Psychologists speak out against tech companies that use "persuasive design" to lure in kids

Chavie Lieber   August 8, 2018
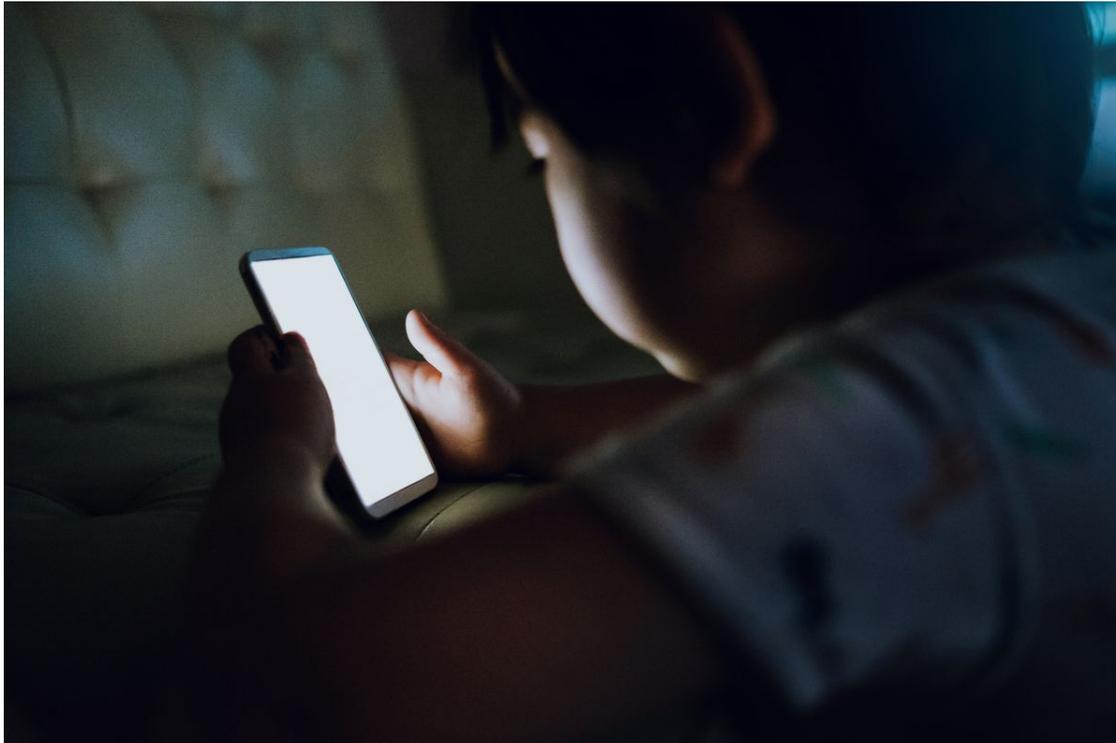
Kids now have 10 times the amount of screen time they did in 2011, according to one study.
Getty Images

As much as adults are now constantly inundated with technology — those constant Facebook notifications and that next episode on Netflix already cued up — children today are even more primed to become hooked on their devices. Kids have 10 times the amount of screen time they did in 2011, and spend an average of six hours and 40 minutes using technology, according to Common Sense Media.

Behind the screens of the games we play and digital communities we interact with are psychologists and other behavioral science experts, who are hired to create products that we want to use more and more. Big tech now employs mental health experts to use persuasive technology, a new field of research that looks at how computers can change the way humans think and act. This technique, also known as persuasive design, is built into thousands of games

and apps, and companies like Twitter, Facebook, Snapchat, Amazon, Apple, and Microsoft rely on it to encourage specific human behavior starting from a very young age.

While defenders of persuasive tech will say it can have positive effects, like training people to take medicine on time or develop weight loss habits, some health professionals believe children's behaviors are being exploited in the name of the tech world's profit. On Wednesday, a letter signed by 50 psychologists was sent to the American Psychological Association accusing psychologists working at tech companies of using "hidden manipulation techniques" and asks the APA to take an ethical stand on behalf of kids.

Richard Freed, a child and adolescent psychologist and the author of *Wired Child: Reclaiming Childhood in a Digital Age*, is one of the authors of the letter, which was sent on behalf of the nonprofit Campaign for a Commercial-Free Childhood. I spoke to Freed about how tech companies are able to manipulate human behavior and why he believes psychology is being used as "a weapon against children."

This interview has been edited and condensed.

Chavie Lieber

Where did the field of persuasive technology come from?

Richard Freed

The founding father of this research is B.J. Fogg, a behavioral scientist at Stanford University [where there's a lab dedicated to this field]. Fogg has been called the "millionaire maker," and he developed an entire field of study based off research that proved that with some simple techniques, tech can manipulate human behavior. His research is now the blueprint for tech companies who are developing products to keep consumers plugged in.

Chavie Lieber

How did his research become so popular in the tech world?

Richard Freed

Fogg spent half his time educating [at Stanford] and [the other half] consulting with the industry. He taught classes on the concept, and people that attended such classes include Mike Krieger, who went on to co-found Instagram. [Fogg is] a guru in Silicon Valley, where tech companies follow his every word. Over time, tech companies have tested his research and iterated it, and then

designed their machines and smartphones and games around it. Now it is remarkably effective, and the model is giving the tech industry what it wants: to keep you on and not let you go.

Chavie Lieber

How does persuasive design work?

Richard Freed

It's actually quite simple, although studied at length, it is sophisticated. The formula is that in order to have behavioral change, you need motivation, ability, and triggers. In the case of social media, the motivation is people's cravings for social connection; it can also be the fear of social rejection. For video games, it's the desire to gain skills and accomplishments. Ability basically means making sure that the product is remarkably easy to use.

Finally, you add triggers, which keeps people coming back. So those videos you can't look away from, the rewards you get inside an app when you use it longer, or the hidden treasure boxes in games once you reach a certain level — these are all triggers, put there as part of the persuasive design.

Chavie Lieber

I can see how the "trigger" technique is used at Snapchat, where users get badges when they're on the app more. Can you give me some other examples of how tech companies use it?

Richard Freed

All social media companies are built with it. When you sign on to Twitter, sometimes it won't give you notifications right away. You might get it in a few seconds. Twitter doesn't want to give it to you on purpose, because they've instead developed a formula for you that will keep you on the site. Facebook will also save up notifications and give them to you on a schedule that they believe will most likely stimulate you to get you back. The iPhone and Apple [are guilty too] because I think of the iPhone as a conduit where kids access the persuasion tech of social media and video games, and it's more dangerous for them.

Chavie Lieber

Why is persuasive design more dangerous for children than adults?

Richard Freed

Adults get affected by not working [at their jobs] properly and are getting more distracted. But kids are being robbed. The type of manipulation and

isolation persuasive technology creates pulls kids away from real-life engagements like family, focusing on school, making friends. There are adolescent [cornerstones], and children are being pulled away from the lives they need.

As a population, kids are also more vulnerable [to the techniques]. Teenagers are sensitive to social situations, like being accepted or rejected, and social media is built to prey on these insecurities.

Chavie Lieber

What does this look like in real life for children?

Richard Freed

Everyone is attached to their screens, but specific problems vary by gender. Video games are more addictive for boys. Boys have a developmental drive to gain abilities and accomplishments, and so video games are created to give them rewards, coins, cash boxes. These are built to make them feel like they are mastering something; it creates bad [gaming] habits and statistically poor academic performance.

Girls, on the other hand, are more inclined to fall prey to social media, and there are serious effects on mental health struggles, since social media can be hurtful for young girls, and there's been an increase in suicide.

Chavie Lieber

Haven't medical professionals always had a problem with video games?

Richard Freed

Yes, but now companies are making sure persuasive design is built in. And we're talking about companies with infinite resources hiring psychologists and other UX designers who are the best and the brightest and use experimental methods tested over and over until they've obtained products that don't let users go.

Chavie Lieber

Is it public knowledge that psychologists are helping big tech?

Richard Freed

I don't think the general public is aware of it. I have so many parents who say they've lost kids' [attention] to social media, but they have never heard of Dr. Fogg, and they definitely haven't heard of persuasive design. But you can go

onto LinkedIn and find psychologists working for , Instagram, and tons of gaming companies. There are *so many* psychologists doing persuasive design at Microsoft's Xbox — just look <u>at their team list</u>.

Not every tech company has them on staff; some companies hire them as outside consultants, and not everyone has a PhD or is a psychologist. Some experts are called UX researchers and have a different certification, but a lot of them are psychologists.

Chavie Lieber

Would these mental health professionals admit they are exploiting scientific research?

Richard Freed

I think they would probably say their job is to create a more attractive product, to make it more user-friendly, and that's in the service of the general public. But it goes way beyond that. I think there's a disconnect between the tech industry and the rest of the world. Silicon Valley and Stanford are in their own little bubble, and I wonder if they are aware of the consequences. These psychologists work in tech, so they see the product and the users' reviews, but I work with kids and families and I see it otherwise. They are so removed from what's happening in the life of real kids.

Chavie Lieber

Have tech companies and their manipulation tactics ever been fully exposed?

Richard Freed

We were given one window into what was happening when Facebook internal documents <u>were leaked to the Australian</u>, where Facebook openly talked about exploiting the emotions of teens, [tracking teens feeling "insecure," "worthless," "stressed," "useless," and like a "failure"]. They were bragging to stakeholders about their ability to do this.

Chavie Lieber

Have you seen any public objections to the use of persuasive technology?

Richard Freed

There have actually been people talking about it within the tech world itself. Tristan Harris [who worked at Google before <u>starting a nonprofit</u> aimed at developing ethics around this topic] has <u>spoken out</u> about this. Sean Parker, Facebook's first president, <u>told Axios</u> that the company's initial thought process is "how do we consume as much of your time and conscious attention

as possible?" Big investors at Apple also put out a public letter saying they were concerned about how kids were using phones to access social media.

I give credit to these tech executives speaking out. But then again, they have the financial freedom and leverage to do so. I recognize that the psychologists in the industry are in a tough spot because they probably can't afford to do so without losing their livelihood.

Chavie Lieber

Tech companies want people to use their product and only their product. But what is the endgame for them with persuasive technology?

Richard Freed

It's about dollar signs. Time spent on social media apps means more people will be looking at ads longer, and that will increase their revenue. With video games, the more you spend time on the game, the more you'll purchase [add-ons]. It's an attention economy, and it's the job of these psychologists to make sure people look at these things for as long as possible.

Chavie Lieber

Could the way persuasive design is used on kids get worse?

Richard Freed

It can, and I definitely don't think it's going to get better. There's too much money to be made. If these companies back off, they know some other company will come up and take their place. And Facebook's capabilities are just getting better, and they want to get kids involved, with Facebook's Messenger Kids.

We not to market a social network to young kids in a letter (that they never responded to) because we know how social media is pulling down teens, especially teenage girls. It's costing kids their emotional health, and it cannot start earlier.

Chavie Lieber

Will the tech world regret all of this once they have teenage kids of their own?

Richard Freed

Tony Fadell [who created the iPhone and iPod] believes people will regret it once they have kids. But people complain about the male ethic on the employment side of Silicon Valley, and how it's not welcoming for women, and

I think that's manifested on the product side too. The focus is on venture capital and money and stock prices. Kids don't seem a part of the equation here.

Chavie Lieber

Why does your letter call out the APA specifically?

Richard Freed

The psychology community needs to step up. I think psychology is going to be in remarkable trouble when parents find out that psychologists are developing the very products they can't get their kids off of. The essence of these people's jobs is to exploit vulnerabilities in order to change their behavior for profit, and that isn't the job of a psychologist.

Chavie Lieber

What do you think the APA should be doing?

Richard Freed

The primary focus of this field is improving health, and yet here's too large an element of the profession working against kids' health and fostering the compulsive use of technology. The APA needs to issue a formal statement that psychologists can't be involved in persuasive design, with the purpose of increasing phone and screen use. The APA should also be asking psychologists in the industry to come out and be a force for good. They need to help get the message across that this is a real danger that won't go away, and help us learn more about how it's such a risk for people of all ages, especially kids.