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## Systematic Review

# A Systematic Review of Excessive Social Media Use: Has It Really Affected Our Mental Health?

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#### ABSTRACT

**Introduction**: Social media use has been rapidly increasing over the past few years. Research and practice have mostly focused on the positive impacts of social media, intending to understand and support the various opportunities afforded by this particular technology era. However, it is increasingly observable that social media also involves enormous risks for individuals, communities, firms and even for society as a whole. This systematic review aimed to establish the negative impacts on mental health related to the excessive use of social media.

**Methods:** As many as 15 articles were generated from Scopus, ScienceDirect and Ebscohost. The reviewers independently screened the titles and abstracts in addition to assessing the studies. The study design varied in rigorousness over the quantitative as well as qualitative studies.

**Results:** The result for this study are that having an average daily screen time (more than 2 hours a day) is positively associated with social media addiction. Avoidant attachment was associated with more problematic social media use.

**Conclusion:** Avoidant attachment was associated with more problematic social media use. Thus, an abstinence of several days from social media consumption can caused a reduction in perceived stress.

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# INTRODUCTION

Regardless of the numerous opportunities that social media offers, an increasing number of incidents show that there is undoubtedly a negative impact from social media. Chamath Palihapitiya, a former Facebook executive, stated that he regrets that some of the tools he helped to create "are ripping apart the social fabric of how society works" (Baccarella et. al. 2018).

Additional studies have examined the association between technology addictions and stress, anxiety, depression and psychological well-being, which all had negative impacts on satisfaction in life (Hawi N, et. al, 2019). Problematic social media use refers to being preoccupied with social media, having a strong motivation to use social media and spending an excessive amount of time on social media leading to impairments in their social, personal and/or professional life, as well as psychological health and well-being (Kircaburun K, et al, 2018). The excessive use of technological devices and apprehensive concern can trigger stress because of losing the ability to control their mobile activities and being unable to limit the incoming communications. Excessive social media use is linked with the distraction and alleviation of psychological suffering, mental exhaustion and attention deficiency (Dhir A, et al, 2018).

Based on the Global Digital report 2018, the growth in internet users has been driven by more affordable smartphones and mobile data plans. More than 200 million people got their first mobile device in 2017 and two-thirds of the world's 7.6 billion inhabitants now have a mobile phone. More than half of the handsets in use today are 'smart' devices too, making it easy for people to enjoy a rich internet experience wherever they are. Social media use continues to grow rapidly, and the number of people using the top platforms available in each country has

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increased by almost 1 million new users every day over the past 12 months. More than 3 billion people around the world now use social media each month, with 9 out of 10 of those users accessing their chosen platforms via mobile devices. The essential headlines for the digital age in 2018 were that the number of internet users in 2018 was 4.021 billion, up 7 percent year-on-year. The number of social media users in 2018 was 3.196 billion, up 13 percent year-on-year. The country-based average numbers of hours that social media users spend using social media each day are the Philippines with 3 h 57, Brazil 3h 39 m, while in third place is Indonesia with 3h 23m.

Excessive social media use (ESMU) is defined as an excessive behavioral pattern of social media use that has adverse effects on the individuals by producing addiction-like symptoms, including salience withdrawal, mood modification, relapse, conflict and tolerance. It can be viewed as a sub- category in the broader spectrum of the problematic excessive use of the Internet. ESMU can manifest in an imbalance between the reward and inhibition brain systems, which results in impaired decision making such that a person emphasizes short-term reinforcing rewards over larger long-term utilitarian rewards. Such disadvantageous decisions underlie many excessive behaviors (He Q, Turel O, Bechara A, 2018).

Experiencing addiction-related symptoms in the context of technology use can be stressful, and so is the mere use of a social networking site. One line of research in the literature thus far has examined various possibly stressful outcomes of excessive SNS use, including reduced wellbeing, mental health and social and academic functioning (Turel O, Cavagnaro DR, Meshi D, 2018).

In this systematic review, we bring attention to the duality of social media. For the many positive sides of social media, there are also negative impacts that need to be explored so then we become more conscious of their potential risks and make betterinformed decisions.

#### **MATERIALS AND METHODS**

This study used a systematic review to analyze the negative impact on the mental health of excessive social media use. The methods used in preparing this systematic review were generated literature from the Scopus, ScienceDirect and Ebscohost databases. The search study began using the words social media and social media impacts, limited to 2015-2019. We checked for references lists through an in-depth manual search using Google and Remotex UNAIR to identify any un-assured literature. As for the journal search, the inclusion criteria were excessive social media use and its negative impact on mental health. The exclusion criteria were if the study did not discuss a negative impact on mental health from excessive social media use. During the screening stage, no distinction was made in terms of the research design and the population's age, including studies on adults, adolescents and children. Only

studies regarding the negative impacts of social media were included.

The initial phase of the article search was conducted with the specified keywords. We then obtained 35 articles from Scopus, ScienceDirect and EBSCOhost. We adjusted the inclusion criteria and the restrictions for the year and found 21 articles. For the second screening, the publications were downloaded. From these 21, 6 publications were excluded after reading the full text. After the second screening, 15 articles are selected for the systematic review.

The selection of studies was conducted in accordance with the PRISMA (Preferred Reporting Items For Systematic Review) guidelines. The idea when writing this systematic review is that our consciousness of the increase in social media use is directly proportional with the disturbed psychological well-being of the social media user.

## RESULTS

The result identified 15 articles that were eligible to be included in the systematic review. Fifteen studies were selected. There were 3 articles that discussed about mental health and psychological well-being. They concluded that average daily screen time and psychopathy were positively associated with social media addiction. Every additional hour of screen time was associated with an increased risk of poor psychosocial well-being. In terms of gender, females appeared to be more prone to being addicted to social media. Indeed, there was evidence showing that the excessive use of social media is more common in females than males.

As many as 6 articles were selected, thus it can be concluded that there was an association between social media dependence and depressive symptoms.

Excessive social media use leads to anxious behavior. As many as 2 articles that we selected showed that maltreatment during childhood on problematic social media use was mediated through anxious attachment. Interactions between loneliness and excessive gambling were positively significant and correlated with compulsive internet use.

Other problematic social media use includes the narcissistic tendency for acquiring attention and validation, in addition to cyberbullying and body dissatisfaction. An article that we selected about narcissistic tendencies showed that the relationship between narcissism and PSMU was fully mediated by cyberstalking among women, while cyberbullying and cyberstalking fully explained the association between machiavellianism and PSMU among men. Girls endorse some appearance concerns and social comparison, particularly with their peers.

#### DISCUSSION

The results of this systematic review show that the average daily screen time is positively associated with social media addiction, with such an excessive use manifested by being consumed by social media, increasing the use to gain pleasure from it, using social media to trigger positive alterations in their emotional states, failure in terms of attempts to control themselves, experiencing distress if unable to use social media, and neglecting other important aspects of life due to its use (Chung KL, et al, 2018).

Compulsive media use significantly triggers social media fatigue, which later results in elevated anxiety and depression. Compulsive use behavior refers to an abnormality in controlling behavioral consumptions where an individual is unable to rationally manage his/her routine performances (Dhir A, et al, 2018). Anxiety includes the effects of entertainment and social interaction motivations in excessive smartphone use. People with high anxiety are more likely to use smartphones to protect themselves from their negative feelings, which may lead to a higher degree of problematic outcomes, indicating that the effect of the motivation related to excessive smartphone use depends on the level of the user's psychological well-being (Shen X, et al. 2019). Narcissism is one personality factor that might be connected to the excessive or problematic use of social media and smartphones. There is a study that showed that narcissism is repeatedly reflected in their social media behavior such as being positively linked to having more friends on social networking sites, spending more time on social media and more frequently posting selfies, status updates and selfpromotional content (Hawk ST, et al, 2019).

Excessive social media use is associated with changes in the brain, including deficits in interhemispheric connection and in the communication along the ventral semantic path. Excessive social media use can observable in terms of the imbalance between the reward and inhibition brain systems, which results in impaired decision making such that a person emphasizes short-term reinforcing rewards over larger long-term utilitarian rewards (He Q, Turel O, Bechara A, 2018).

Previous studies have concluded that the relationship between Facebook use and depressive symptoms is curvilinear. For the different levels of Facebook use, the depressive symptoms may differ in terms of direction. This may be a reflection of the different kinds of user interactions possible on Facebook. For example, if the users are actively using Facebook to keep in contact with their friends, then they could have lower depressive symptoms than someone who uses Facebook to simply view other's profiles (Nisar TM, et al. 2019). The internet provides for the formation of online gambling subcultures and the identity generation therein. It is relatively easy to find others who share similar gambling interests and values through the internet (Sirola A et al, 2019).

Experiencing addiction-related symptoms in the context of technology use can be stressful. Short-term abstinence from social media use leads to a reduction in stress. The research by Turel (2018) supports the hypothesis that was tested with absolute stress reduction, although the results for relative stress reduction were inconclusive. This suggests that temporarily quitting social networking can be

rewarding in terms of absolute stress reduction. A short abstinence from online networking suggests that if people with strong SNS addiction-like symptomatology can be convinced to abstain from social media use, then they may have much to benefit from in terms of stress reduction (Turel O, Cavagnaro DR, Meshi D, 2018).

# CONCLUSION

Excessive social media use can leads to problematic social media use, which can causes impaired mental health such as anxiety and social media fatigue heading to depressive symptoms.

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