

The New York Times

GUEST ESSAY

Does Instagram Harm Girls? No One Actually Knows.

Oct. 10, 2021

By Laurence Steinberg

Dr. Steinberg is a professor of psychology who has written nearly 500 articles and essays on development during the teenage years.

See more of our coverage in your search results.

Add The New York Times on Google ↗

Defendant's Exhibit**DX3417**

Case Number:
D-101-CV-2023-02838

Amid the pillorying of Facebook that has dominated the latest news cycle there is an inconvenient fact that critics have overlooked: No research — by Facebook or anyone else — has demonstrated that exposure to Instagram, a Facebook app, harms teenage girls' psychological well-being.

Last month The Wall Street Journal reported that Facebook's "own in-depth research shows a significant teen mental-health issue that Facebook plays down in public." That story turned into an even bigger one when Frances Haugen, a former Facebook employee who had leaked internal company documents to The Wall Street Journal, revealed her identity on "60 Minutes" and then gave testimony before a Senate subcommittee.

One of Ms. Haugen's most serious claims was that Facebook had purposely hid research showing that teenagers felt worse about themselves after using its products. It is easy to assume that this damning research was reliable. But that assumption is unwarranted. A review of the Facebook documents, now available online, reveals that the findings of that research are inconclusive.

According to the documents, Facebook conducted surveys and focus groups in which people were asked to report how they thought they had been affected by using the Instagram app. Three in ten adolescent girls reported that Instagram made them feel worse about themselves.

On the face of it, this correlation between Instagram use and self-reported psychological distress is concerning. But such a finding should be used as a starting point for research, not as a conclusion. Psychological research has repeatedly shown that we often don't understand ourselves as well as we think we do. Scientific studies of human behavior seek to go beyond individuals' own accounts of why they feel what they feel or why they behave as they do.

Sign up for the Opinion Today newsletter Get expert analysis of the news and a guide to the big ideas shaping the world every weekday morning. [Get it sent to your inbox.](#)

There were other shortcomings to the research too. The Facebook studies as described in the documents didn't include a comparison group of people who didn't use Instagram, which would be crucial to drawing any inferences about the effects of Instagram use. Facebook itself notes this limitation, acknowledging in the documents that its research "did not measure directly whether Instagram makes things worse but how people who reported that they were already experiencing these issues felt Instagram impacted their experience."

Some may see this caveat as self-serving. Regardless, it happens to be true.

Psychologists agree that there has been a rise in depression and related mental health problems among young people in recent years, a trend that deserves our urgent attention. But disentangling cause and effect in correlational research that links experience and mental health is an enormous challenge.

Absent a controlled experiment in which people are randomly assigned to either have or not have an experience, we are left with several uncertainties: We cannot be sure if the experience harmed the person's mental state (in this case, that Instagram caused teenagers to become depressed); if the person's poor mental state led to the experience (that depressed teenagers are more likely than others to use Instagram, or to use it more often); or if some other, unmeasured variable (such as family conflict) contributed to both the experience and the mental state, creating the appearance of a direct association between the two factors.

The problem is that all of these interpretations are reasonable. We need much better research than that described in the Facebook documents to sort out these competing accounts. Such research would be able to control for pre-existing differences between people who do and do not use the platform, to monitor them over time to look at changes in mental health during the period tracked, and to measure mental health with standardized measures of symptoms before

and after. Ideally, such research would also compare the effects of using a social media platform with those of using other media that have the potential to harm adolescents' well-being.

To be sure, there is a growing scientific literature on the links between social media use and adolescent mental health. But as yet it is not possible to draw any firm conclusions from it, in part because very few studies have the characteristics listed above. Of the better studies that have found a negative correlation between social media use and adolescent mental health, most have found extremely small effects — so small as to be trivial and dwarfed by other contributors to adolescent mental health.

Complicating matters further is that in the Facebook surveys, twice as many respondents reported that Instagram alleviated suicidal thinking as said it worsened it; three times as many said it made them feel less anxious as said it made them feel more so; and nearly five times as many reported that Instagram made them less sad as that it made them sadder.

We should be just as skeptical about correlational research that links social media use to reports of positive well-being as we are about research that reaches the opposite conclusion. But given the widespread eagerness to condemn social media, it's important to remember that it may benefit more adolescents than it hurts. (Consider how teenagers might have fared during the pandemic without being able to communicate with friends through online platforms.)

What's the harm, you might ask, in assuming without concrete evidence that Instagram use causes adolescents to become depressed? Isn't it plausible enough at face value? Wouldn't more regulation of Instagram and other social media platforms used by young people prevent at least some teenagers from feeling bad about themselves?

This way of thinking presents its own dangers. If other factors that have contributed to the rise in adolescent depression are being overlooked in the rush to point the finger at Facebook, we may be contributing to the very problem we hope to solve. Parents who believe that they can treat a teenager's depression simply by restricting her Instagram use may end up ignoring the true causes of her suffering. Blaming Facebook for a teenager's malaise can become a convenient way of avoiding other, more uncomfortable but equally plausible explanations, such as familial dysfunction, substance abuse and school-related stress.

We are told again and again that correlation is not causation, but we readily ignore this maxim when we are looking for an account that we hope is true. At a time when Facebook is regularly vilified (sometimes deservedly), wanting to believe that its practices have caused teenagers' mental health to suffer is understandable. But wanting doesn't make it so.

Laurence Steinberg (@ldsteinberg) is a professor of psychology at Temple University and the author of “Age of Opportunity: Lessons From the New Science of Adolescence.”

The Times is committed to publishing a diversity of letters to the editor. We'd like to hear what you think about this or any of our articles. Here are some tips. And here's our email: letters@nytimes.com.

Follow The New York Times Opinion section on Facebook, Twitter (@NYTopinion) and Instagram.

A version of this article appears in print on , Section A, Page 20 of the New York edition with the headline: Does Instagram Really Harm Girls?