

Are Smartphones Making Us Stupid?

The mere presence of your smartphone can reduce cognitive capacity, study finds.

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[Cognitive](#) capacity and overall brain power are significantly reduced when your smartphone is within glancing distance—even if it’s turned off and face down—according to a recent study. This new report from the University of Texas at Austin, “[Brain Drain: The Mere Presence of One’s Own Smartphone Reduces Available Cognitive Capacity.](#)” was published in the *Journal of the Association for [Consumer](#) Research*.

During this study, the UT Austin researchers found that someone's ability to hold and process data significantly improved if his or her smartphone was in another room while taking a test to gauge attentional control and cognitive processes. Participants who kept their phones in a pocket or bag also outperformed those who kept their phones on the desk while taking the same test. Again, even if the phone was turned off and face down on the desk, the mere sight of one's own smartphone seemed to induce "brain drain" by depleting finite cognitive resources.

In June 2016, another study reported that the typical smartphone owner interacts with his or her phone an average of 85 times per day. This includes immediately upon waking up, just before going to sleep, and oftentimes in the middle of the night. *(For the record: Although I hate to admit it, I am a heavy smartphone user and these statistics accurately describe my waking and [sleeping](#) phone habits.)*

Have you ever experienced a lack of focused attention and distractibility caused by the "itch that needs to be scratched" temptation to constantly keep checking your smartphone? I have. If left to my own devices, I would check my phone incessantly. Therefore, I make a conscious daily effort to physically distance myself from my smartphone whenever possible. As a real-time example, I purposely left my smartphone locked in the glove compartment of my car while I'm writing this blog post at a local coffee shop.

It's nice to have some empirical evidence to remind us all to keep our smartphones out of sight whenever we need to be fully present and in the moment. This new clinical research from the [McCombs School of Business at The University of Texas at Austin](#) also serves to reinforce the validity and importance of "smartphone-distancing behaviors" in other aspects of life, such as while driving or socializing face-to-face with [friends](#) and family.

We all understand the joys of our always-wired world—the connections, the validations, the laughs...the information. But we are only beginning to get our minds around the costs. —Andrew Sullivan (2016)

For their latest research on the reduction of cognitive capacity caused by the mere sight of one's own smartphone, [Adrian Ward](#) and co-authors from McCombs conducted two different experiments with nearly 800 smartphone users.

In the first experiment, the researchers asked study participants to take a series of tests that required full [concentration](#) and gauged cognitive capacity while sitting at a desk. Before the test began, all participants were instructed to put their phones in “silent” airplane mode. Then, participants were randomly assigned to place their smartphones either on the desk face down, in their pocket or personal bag, or in another room. As mentioned earlier, the researchers found that participants who left their phones in another room

significantly outperformed those with their phones anywhere physically close to them while taking the test.

In the second experiment, the researchers found that participants who had been identified as extremely dependent on their smartphones performed much worse on cognitive tests than their less-dependent peers if they kept their smartphones on the desk, in their pocket, or in a bag. The good news is that when the smartphone was placed in another room, all study participants—regardless of someone's pre-existing degree of smartphone dependence—performed equally well on cognitive capacity tests.

Adrian Ward summed up his team's research findings in a statement to UT Austin: "We see a linear trend that suggests that as the smartphone becomes more noticeable, participants' available cognitive capacity decreases. Your conscious mind isn't thinking about your smartphone, but that process—the process of requiring yourself to not think about something—uses up some of your limited cognitive resources. It's a brain drain."

One of the most valuable takeaways from this study is that it doesn't seem to matter whether your smartphone is turned on or off—or whether it's face up or face down on a desk close to you...Just having your smartphone within sight can reduce your proficiency on cognitive tasks that require your undivided attention. Luckily for all of us, putting your smartphone in another room, a pocket, or the bottom of a bag seems to be an easy remedy for this problem.

Remember: Anytime you (or your children) need to optimize attentional control and cognitive function, keeping smartphones out of sight helps to boost brain power and minimize brain drain.

References

Adrian F. Ward, Kristen Duke, Ayelet Gneezy, Maarten W. Bos. Brain Drain: The Mere Presence of One's Own Smartphone Reduces Available Cognitive Capacity. *Journal of the Association for Consumer Research*, 2017; 2 (2): 140 DOI: [10.1086/691462](https://doi.org/10.1086/691462)