

ISSUE BRIEF

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There are Costs from Spending Too Much Time on Social Media

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In 2006, Facebook marked the beginning of a new era in social media by making itself universally available. Since then, membership on social media platforms has exploded. Ninety percent of young adults in the U.S. are now on social media, and the majority visit these sites at least once per day.¹ Nearly half of all social media users in the U.S. visit sites a minimum of 31 times per week. Social media has benefits, including the ability to share important information, communicate with friends, and expand one's social circle by being connected to a diverse group of people. Excessive social media use also has costs, including addiction, loneliness, depression, reduced self-esteem, and reduced ability to develop meaningful relationships.¹

Too Much Social Media Can Be Bad for Our Mental Health

Social media use is changing the way people socialize. Many individuals are replacing time spent with friends with social media.² Why might this be a problem? Individuals who report excessive social media use, defined as use for more than an average of 2 hours per day, are twice as likely to report social isolation as those who spend less than half an hour per day using social media.³ Young adults who use social media the most are significantly more likely to show signs of depression.⁴ More time spent on social media decreases perceived emotional support, ⁵ increases fear of missing out (FOMO), and lowers self-esteem.⁶

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Excessive social media use also results in more superficial relationships. Many social media users will be familiar with friends whose lives seem impossibly perfect and may feel the urge to make comparisons to themselves. Frequent exposure to highly polished unrealistic portrayals on social media can give people the false impression that others are living happier, more connected lives than their own. Social comparison and peer envy induced by social media play a major role in fueling depressive symptoms. Social media platforms have increased the ways we can deceive people into believing we have succeeded while hindering our ability to detect misrepresentations.

The Importance of Face-to-Face Communication

Larger social networks can increase feelings of happiness and positive health behaviors. For many social media users, their online networks are a way to strengthen real-life interactions. However, we should be cautious about placing too much faith in them. Although there might be a certain satisfaction or comfort derived from having more virtual friends or followers, studies suggest a larger online social network is neither associated with having a larger offline network nor with feeling emotionally closer to one's offline networks. There are logical reasons for this. The human brain is set up to maintain around five deep relationships, excluding family, which act as support in times of stress and

need. People are largely incapable of maintaining relationships beyond acquaintance status thereafter.¹¹ There is a literal limit on how many friends our brain can handle.

Human communication is about far more than just the words of the conversation. Voice tonality, eye contact, body language, and facial expressions are critical elements of communication. Face-to-face conversations activate areas of the brain fundamental to social reasoning and trigger the release of oxytocin, an evolutionary chemical produced in the brain that is critical to relationship development. Oxytocin and social reasoning - our ability to interpret facial expressions, body position, and emotional states - act as the foundation of everything we value in a friendship, such as trust, empathy, and advice. By replacing, rather than supplementing, real world interactions with virtual ones, some social media users are sacrificing these foundational blocks of their friendships.

Social Media Is Addictive

Many people are well aware of the addictive nature of drugs, alcohol, nicotine, gambling, and even food, but few are aware that social media is purposefully designed to have the same addictive effects on our brains. Social media notifications, likes, shares, and comments trigger an instant release of dopamine into the brain, an evolutionary chemical designed to help us learn and repeat anything that triggers its release. It is also extremely addictive. In an interview in November 2017, Sean Parker, Facebook's first president,

revealed that social media "need[s] to sort of give you a little dopamine hit every once in a while, because someone liked or commented on a photo or a post" and described the practice as "exploiting a vulnerability in human psychology...the inventors, creators understood this consciously. And we did it anyway." Dopamine is the tool of choice for social media companies that have a clear interest in

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keeping its users online. The means of triggering these dopamine releases continue to become more sophisticated. Snapchat now has a 'snapstreak' feature that provides a psychological reward for posting on a daily basis, while Instagram allows followers to answer questions embedded into video stories. Just like a cigarette smoker craves dopamine from smoking, a social media user craves its release via these well-designed triggers.

The drive by social media companies to gather personal information on users has its own set of consequences. The mechanics of social media are mood reinforcing. Computer algorithms designed to feed content to people based on themes they have already viewed or responded to create 'filter bubbles'. In order to keep users online, these algorithms filter out content that is not likely to be of interest to the user and reinforce content that users regularly view. Any negative content is therefore reinforced by further negative content. Users that log into social media excessively may find themselves, when in a negative emotional state, unable to turn to traditional, more meaningful offline friendships for support. Someone in a depressed mood may seek solace on social media, only to be further bombarded with negative content that reflects their state of mind. The content of other users' posts can also have the same effect. Studies show that emotional states are involuntarily transmitted through videos, photos, and posts in a fashion known as emotional contagion. Even if a user accesses the site in a good mood, the content fed to them through their friends can be negative, which, in turn, can lead to a negative mood swing.⁴

Everything is Better in Moderation

Much like many other lifestyle choices, consumption of social media can be fine in moderation. Its availability allows ideas and concepts to travel faster and further than ever before. It allows us to boost our social lives with technology that keeps friends and colleagues connected more than ever. How much use is too much? There is no clear way to tell, but limiting access to ten minutes per site per day has been shown to mitigate the negative effects. What is clear is that **we should be exercising caution when use begins to replace real life interactions**. A network that allows people to keep in touch with friends with whom they would otherwise have no way of staying connected is an admirable invention. If it is used to enhance, rather than replace, real world interactions, evidence suggests it can have a positive impact. 12

The natural world is littered with healthy dopamine, serotonin, and oxytocin triggers. They are, after all, rewards to help us learn, fall in love, and engage in activities that give us pleasure and life fulfillment. Social media may be an easy way to trigger a dopamine release, but sports, quality time with friends and family, concerts, accomplishments, and enjoyable recreational activities are tried and tested alternatives. For some, deleting smart phone apps and committing social media use to computers may be required to draw one's attention away from social media. But for many, simply turning off notifications could be the beginning of a better balance between social media and real life. Striking the right balance will ultimately come down to the individual.

End Notes

- 1. Lin, L. Y., Sidani, J.E., Shensa, A., Radovic, A., Miller, E., Colditz, J.B.,...Primack, B.A. (2016). Association between social media use and depression among U.S. young adults. *Depression & Anxiety*, *33*(4), 323-331.
- 2. Twenge, J. M. (2017). *iGen: Why today's super-connected kids are growing up less rebellious, more tolerant, less happy and completely unprepared for adulthood and what that means for the rest of us.* New York, NY: Atria Books.
- 3. Primack, B. A. (2017). Social media use and perceived social isolation among young adults in the U.S. *American Journal of Preventative Medicine*, *53*(1), 1-8.
- 4. Shensa, A., Sidani, J. E., Lin, L. Y., Bowman, N. D., & Primack, B. A. (2016). Social media use and perceived emotional support among US young adults. *Journal of Community Health, 41,* 541-549.
- 5. Hunt, M. G., Marx, R., Lipson, C., & Young, J. (2018). No more fomo: Limiting social media decreases loneliness and depression. *Journal of Social and Clinical Psychology, 37* (10), 751-768.
- 6. Margalit, L. (2014). The psychology behind social media interactions [Online magazine]. Retrieved from https://www.psychologytoday.com/us/blog/behind-online-behavior/201408/the-psychology-behind-social-media-interactions.
- 7. Dunbar, R. I. M. (2016). Do online social media cut through the constraints that limit the size of offline social networks? *The Royal Society*, *3* (1), 1-9.
- 8. Anderson, J., & Rainie, L. (2017). The future of truth and misinformation online. Retrieved from https://www.pewinternet.org/2017/10/19/the-future-of-truth-and-misinformation-online/.
- 9. Salina, S. (2017). Facebook co-founder sean parker bashes company, saying it was built to exploit human vulnerability [CNBC online]. Retrieved from https://www.cnbc.com/2017/11/09/facebooks-sean-parker-on-social-media.html
- 10. Matei, S. A., Russell, M. G., & Bertino, E., (2015). *Transparency in social media: Tools, methods, and algorithms for mediating online interactions.* New York, NY: Springer.

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- 11. Ferrara, E., & Yang, Z. (2015). Measuring emotional contagion in social media. *Plos One, 10* (11), 1-14.
- **12.** Hyun, J. O., Ozkaya, E., & LaRose, R. (2014). How does online social networking enhance life satisfaction? The relationships among online supportive interaction, affect, perceived social support, sense of community, and life satisfaction. *Computers in Human Behavior*, *30*, 69-78.

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