## TikTok Brain

Since the start of the COVID-19 pandemic, the social media app TikTok has taken the world by storm. In September 2021, the app reported one billion monthly active users worldwide – and about 80 million of these users are in the United States. The age group that uses TikTok the most consists of 10 to 19-year-olds, followed second by the 20 to 29-year-old age group.

While light-hearted videos of dancing, cooking, and cute animals are both entertaining and have brought joy to so many – especially during a global pandemic that left many people feeling isolated – health experts are now warning that too much time spent on TikTok can become problematic. The term "TikTok Brain" is being used to describe some of the issues being discovered, such as shortened attention spans and even signs that are commonly seen with addiction.

TikTok in particular is so engaging because the app learns an individual's interests based on how long they watch a video, whether or not they hit the "like" button, and so on. TikTok is able to learn what the user likes and continue to feed similar content, creating a personalized experience for the user and tailoring it to someone's exact interests.

"You can be on TikTok for 45 minutes and it seems like you've only been on it for 15 minutes – and you couldn't even tell anybody what you saw on TikTok when that time is over. But they know what made you look longer and what made you scroll faster, and it's basically in 30 second increments. Where else can you get that kind of a stimulation? Every 30 seconds you are being triggered to be happy or interested, and there is not much that can compete with that," says Marybeth Evans, an OSF HealthCare licensed clinical social worker.

As someone scrolls on TikTok, endorphins are basically being released whenever they see a video that appeals to them, which leaves them wanting more.

"Basically, it's what they call intermittent reinforcement which increases a behavior rather than decreases a behavior. That's something we learn in psychology – that if you constantly punish a behavior, it goes away. But if you intermittently reinforce the behavior, it goes up," Evans explains.

Evans says that most addictions are based on intermittent reinforcement, and that even though we typically think of addictive forces as things like drugs or alcohol, addictions to seemingly less harmful things like sugar and social media can also occur. The reason this is concerning is because the brain not fully developed until age 25, and the majority of users on TikTok are children and teens.

TikTok recently added an option for to create videos that are up to 10 minutes long; however, the large majority of its videos are still 30 seconds long or less. This not only leaves people wanting more, but early studies have shown it could impact a child or teen's attention span in the long run. Evans says it is important to make sure you are spending quality time with loved ones in person as well – not only behind the screen – as face-to-face interactions and conversations can be beneficial in combatting the negative effects of too much time spent scrolling through mindless videos.

Furthermore, even more endorphins are also released whenever people make their own TikTok video and people "like" and leave comments on it, turning the app into a popularity contest for young people. Many teens end up comparing themselves to other people their age, which can be detrimental for mental health.

"I think people don't realize that social media is a lot of acting. People are not really living like that. They are creating a scenario which makes them look like they are the happiest people in the world," says Evans.

Although the early data surrounding "TikTok Brain" can be concerning, TikTok is not a horrible social media platform that people should avoid. Evans just advises people who enjoy watching or making TikTok videos to focus on the lighthearted fun that it brings. She adds it is important to remember that when you are on social media, you are only seeing a small glimpse into someone's life – and what people choose to share on social media and TikTok is carefully created before it is posted.

"Family videos I think are very cute. You see a dad dancing with his child or something like that. But I think that has to be in moderation. Any dad that dances with his child probably also has days where he is not dancing with his child. And it would be unrealistic to think that that's the kind of mood that a dad needs to be in every day, because it's not true," Evans cautions.

Her number one tip? Don't take TikTok too seriously, have fun, and take daily social media breaks.

TikTok offers a Family Pairing setting that not only allows parents to set a limit on their teen's watch time, but also allows parents to limit content that is shown to their teen, manage their teen's privacy and safety settings, and choose whether their account is private or public. In addition to customizing settings directly on the TikTok app, both Apple and Android offer parental controls to limit app time and there are various "focus" modes that also can be used to limit the notifications that come through to your phone. Evans also recommends setting a timer for 15 minutes or less before you start scrolling on TikTok, and taking a social media break once the timer goes off.

If you think your child or teen is struggling with "TikTok Brain" and is showing any signs that they are struggling with their attention span or that could signal a true social media addiction, but setting restrictions and social media breaks is not helping, talk to a mental health expert or your child's primary care provider.