shot, right?

Research shows that our intuition is wrong. We can focus. But our sense that we can't may not be a phantom. Paying attention requires not just ability but desire. Technology may snuff out our desire to focus.

The idea that gadgets corrode our attention span sounds logical. Screen-based activities can take <u>upward of 11 hours</u> of a teenager's day, and many demand rapid shifts of attention: quick camera cuts in videos, frenetically paced games, answering questions in multiple apps, not to mention web design that invites skimming. And we often do all this simultaneously, so attention bounces between two (or three or eight) fast-paced tasks. The theory is that the brain's plasticity turns this quick mental pivoting into a habit, rendering us unable to sustain attention.

But there's little evidence that attention spans are shrinking. Scientists use "span" to mean two separate things: how much we can keep in mind, and how well we can maintain focus. They measure the former by asking people to repeat increasingly long strings of digits in reverse order. They measure the latter by asking people to monitor visual stimuli for occasional, subtle changes. Performance on these tests today looks a whole lot as it did 50 years ago.

Scientists also note that although mental tasks can change our brains, the impact is usually modest. For example, <u>practice with action video games</u> improves some aspects of vision, but it's a small boost, not an overhaul of how we see. Attention is so central to our ability to think that a significant deterioration would require a retrofitting of other cognitive functions. Mental reorganization at that scale happens over evolutionary time, not because you got a smartphone.

But if our attention span is not shrinking, why do we feel it is? Why, in a <u>2012 Pew</u> survey, did nearly 90 percent of teachers claim that students can't pay attention the way

they could a few years ago? It may be that digital devices have not left us unable to pay attention, but have made us unwilling to do so.

The digital world carries the promise of amusement that is constant, immediate and limitless. If a YouTube video isn't funny in the first 10 seconds, why watch when I can instantly seek something better on BuzzFeed or Spotify? The Internet hasn't shortened my attention span, but it has fixed a persistent thought in the back of my mind: Isn't there's something better to do than what I'm doing?

Are we more easily bored than we were 20 years ago? Researchers don't know, but recent studies support the suggestion that our antennas are always up. People's performance on basic <u>laboratory tests of attention</u> gets worse if a cellphone is merely visible nearby. In <u>another experiment</u>, people using a driving simulator were more likely to hit a pedestrian when their cellphone rang, even if they had planned in advance not to answer it.

The direct prediction offered by digital critics — our phones are really pocket-size deep fryers for the mind — may be untrue, but the alternative I've suggested sounds nearly as bad. The appetite for endless entertainment suggests that worthier activities will be shoved aside. We may buy Salman Rushdie's book, but we'll end up sucked in by Flappy Bird.

That doesn't quite seem to be the case, either. Research shows, for example, that the amount of leisure reading hasn't changed with the advent of the digital age. Before we congratulate ourselves, though, let's acknowledge that brainier hobbies have never been that popular. There have always been ways to kill time.

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