

## SCIENCE

# Why We Can't Look Away From Our Screens

## Leer en español

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A CONVERSATION WITH MARCH 6, 2017

In a new book, “Irresistible: The Rise of Addictive Technology and the Business of Keeping Us Hooked,” the social psychologist Adam Alter warns that many of us — youngsters, teenagers, adults — are addicted to modern digital products. Not figuratively, but literally addicted.

Dr. Alter, 36, is an associate professor at the Stern School of Business at New York University who researches psychology and marketing. We spoke for two hours last week at the offices of The New York Times. Our conversation has been edited and condensed for clarity and brevity.

**Q. What makes you think that people have become addicted to digital devices and social media?**

**A.** In the past, we thought of addiction as mostly related to chemical substances: heroin, cocaine, nicotine. Today, we have this phenomenon of

behavioral addictions where, one tech industry leader told me, people are spending nearly three hours a day tethered to their cellphones. Where teenage boys sometimes spend weeks alone in their rooms playing video games. Where Snapchat will boast that its youthful users open their app more than 18 times a day.

Behavioral addictions are really widespread now. A 2011 study suggested that 41 percent of us have at least one. That number is sure to have risen with the adoption of newer more addictive social networking platforms, tablets and smartphones.

### **How do you define “addiction”?**

The definition I go with is that it has to be something you enjoy doing in the short term, that undermines your well-being in the long term — but that you do compulsively anyway.

We're biologically prone to getting hooked on these sorts of experiences. If you put someone in front of a slot machine, their brain will look qualitatively the same as when they take heroin. If you're someone who compulsively plays video games — not everyone, but people who are addicted to a particular game — the minute you load up your computer, your brain will look like that of a substance abuser.

We are engineered in such a way that as long as an experience hits the right buttons, our brains will release the neurotransmitter dopamine. We'll get a flood of dopamine that makes us feel wonderful in the short term, though in the long term you build a tolerance and want more.

### **Do the designers of the new technologies understand what they're doing?**

The people who create video games wouldn't say they are looking to create addicts. They just want you to spend as much time as possible with their products.

Some of the games on smartphones require you to give money as you play, so they want to keep you playing. The designers will build into a game a certain

amount of feedback, in the same way that slot machines offer an occasional win to hold your interest.

Not surprisingly, game producers will often pretest different versions of a release to see which one is hardest to resist and which will keep your attention longest. It works.

For the book, I spoke with a young man who sat in front of his computer playing a video game for 45 consecutive days! The compulsive playing had destroyed the rest of his life. He ended up at a rehabilitation clinic in Washington State, reSTART, where they specialize in treating young people with gaming dependencies.

### **Do we need legislation to protect ourselves?**

It's not a bad idea to consider it, at least for online games.

In South Korea and China, there are proposals for something they call Cinderella laws. The idea is to protect children from playing certain games after midnight.

Gaming and internet addiction is a really serious problem throughout East Asia. In China, there are millions of youngsters with it, and they actually have camps where parents commit their children for months and where therapists treat them with a detox regime.

### **Why do you claim that many of the new electronic gadgets have fueled behavioral addictions?**

Well, look at what people are doing. In one survey, 60 percent of the adults said they keep their cellphones next to them when they sleep. In another survey, half the respondents claimed they check their emails during the night.

Moreover, these new gadgets turn out to be the perfect delivery devices for addictive media. If games and social media were once confined to our home computers, portable devices permit us to engage with them everywhere.

Today, we're checking our social media constantly, which disrupts work and everyday life. We've become obsessed with how many "likes" our Instagram photos are getting instead of where we are walking and whom we are talking to.

### **Where's the harm in this?**

If you're on the phone for three hours daily, that's time you're not spending on face-to-face interactions with people. Smartphones give everything you need to enjoy the moment you're in, but they don't require much initiative.

You never have to remember anything because everything is right in front of you. You don't have to develop the ability to memorize or to come up with new ideas.

I find it interesting that the late Steve Jobs said in a 2010 interview that his own children didn't use iPads. In fact, there are a surprising number of Silicon Valley titans who refuse to let their kids near certain devices. There's a private school in the Bay Area and it doesn't allow any tech — no iPhones or iPads. The really interesting thing about this school is that 75 percent of the parents are tech executives.

Learning about the school pushed me to write, "Irresistible." What was it about these products that made them, in the eyes of experts, so potentially dangerous?

### **You have an 11-month-old son. How do you interact with your technologies when you're with him?**

I try not to use my phone around him. It's actually one of the best mechanisms to force me not to use my phone so much.

### **Are you addicted to this stuff?**

Yeah, I think so. I've developed addictions from time to time to various games on my phone.

Like many of the people in the survey I mentioned earlier, I'm addicted to email. I can't stop checking it. I can't go to bed at night if I haven't cleared my inbox. I'll keep my phone next to my bed, much as I try not to.

The technology is designed to hook us that way. Email is bottomless. Social media platforms are endless. Twitter? The feed never really ends. You could sit there 24 hours a day and you'll never get to the end. And so you come back for more and more.

### **If you were advising a friend on quitting their behavioral addictions, what would you suggest?**

I'd suggest that they be more mindful about how they are allowing tech to invade their life. Next, they should cordon it off. I like the idea, for instance, of not answering email after six at night.

In general, I'd say find more time to be in natural environments, to sit face to face with someone in a long conversation without any technology in the room. There should be times of the day where it looks like the 1950s or where you are sitting in a room and you can't tell what era you are in. You shouldn't always be looking at screens.

### ***Correction: March 8, 2017***

An answer in the "A Conversation With" article on Tuesday, in which Adam Alter, a social psychologist, talked about his new book, "Irresistible: The Rise of Addictive Technology and the Business of Keeping Us Hooked," misstated the year Steve Jobs said in an interview that his children did not use iPads. It was 2010, not 2012. (Mr. Jobs died in 2011.)

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