


# Why we can't stop checking Facebook

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Vivek Wadhwa

Facebook's recent acknowledgment that social media may be making its users feel bad in some cases is a significant milestone. So far, the technology industry hardly has talked about the downsides of their products. Now a realization seems to be setting in that perhaps something has gone wrong along the way.

Academic research that Facebook cited in a corporate blog post in December documented that when people spend a lot of time passively consuming information they feel worse. For example, reading Facebook posts for even 10 minutes can put people in a bad mood, and clicking or liking too many links and posts can have a negative effect on mental health. Some researchers also believe that reading rosy stories about others leads to negative comparisons about one's life and that being online too much reduces in-person socializing.

Although Facebook said that, as a result of the assessments, it would make some changes to its platform (e.g. give people more control of what they see and help with suicide prevention), it also highlighted some of the benefits of using the social network. It pointed to research it helped conduct, which concludes that "sharing messages, posts and comments with close friends and reminiscing about past interactions" can make people feel better. Facebook said it is working with sociologists and scientists to find ways to enhance "well-being through meaningful interactions" and more-active engagement.

"In sum, our research and other academic literature suggests that it's about how you use social media that matters when it comes to your well-being," Facebook said. It posits that if we engage or interact with others more on its platform, we will be happier.

But that approach doesn't seem to be an effective solution for those who can't pull themselves away from such platforms. The Pew Research Center estimates that 24 percent of teens go online "almost constantly," for example. It is becoming a matter of addiction.

In July 2016, former Google "design ethicist" Tristan Harris published the essay "The Slot Machine in Your Pocket," which detailed the many ways in which technology affects people's minds and makes them addicted. He drew a direct line of descent to phones and computer screens from the numerous techniques that slot-machine designers use to entice gamblers to sit for hours losing money.

These techniques are similar to the work of psychologist B.F. Skinner, who in the 1930s put rats in boxes and taught them to push levers to receive a food pellet. They would push the levers only when hungry, though. To get the rats to press the lever repeatedly, even when they did not need food, he gave them a pellet only some of the time, a concept now known as intermittent variable rewards.

The casinos took variable rewards to a new level, designing multiple forms of rewards into slot machines. Those machines now bring in the majority of casino profits. Players not only receive payouts at seemingly random intervals but also partial payouts that impart the feeling of a win even if the player in fact loses money overall on a turn.

These techniques entice humans to keep playing, because our brains are hard-wired to become addicted to variable rewards, as Skinner had found. And it is intermittent variable rewards that have us checking our smartphones for emails, new followers on Twitter or more likes on photographs we posted on Facebook.

The "bottomless bowl" of information we are served also leaves us always seeking more.

Cornell University researcher Brian Wansink led a 2005 study that found that people who ate soup from bowls that had a tube in the bottom so they constantly refilled themselves consumed 73 percent more than those who ate out of normal bowls. And they felt no more satiated. This is the effect Netflix has when it auto-plays the next episode of a show after a cliffhanger and you continue watching, thinking, "I can make up the sleep over the weekend." And it is the effect that Facebook, Instagram and Twitter have in tacking on their scrolling pages and updating news feeds, causing each article to roll into the next.

This doesn't seem to be a fair fight. The tech industry is constantly mining our data, using artificial intelligence to learn our habits and building tools to have us returning for more. We can turn off our applications, but some of us are subconsciously addicted to them.

So we need to be aware of what we are up against. Technology, when used correctly, can be wonderful. But perhaps the best solution is just to use technology in moderation.

Remember when we would just pick up the phone and call someone rather than emailing them and creating greater misunderstandings? This may be an old-fashioned choice, but the right one. And maybe we should just turn away from our screens sometimes and meet our friends and family in person.

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*Vivek Wadhwa is Distinguished Fellow and professor at Carnegie Mellon University Engineering at Silicon Valley and a director of research at Center for Entrepreneurship and Research Commercialization at Duke University.*