Research evaluating social media use and impacts on mental well-being inconclusive

21 September 2015, by Kirashaw

Researchers have been evaluating whether Facebook use has impacts on mental well-being, but results continue to be inconclusive and at times contradictory. Credit: Flickr

There are more than 500 million people interacting with Facebook from countries all over the world every single day, and that number is growing. On August 24, 2015 Facebook reached a milestone when, for the first time, one billion users logged onto the site in a 24-hour window, which equates to one out of seven people in the entire world being active on the social networking website. Facebook is the world's largest online social network, and has revolutionized how people interact and communicate. Yet, sometimes Facebook feels like a fog, which can hover over all of our social judgements and interactions. In fact, Facebook has grown so prevalent that it has even joined its ever-popular cousin Google and progressed into the 'verb territory'; for example, the mark of a serious relationship is when it finally becomes "Facebook official".

There are also cases where Facebook's influence can have serious consequences for an individual's future. Who hasn't had an unflattering picture taken of them? Or shared information publicly when the information is best kept private and off the Internet record? While there are many obvious benefits to this form of fingertip social networking, there may be some downsides, which need to be considered.

PLOS ONE study finds an increase in Facebook use leads to decrease in self-reported well-being

A study published in PLOS ONE by Kross and colleagues found Facebook use predicted declines in self-reported well-being and life satisfaction among young adults. The study included 82 participants drawn from a sample of college students at University of Michigan, Ann Arbor. Participants answered questions about their feelings and life satisfaction five times a day over the course of two weeks. The questions assessed subjective feelings, social interactions, and Facebook usage time. A Satisfaction With Life Questionnaire was completed before and immediately after the 14-day sampling period to investigate how interacting with Facebook influenced subjective cognitive well-being (life satisfaction) and affective well-being (feelings). Information about personal motivations for using Facebook and perceptions of Facebook support were also gathered.

The authors found those who used Facebook more often over the study period reported a greater decline in well-being over time, specifically: a) how people felt moment-to-moment, and b) how satisfied they were with their own lives. Individuals who used Facebook most often over the two-week testing period showed a larger decline in life satisfaction levels over time. Some alternative explanations were ruled out, as direct interactions (face-to-face) did not predict any decline in well-being, and those who already reported feeling down or bad were not particularly more likely to engage with Facebook.
Study design has limitations, but significant findings call for future research

As described in the "Future Research" section of this PLOS ONE paper, the study had a few limitations. First, the participants were university students who represent a main Facebook user demographic, but are not a sample generalizable to the global Facebook user population (after all, there are one billion users). A second caveat to this sample is that participants were recruited through fliers advertising the study on the University of Michigan campus. Due to the specific location and demographic, this sample may represent people who are more likely to feel bad after high Facebook use, and is a group that does not represent the general population overall. Second, the two-week time period is also very narrow and may impact the results. For example, given the characteristics of this sample, it is possible these two weeks overlapped with high-stress periods on the academic calendar, such as midterms or finals. Finally, the researchers didn't ask about other sources of stress, and because the study was not a randomized trial, we cannot assume these potential confounders were evenly distributed.

In the future, a larger randomized controlled trial or a longitudinal cohort study could strengthen the evidence for the detrimental effect of Facebook on well-being. It would also be beneficial to increase the number of participants as the study size is fairly small at less than 100 people.

Other social networking studies evaluating mental health impacts find contradictory results

In the discussion, Kross et al. suggested that one potential mechanism for a reported decline in well-being is that Facebook use triggers damaging social comparisons, which is explored in more detail in a 2012 study published in a Cyberpsychology journal. Damaging social comparisons refers to how people compare themselves to others in their social network, while not taking into account that individuals share only the most favorable material online. It is most likely that individuals on social media traditionally share the most interesting or favorable parts of their lives on Facebook—the holidays, the nights out, and the lavish meals. We know this is a window to only a small part of an individual's world, and constantly comparing your own life to these specific celebratory moments can potentially be harmful.

But don't hastily delete your Facebook account just yet, not all studies show that Facebook use can create a negative effect on mental health. A recent study from the University of Wisconsin tested for a correlation between 190 university students' social networking use and any signs of clinical depression. Clinical depression is a severe form of depression, and to be diagnosed you must meet the symptom criteria for major depressive disorder in the Official Psychiatric Manual (DSM). This study found that there was no evidence supporting a relationship between social network use and clinical depression.

It is notable that the impacts of Facebook use on self-reported well-being, which was measured in the PLOS ONE study, and Facebook use and clinical depression, which was measured in the University of Wisconsin study, are two very different outcomes. However, by synthesizing the results of these studies we find that Facebook use and impacts on mental well-being are inconclusive, at least so far.

Facebook as a tool for discussion and awareness of depression

Alternatively, Facebook has also been championed as a useful tool for combating the stigma around mental illness. One investigation followed students' public Facebook disclosures over one year to evaluate for statements that meet the DSM criteria for a depressive symptom or episode. Overall, 25% of the profiles were found to broadcast content which displayed symptoms of depression. So, rather than social networking contributing to mood disorders, there are also ways in which it may be useful for publicly discussing them and raising further awareness.

Concluding thoughts

Based on my review of studies examining Facebook use and impacts on mental well-being, it seems that too much time spent on Facebook may
negatively impact a person's mood, but that is highly unlikely to actually cause or contribute any clinical symptoms. The effects of Facebook on mental health and well-being is far from clear. If anything, these conflicting results call for more research with a more rigorous study design to examine the effect of a relatively new force that has become almost omnipotent in our digital age. Some evidence also suggests young adults should put down their phones for a few hours of the day and leave the Facebook fog behind for more personal social interactions, like meeting some friends for walks in the great outdoors.

I believe it is important to find balance, and Facebook use can be part of a healthy and varied lifestyle, so long as it doesn't compromise other important activities. We also see that when used effectively, Facebook is a platform to disseminate important information, including scientific findings, thus allowing individuals and researchers to educate a large and diverse audience.

On that note, please don't forget to share this article on social media with your various and diverse social networks. I guess it perhaps isn't quite that simple to give up on Facebook just yet…

**More information:** "Facebook Use Predicts Declines in Subjective Well-Being in Young Adults." *PLoS ONE* 8(8): e69841. DOI: 10.1371/journal.pone.0069841


"'Facebook Depression?' Social Networking Site Use and Depression in Older Adolescents," *Journal of Adolescent Health*, Volume 52, Issue 1, January 2013, Pages 128-130, ISSN 1054-139X, http://dx.doi.org/10.1016/j.jadohealth.2012.05.008
