

# **Social Media Usage and Its Effects on Mental Health and Well-Being**

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Over 3.6 billion people use social media to communicate every day. (Statista, 2021b)

Social media includes any one of several applications that allow users to create and share content and participate in social networking. (Lexico, 2021) Applications referred to may include Facebook, Twitter, Instagram, Snapchat, Pinterest, LinkedIn, TikTok, and more. With social media reaching so many people, there is concern over whether its use might affect the mental health of its users. My research question is: how does the use of social media impact mental health? The answer to this question is complex.

Researchers from various fields, including psychology, public health, medicine, communication, media studies, and sociology, have studied this topic. Often, teams of researchers from various fields have come together to study the issue. To further understand the topic, it would be useful to take psychology courses, particularly social psychology to understand how the brain works, especially in social situations. Further study in sociology would be useful to understand the group dynamics involved in social media use. Courses in medicine would help create an understanding of how depression and anxiety are treated and their full body effects. Communication courses would help further knowledge in how people interact with one and other and communicate in a more in-depth way.

This paper will look at the effects of social media usage on mental health and well-being. Many studies have shown a correlation between social media use and adverse effects on well-being and psychological state, primarily showing depression and anxiety increases. Facebook is the most popular social network worldwide, with over 2.85 billion monthly active users (Statista, 2021a). For this reason, many researchers have chosen to study Facebook specifically and found similar correlations. However, the mechanisms through

which users are affected by social media are less widely studied, but social comparison and envy may be strong predictors of adverse effects on well-being. This paper will show that while many researchers from various fields have studied the topic, much research remains to be done for definitive answers as to whether social media causes mental health issues.

In mass media, the negative association between social media and mental health is frequently reported. Unfortunately, these popular stories are a little misleading. While many studies show a correlation between poor mental health and social media use, none claim causation. In one such study, Kiera Riehm and her colleagues (2019) determined that adolescents aged 12-17 years that use more than three hours of social media per day may be at higher risk of mental health problems, particularly internalizing problems (p. 1267). Internalizing problems are symptoms within an individual like depressive symptoms and anxiety versus externalizing problems like aggression and delinquent behavior. In a similar vein, Elroy Boers and his colleagues (2019) discovered, in data collected over six years from students grades 7 to 11, that screen time, especially social media use, was associated with increased symptoms of depression. Building on these previous studies, Brian Primack and his colleagues (2021) found that social media use correlated with the development of depression over six months' use. Frequent social media users aged 18-30 years were three times as likely to develop depressive symptoms over the six-month period versus light social media users. These studies show that frequent use of social media is related to psychological distress, depressive symptoms, and anxiety, particularly among adolescents and young adults. However, they do not show that the use of social media causes mental health issues. Many of these studies ask:

Does social media use cause psychological distress, or do psychologically distressed individuals utilize social media more often than their healthy counterparts? Perhaps people struggling with depression and anxiety are more likely to reach out for social contact via social media channels. Many studies can find a correlation between the two, but the reason behind it is unclear.

Facebook, as a platform, has specifically received a lot of attention from researchers due to its overwhelming popularity. Findings in studies on Facebook users were much like findings by other researchers. For example, Ethan Kross and his colleagues (2013) found that heavy use of Facebook is associated with a decline in life satisfaction over time. Their study also found that lonelier people used Facebook more often. They question whether the use of social media is interfering with habits more conducive to positive mental health and well-being, such as exercise and direct social contact.

Building on this work, Christina Sagioglou and Tobias Greitemeyer (2014) found that the longer people used Facebook, the worse their mood was after use. They further assert that while many people expect to feel better after using Facebook, they actually feel worse (p. 359). Later, Holly Shakya and Nicholas Christakis (2017) compared real-life social interaction with Facebook social interaction and found that “overall, the use of Facebook was negatively associated with well-being” (p.203). A unique study by Morten Tromholt (2016) found that quitting Facebook for one week increased well-being.

Tromholt had two groups of participants: one group that was instructed to discontinue using Facebook for one week and one that was to continue using Facebook as per usual. His study showed that heavy users, passive users, and those experiencing the most envy received the most beneficial effects from quitting. A passive user consumes content by

reading others' posts but is less likely to create their own content. Facebook use it seems, as much as other social networks, may negatively correlate with mental health and well-being. Though Kross et al. (2013) found that lonelier people use Facebook more often, the question of whether using Facebook causes this loneliness or whether lonely people utilize social media more often to reach out remains unanswered.

Though these studies show a correlation between social media use, particularly Facebook use, and an increased risk of depression, anxiety, and decreased well-being, they don't generally address the mechanism through which these symptoms develop. Fortunately, several studies have researched the mechanisms that may lead to these symptoms. One such mechanism is problematic use, sometimes referred to as social media addiction. Claudia Marino (2018) and her colleagues found that problematic Facebook use decreased well-being and increased psychological distress. Other researchers have found that heavy use correlates to negative outcomes. In a similar study looking into excessive use, Brian Primack and his colleagues (2017) found that the use of 7-11 different social media platforms correlated with anxiety and depression. Thus, it could be that excessive amounts of time spent on social media is the mediating factor between usage and psychological distress. It makes sense that the more one is exposed to social media the more likely they could develop adverse reactions to it.

Another mechanism often studied is envy. Many researchers contend that because social media often portrays the best of people's lives, users can compare themselves to others they perceive as having better lives than themselves. Due to this envy, users develop psychological distress and poor well-being. For example, Edson Tandoc (2015) and his colleagues found that when envy is controlled for, Facebook use can lessen depression in

users. He found, however, that heavier, passive Facebook users often experienced more envy and that Facebook envy was a predictor of depression among college-age individuals. Similarly, Emily Hanna and her colleagues (2017) found that “Facebook use was associated with greater social comparison and greater self-objectification, which, in turn, was each related to lower self-esteem, poorer mental health, and greater body shame” (p. 172).

Related to envy is rumination, which was studied by Brian Feinstein and his colleagues (2013). They found that negatively comparing oneself to others on Facebook may cause rumination, which can lead to depressive symptoms. Rumination refers to the process of dwelling in negative thoughts and feelings of inadequacy and is a well-known contributing factor to depression.

These studies, taken together, show that envy and comparison may be at the heart of why social media use and poor mental health are related in so many studies. It’s easy to see how comparing one’s everyday life to the highlight reels of other people’s lives might cause envy. Continued exposure to these feelings of inadequacy could begin to leach into other parts of one’s life causing overall turmoil.

On the other hand, not all studies show social media use to be a bad thing. Some argue that using Facebook can connect users to others when they need it most. For example, Moira Burke and her colleagues (2010) found that users who communicated directly via social media had lower loneliness and greater emotional support from close friends. Unfortunately, she also found that heavy social media users had greater feelings of

loneliness. She recommends that future studies look more closely at how people use social media when they are logged on versus only looking at the amount of time social media is used. Burke's study was done in conjunction with Facebook employees, so there may be some inherent bias in the work. In a similar vein, Eva C. Beuchel and Jonah Berger (2018) found that microblogging allows people to reach out when they feel lonely without feeling like they are burdening another specific person with their problems. Microblogging refers to any short text medium like Twitter tweets or Facebook status posts. Both these studies show that being able to connect socially via social media may improve their mental health for some users. In a later study, Mesfin Bekalu and colleagues (2019) found that routine use of social media is associated with healthy outcomes such as positive mental health, social well-being, and self-rated health (p.704). On the other hand, their study showed that users emotionally connected to social media use had adverse outcomes. While these studies show primarily positive effects, they also come with negative results. Studies like these are part of why this field is a bit of a gray area to researchers. Both positive and negative relationships between social media use and mental health and well-being seem to be proven by several studies. However, there is no clear consensus between studies of whether social media is helping or hindering its users.

Some critics of these types of studies say that the methodology used to study social media use is flawed. Douglas Parry and his colleagues (2021) found that "self-reported media use correlates only moderately with logged measurements, that self-reports were rarely an accurate reflection of logged media use and that measures of problematic media use show an even weaker association with usage logs" (p. 1). In other words, when

the researchers used technology to track usage, the amount of use did not match what was reported by the users. In a similar study, Natasia Griffioen and her colleagues (2020) also found that self-reported data is inaccurate. They contend that studies of social media use are hard to look at as a group as many use different measures and scales to assess participants. They believe that studies should look more at passive versus active use and that APIs could track actual social media usage rather than relying on inaccurate self-reports. An API is a type of software that could be designed and installed to track social media usage and respond to usage by posing surveys when the users are using social media for more accurate, real-time information. Griffioen also recommends that future research use more field studies and more accurate lab studies, perhaps testing the physiological responses of users while using social media. Griffioen et al. and Parry et al. claim that the results of studies involving social media and mental health and general well-being are flawed to begin with, and the results should therefore be taken with a grain of salt. However, self-reports are common in this sort of research due to the nature of the questions asked. Assessing the feelings of study participants is not data that is easy to quantify.

While many studies have shown the effects on mental health from social media use, there is not a clear consensus on whether the correlations are positive or negative. There is a research gap here because of this lack of consensus. Further, most studies can only point to correlation, whether positive or negative and not to causation. Many studies ask if social media use and psychological distress are correlated because the use of social media affects well-being or because people who struggle with depression and anxiety symptoms seek out social media to connect. Future studies might benefit from an



approach wherein more data is captured over a longer time. Many of the suggestions of Griffioen et al. (2020) could be utilized to capture better data. If study participants allowed it, an API that logs social media use would eliminate incorrect self-reported usage. It could also be programmed to pop up after logging social media use to ask questions immediately while the information and feelings are fresh in the participant's mind. Interesting information could be gleaned if it also popped up when no social media is used to discover if there is a different state of mind when one chooses to use social media versus not. More questions could be asked about the passive and active use of social media and the role of envy and social comparison in psychological distress. A more in-depth look at different types of social media and their effects would be revealing as well. Certainly, a person using LinkedIn for work-related purposes and a person using Facebook for casual social purposes have different usage patterns and different reactions to their usage, for example. It might also be helpful to compare the use of social media by younger people to the use by older people to see if there is a difference in how social media is used and the effects of usage. A more nuanced approach to the studies of social media use and its impact on mental health and well-being will be required to understand the subject thoroughly.

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