

New research suggests social media use can alter teenagers' brains

Social media inspires fear in adults and joy in students; the truth is more complex

BY CALI GROENEWOLD

Parents, teachers, and students have debated the issue of social media for many years. While teens generally come down on the side of enjoying social media, adults fear the negative effects of "social addiction". Now, new studies suggest that using social media can cause actual changes in the brain.

"It makes sense," 8th grade science teacher Abbie Kilgore said. "Students get involved in drama via social media and compare themselves with others."

Maria Maza is a third-year doctoral student at the University of North Carolina. There, she studies developmental psychology and neuroscience. Her research interests lie in adolescent development and how that is impacted by social media.

"There are a lot of papers that have shown that it can cause depression and there are a lot of papers that have shown that it does not cause depression," she said. "In fact, it can be protective against anxiety and depression."

Maza compares social media to schools, a place where a lot of stuff, either good or bad, can happen.

"Trying to say that it's good or bad for everybody is really difficult because there are some behaviors that are helpful and there are some behaviors that aren't very helpful," she said. "I think it can negatively impact some adolescents' development, but for others, it's been really useful. It's really like a supportive place to be able to interact with other peers."

New studies have been making national headlines about social media changing the brains of students.

"Basically, what we found was that adolescents who check their social media more frequently, they were the ones who became more and more sensitive to any form of social feedback, whether that's good social

feedback or bad social feedback, over time," she said.

Even here, Maza advises not to jump to conclusions.

"So, every time you get a notification and a comment, it might make you want to check more, but at the same time, we don't know that," she said. "That is pure speculation of what it could be doing. Another possible thing that it could be doing is just showing us a way of functioning that adolescents at this day and age kind of need to be able to navigate digital spaces."

One of the big dangers of social media, according to critics, is that adolescents develop unrealistic expectations because they constantly are comparing themselves to posts on social media.

Blakely Matheny, an 8th grade student, disagreed.

"I feel that you are who you are; don't try to be someone you aren't," she said.

Teachers like Tina McMurray worry that students don't always have the self control necessary to use social media.

"It can be bad because students may not have the self discipline to be able to 'stop the scrolling'," she said. "Also, students may hide behind the keyboard and post something on social media they may not say in person."

Another big problem on social media is cyberbullying, especially among teenagers.

"Students are way more bold on social media than in person," Kilgore said. "They say things via social media they would never say if they were there in person."

Maza agreed.

"This idea of having a screen between the people that are having these conversations, it sometimes gives people a little bit more feeling of being able to say stuff that they wouldn't say in person," she said.

Still, she cautions that these dangers exist offline, as well.

"Bullying and harassment can happen online, but again, I think it takes it back to the context that

be you found that there were more instances of bullying and discrimination, because now there's that opportunity to have them."

feature.

"It's a little scary," she said. "I keep my posts private so hopefully no stranger knows where I am. I tell my students and my own children that if you don't want parts of your life plastered on a billboard on Stone Drive, don't post it on social media."

Often, social media can turn tragic. A former Virginia state trooper, for example, allegedly kidnapped a California teenage girl he had been catfishing online after murdering her family. He met the girl online and obtained her personal information by passing himself off as someone else.

Then there's the issue of misinformation, or "fake news", which often starts and quickly spreads on social media.

"I do not believe teen brains are fully developed yet to be able to decipher such information," McMurray said.

Maza has faith that adolescents can learn to tell the difference.

"I really believe in the adolescent mind," Maza said. "I think it's incredible. I think you have the capacity to do everything that you guys want to do."

The real issue, according to Maza, is less social media and more digital literacy.

"It's basically the idea of giving tools to youth and to children to use digital spaces in a healthier and safer way," she said. "One of the

things that we often don't do enough is teach a critical perspective on what you see online. So, it's not that you

cannot do it, it's that we are not giving you the proper tools to be able to do it. Because it's difficult to read a sentence and to be like 'Is this true? It's not true? What do I do? How do I prove that it is true, or prove that it's not true?' These are all things that you have to learn to do."

The biggest complaint from teachers, by far, is that social media and cell phone use are shortening students' attention spans. According to Maza, the issue is a lot more complex. Users of social media are actually learning to switch their mindset very quickly.

"Sometimes, when we talk about attention, we're like 'oh, I have difficulty with attention because of social media', because they are turning to have a conversation or trying to do their homework, then they pick up the phone," she said. "That's not necessarily a problem with attention, that is a problem with controlling your impulses."

Although social media has dangers and potential negative consequences, Maza still believes that people should use it.

"This goes back to teaching our kids to use it safely," she said. "A lot of parents and a lot of teachers have been advocating for restrictions of use. While I think limiting use can sometimes be helpful for some teens, it's putting a bandaid on a potential problem."

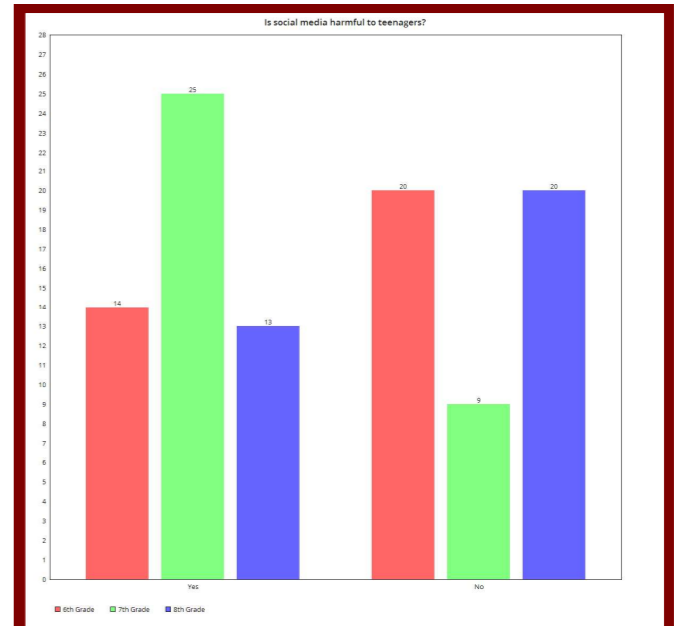
The key to avoiding the negative effects of social media is education.

"All this stems from giving adolescents the tools to be able to take those critical perspectives when they're using social media, to pause, to reflect, to be very mindful when they're using it and listen to their own body and their mind to see what's working and what's not working for them," Maza said.



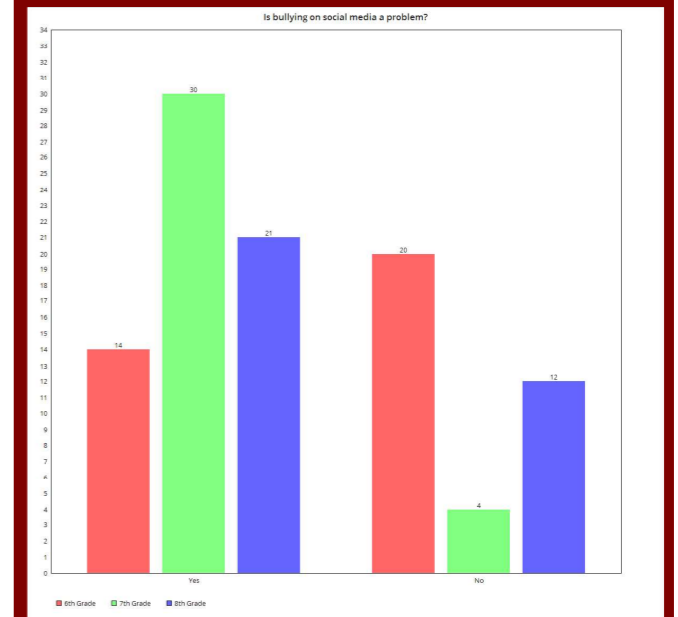
Scribe Photo/CALI GROENEWOLD

HOOKED ON SOCIAL MEDIA. A Scribe model illustrates how much time middle school students spend on social media. New research has shown that the brain actually changes with increased social media use.



Scribe Survey/ANTON BARRERA

NO HARM DONE? This Scribe poll shows that the opinion on social media is divided, with around half of the students believing that social media is harmful. The majority of seventh grade students believe it is, in fact, harmful.



Scribe Survey/ANTON BARRERA

THE DIFFICULT FEW. Bullies on social media have affected seventh grade students more than any other grade. Many students agree that bullies are a problem on social media.

SOUND OFF - Do you think social media is a good thing or a bad thing?



"It has a negative and positive impact, like they are glued to their phones."

"You can get made fun of for posting stuff."



Colton Thorton



"It's good and bad. You can go on, there to talk to friends but also, it can convince you to do drugs and other bad things."



Holly Perdue

"It's good and bad because I like keeping up with people, but it can stir up a lot of drama."



"Good, and he'll adjust some things for the greater good."



Ben Ewing

"He's currently running Twitter and now my family has abandoned Twitter."



"He's probably going to try to input something new and it isn't going to work out."



Danielle Luethke

"I think he thought it was a good idea but it's not going to work out."

SOUND OFF - What are your thoughts about Elon Musk buying Twitter?