JUST ASKING QUESTIONS | MAY 8, 2023

The Grim New Consensus on Social Media and Teen Depression

By Benjamin Hart, associate editor at Intelligencer who joined New York in 2017

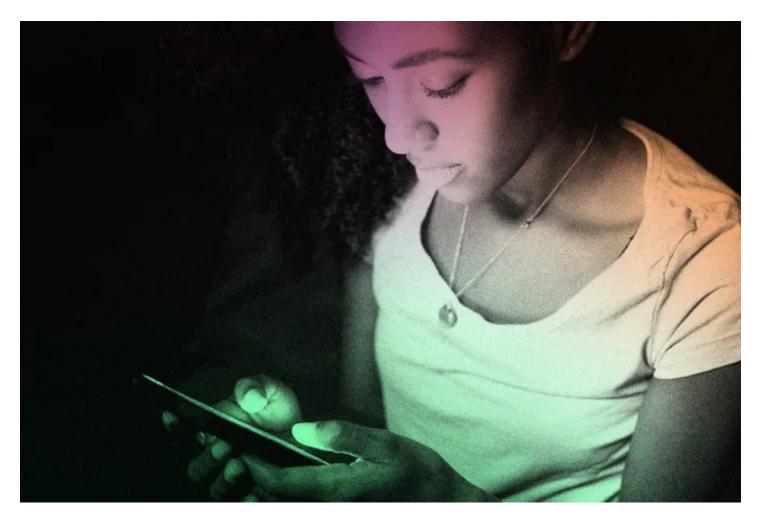
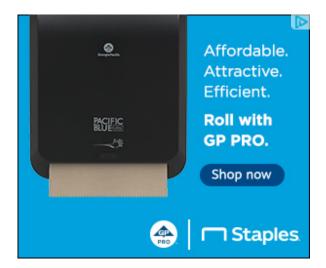


Photo-Illustration: Intelligencer; Photos: Getty

sychologist Jean Twenge has made her name puzzling out the differences between generations. In 2006's <u>Generation Me</u>, Twenge, who is a professor at San Diego State University, described millennials as entitled and confident yet unsatisfied. In 2017's <u>iGen</u>, she characterized Gen Z as cautious to a fault, addicted to their phones, and miserable. An <u>adapted excerpt</u> from that book in <u>The Atlantic</u> helped ignite a debate about the connection between rising <u>teen depression and anxiety</u> and the smartphones that had become ubiquitous several years earlier. Twenge's new book, aptly titled <u>Generations</u>, uses troves of data to explore differences — largely tech-driven — between age cohorts.

Critics of Twenge's work have accused her of <u>exhibiting confirmation bias</u> in how she presents data and ignoring <u>alternate explanations</u> for teen unhappiness. (The notion that generations are so easily definable in the first place is another general area of dispute.) But as the rates of serious depression among young people — especially girls — <u>grows more alarming</u> and <u>persuasive new research</u> emerges about its causes, her theory of the case on teen misery is looking increasingly solid. I spoke with Twenge about how thinking about this phenomenon has changed in the last few years, whether she thinks new state laws on social media might be the way forward, and whether the state of the world has prompted fatalism among young people.



When your *Atlantic* story came out in 2017, it helped kick-start the conversation around social media and teen depression. For a long time, there was considerable pushback to the idea that the two were inextricably linked. A lot of people made the point that even though "technology is making kids miserable" was an intuitive idea, there wasn't enough empirical proof to really prove it. Here's the opener of a <u>2020 New York *Times* piece</u>: "It's become common wisdom that too much time spent on smartphones, et cetera, is

responsible for a recent spike in anxiety and depression. But a growing number of academic researchers have produced studies suggesting that common wisdom is wrong."

Sign up for Dinner Party A lively evening newsletter about everything that just happened. Enter your email SIGN UP

But now it feels like a lot of that resistance has melted away. There's far more consensus that smartphones are a major factor in this crisis, even if they're not the only one. Why is that? Better research? Or are people just more thoroughly digesting what they're seeing in front of them?

I think there's a number of factors. One is I think it's becoming increasingly clear that correlational studies finding there was no link between social-media use and depression had some pretty significant flaws. That New York *Times* article that you're referring to, if I remember right, had a picture of Candice Odgers in it, right?

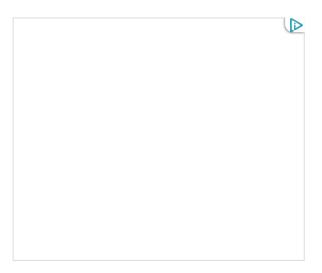
Yes, that's right.

One of the studies she frequently presents measured social-media use from "never" to "every day," and then looked at any links to happiness or well-being. Well, when teens use social media now, if they do at all, they use it every day. So that's a really poor measure. And speaking very broadly, daily social-media use is usually not the issue — excessive use is. It's three, or especially five, or seven, or more hours a day of social media where you find the strong links to depression.

The bigger one was an Orben and Przybylski <u>paper in Nature Human Behaviour</u> in January 2019. That paper was very often cited as being about social media and depression. But even just the scan of the title on the abstract shows it was actually about all screen time. They included TV; they included even owning a computer, and they threw all these things together. And so not only did they not zero in just on social-media use, there were also several really significant flaws in their method, which I pointed out in a paper.

But for the sake of argument, let's set aside whatever I did. Two other research groups also concluded that the same datasets Orben and Przybylski used showed significant links between social-media use and depression. Yvonne Kelly and her colleagues had a paper come out the same month as Orben and Przybylski's, showing that girls who spent five or more hours a day on social media were three times as likely to fit clinical criteria for depression as nonusers of social media. And then several years later, after we had gotten the data, and the code, and

been able to use the same sophisticated statistical technique they did, we found the same thing.



So a pattern begins to emerge.

The same month our paper came out, two researchers in Spain posted another paper on a preprint server. They're not only not collaborators of mine — I had never met them or heard of them. And they used the same sophisticated statistical technique, but similar to us, narrowed in more on social media. And they came to many of the same conclusions about some of the flawed analyses in the Orben and Przybylski paper. So I think three independent research groups coming to different conclusions than Orben and Przybylski really started to change the conversation as well. And there are other elements; those are just some examples.

The other piece here is that when the *Atlantic* article came out, that was an excerpt of my 2017 book. If I remember correctly, we only had data up until 2015, and these increases in depression started around 2012. So we really only had a few years of data. For a lot of folks, the idea was, "Maybe this is a blip that's going to go away, and who knows what the cause is." My theory was: If it is phones and social media, and if phones and social media continue to rise in popularity and frequency of use, then the rise in depression should continue. If it's something else, say economic circumstances, or some other, one time event, it should fade. And what happened is it kept going.

As you mentioned before, the notion of "screen time" is a vague concept. But now it feels like researchers have gotten more savvy about which kind of screen time in particular, and how much of it, could be dangerous.

I think so too. Something I became more interested in was, is it everything on a screen or is there a stronger link to depression with certain activities versus others? So one of my papers a couple years ago was titled "Not All Screen Time Is Created Equal."

Have you gotten to the point where you can point to certain apps that you think might be worse than others? Is there a hierarchy of misery there?

The paper I just mentioned looked at the "social media versus gaming" question. And yes, the links to depression are stronger for social media. That's true even if you look at boys and girls separately, which I know sounds like a detail, but it's not. That's really, really important in this area of research, because girls spend more time on social media, boys spend more time on gaming, and there's a significant sex difference in depression. So you have to look at them separately, or at least control for gender.

You believe that social media itself is a major driver of harm. But I'm wondering about the opportunity costs of using it, too. Because your findings show that young people are going out less, they're hanging out with one another less; they're overall a lot less independent than previous generations. If they lived lives that encompassed both heavy use of social media and the more traditional markers of young adulthood, would that mostly allay the problem? Or is social media just by itself enough to do this damage? I think it would be less, but it would still be there.

This is the thing about the rise of social media and excessive use of social media: There's so many possible mechanisms. There's the fact that they have less time for seeing friends face-to-face, which happens at the group level, too. Even if you don't use social media, who are you going to go out with when your friends are all on Instagram and going out in person is no longer the norm?

Then there's the displacement of other beneficial activities like exercise and sleep. Not getting enough sleep is a major risk factor for mental-health issues, and teens started sleeping less right around 2012. Again, right around that turning point for social media and smartphones. And data I published shows that, not surprisingly, the teens who spend a lot more time on portable electronic devices are not sleeping as much. Then there's content. And I think that's the other way that the research has really evolved in the last six years, is we know a lot more about the impact of content.

Meaning?

Meaning social comparison, lots of body-image issues, especially for teen girls and young women; cyberbullying, sexual exploitation, going down rabbit holes of negative content, and then not being able to reset because the algorithms think this is the content you want to see. There's just so many other problems. And some of the research in that area around the problematic content was done by Meta themselves.

That's what Frances Haugen's leaked documents showed.

There's obviously a flip side to this, which is that the internet often makes people feel less alone as well — both young people and adults. There are shy or weird or socially awkward kids who would have no community whatsoever in the old days, the old, supposedly better days, who can now sometimes find that community online.

That's the argument and an area where I think there's intuitive appeal to that, but not a ton of research.

So you just need a few more years to delve into that more thoroughly, you think? Perhaps. I don't know, and I'd have to look into this to see if it has been done. But is there research showing that, say, LGBTQ kids in rural areas, where they may not be able to find a community in person, are better off if they spend a lot of time online versus less? I don't know if that's been addressed. I don't know if that research is out there.

You'd have to design that experiment very, very carefully. Yes, exactly.

You speak to a lot of kids and young adults for your books. To what extent do they agree with your hypothesis? Do they think, *Yeah*, *this is screwing us up*? And is there any kind of real anti-smartphone movement among the young, other than a few kids in Brooklyn? I should be clear that the people I've talked to are not a representative sample. This is why most of the research that I do *is* based on nationally representative samples. But I did a bunch of interviews for *iGen*, the 2017 book, and then I also gave a lot of talks on that book at middle schools and high schools. What I find the most often is that kids adamantly say, "We do not want our phones taken away" — they use that phrase very specifically. But then they also say, "Having a break from it is nice. And yeah, I don't feel good when I'm on social media," and "I don't want to spend this much time on social media, but I don't know how to stop."

That's relatable.

I think a lot of people feel that way. And I've seen a few young people who have started conversations around this issue over the last few years. Emma Lembke, who's a college student at, I think, Washington U. in St. Louis, did a really interesting interview with the *Times*, talking about how she had a very negative experience with Instagram as a young teen. She started a movement called Log Off to get young people talking about this issue of cutting back on social media, on letting it take over your life. So there's more conversation around that.

encer