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## A Review on Correlation Between Depression & Social Media

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Abstract: This review explored the relationship between excessive SM usage and depression, with the goal of uncovering the negative consequences of spending too much time on SM platforms. Through the exploration of the connection between these two elements, it aims to raise awareness regarding the possible risks associated with excessive use of social media and promote the importance of being cautious while interacting with these platforms. Intermediatory agents have the effects of reduced self-esteem, reliance, and solitude. With the growing dependence on SM, there is a greater chance of encountering adverse impacts on mental well-being and overall health. Research has revealed that the extensive utilization of SM had an big relation with depression . Furthermore, conducting longitudinal studies is crucial for evaluating the relationships between these two factors. This will facilitate the development of precautionary measures and treatment strategies to effectively address them.

Keywords: SM, depression, well-being, health, negative consequences, dependence, self- esteem, intermediatory agents, adverse impacts, awareness.

#### Introduction

Social media (S.M.) refers to online platforms and software that stress communication, community participation, engagement, content sharing, and collaboration.<sup>1</sup> Simultaneously, the allure of S.M. increased, leading to a surge in the number of people using it.<sup>2</sup> According to the American Psychiatric Association, depression is a substantial medical condition that may have negative effects on a person's emotions, cognition, and behavior.<sup>1</sup> Depression is also defined by symptoms such as profound sorrow and a diminished capacity to find pleasure in formerly enjoyable activities. 1As well as causing a host of mental and physical health problems, it may make it hard for those whoall were dealing with it to carry out your daily tasks at home and at work.<sup>1</sup> Approximately 280 million

people, or 3.8% of the world's population, suffer from depression, according to the World Health Organization (WHO).1

Adolescents are defined by the WHO as those aged 10–19.1 The transition from infancy to adulthood is known as adolescence. The foundation for longterm health is laid at this unique stage of human development. The emotional, mental, and physical capacities of adolescents expand at a dizzying rate. Their feelings, ideas, choices, and relationships with others and the world around them are all affected by this. Over the last ten years, there has been an increase in the number of teenagers who are depressed.1 One out of seven teenagers will experience depression at some point in their lives.<sup>1</sup> Cognitive impairments, prejudice, and social stigma may affect adolescents who exhibit depressive symptoms. An uptick in depressive symptoms has been associated with greater social media usage, according to some research.1

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## **Implications**

Currently, researches are being conducted to investigate the psychological effects of social media, which may include the possibility of connections with feelings of worry, depression, and a reduction in self-esteem. Furthermore, those in their early adulthood who were in the process of growing at the time when social media was emerging are confronting various concerns linked to the excessive and uncontrolled use of the Internet and social media platforms. These individuals are experiencing a variety of problems.<sup>3</sup>

## Social Media & Depression

There have been a number of research articles that examine the connection between depression and Facebook, which is a social media network that is widely used.<sup>4,5</sup> Research conducted by Blachnio and colleagues has shown that there is a positive association between intrusion on Facebook and depression. It is common for Facebook addiction and intrusion to occur concurrently, and the terms may often be used interchangeably. However, the latter term stresses a more extreme strain on social interactions than the former does. The individuals who are subjected to Facebook intrusion are those who engage in excessive use of the social media platform, which causes disruptions to their daily routines and the relationships they have with other people. In light of the striking similarities that exist between Facebook addiction and Facebook intrusion, it is possible to draw the conclusion that those who are addicted to Facebook are more likely depression.5Haand experience discovered a significant correlation between social media addiction and depression. They observed that those who are addicted to social media are more likely to experience depression, and the severity of social media addiction is directly proportional to the severity of depression.<sup>6</sup>

## **Intermediatory Agents For Depression**

## 1. Self Esteem

A research had showed that self – esteem is usually seen harmed among teenage participants who use to use internet on daily basis. This outcome may be elucidated by the observation that people with poor self-esteem tend to avoid genuine social contacts and instead seek escape in virtual worlds, where they can assume anonymous identities and engage in unrestricted behavior. Thus, within this structured model, self-esteem emerged as the most influential predictor of depression.

## 2. Additicion (A)

An SMA was shown to have a favorable association with depression, just as regular Internet usage does, according to the findings of the study. SM usage among teenagers has been shown to be tangentially associated to depression. The risk of developing depression grows in tandem with the amount of time spent on social media. The inclination of an individual to spend more time

online is one of the characteristics that, according to the study, is a distinguishing characteristic of SMA. The probability that depression symptoms will go away is higher.<sup>5</sup> According to the findings of a study conducted in Canada by Sampasa-Kanyinga and Lewis, there is a correlation between psychological discomfort and daily usage of social media for more than two hours.<sup>8</sup>

#### 3. Loneliness

A study have shown that loneliness was a psychological variable created or associated due to the use of internet and Facebook addition in majority of the participants. Thus, the more depressive symptoms visible was directly related to the more usage of the internet & Facebook due to its addiction.<sup>9</sup>

#### **Cognitive Mechanism**

According to the Cao study, an individual's level of emotional and functional attachment to a social media platform is what defines their addiction to it.<sup>10</sup> Both technical factors (such as information support, system quality, and customization) and motivational factors (such as reported pleasure and social involvement) influence these attachments.<sup>5</sup>

A study showed and concluded that an addiction to social networking sites may be associated with a decrease in the amount of gray matter in the bilateral amygdala, although there seem to be no structural abnormalities in the nucleus accumbens. This phenomenon may be due to the increased efficiency of the brain system responsible for impulses. In this way, the structural changes in the brain that result from addiction to social networks are analogous to those that occur as a result of addiction to other substances, gambling, and other activities. During this period, unlike other addictions, the middle stage of the addiction weakened the anterior cingulate cortex, rendering it incapable of providing the necessary inhibition. was reflected in a reduction in gray matter volume, which was deemed healthy in our sample. Additionally, the volume of gray matter seemed to have a positive correlation with the degree of addiction to social media.11

Thus, it has been found and concluded that its a global challenge to control the situtation called SM addition as it is causing serious damages in people's life especially their mental health.<sup>5</sup>

#### **Prevention**

#### 1. Limit the use of SM

Despite the fact that it is obvious that young people often misuse social media, which may have a negative impact on their wellbeing, a study has investigated the variables that encourage individuals to restrict their social media usage and has found positive findings. 12 According to a study conducted by the University of Pennsylvania, reducing the amount of time spent on social media usage to about thirty minutes per day may have a substantial impact on one's overall well-being. As to the findings of the study [23], reducing the amount of time spent on social media platforms may significantly enhance the mental well-being of people. Less than 10 minutes of time spent each day on each mobile platform significantly reduced depression across the course of the three-week study. Those who started the study with high levels of depression or moderate or severe depressive symptoms were able to decrease their usage to moderate levels by cutting down on their social media usage. Statistics have significantly improved over the last three weeks, even among individuals with modest levels of depression. This may be a result of decreased social media usage. It may not have an impact on clinical findings. 13

## 2. Feasibility

Researchers have posited that focusing only on potential risks within the realm of education might be challenging. Instead, individuals should endeavor to use the Internet in a manner that fosters the development of young people's abilities and maintains a balanced ratio between their online and offline activities. Therefore, according to a study, after utilizing internet as educational means can develop 14:-

- a. Mindfulness & critical thinking abilities.
- b. Ability to teach, communicate by facing different attitude, value & behavioral pattern.
- Social online games help with coordination & motor activities
- d. Teach cooperation & team relations
- e. Support development of social & civil competencies by broadening friends group
- f. Inspiration by enabling to create new music & film items

#### g. Writing blog

#### Conclusion

The purpose of this present review paper was to discuss and assess the relationship between SMA and depression, as well as to investigate potential preventative strategies for SMA. All of the causes that are contributing to the widening of the gap between people include the continual growth in the number of people who possess smartphones and tablets, as well as the improvements in technology and the enhancement of applications. The end result of this is that there is a constant problem of addiction to social media platforms. On the other hand, depression has become a large demographic component among those who use SM. This is a relatively new phenomenon.

When all of this is taken into consideration, it is possible to arrive at the conclusion that addiction to social media has a substantial negative influence on depression. Despite the fact that the degree of SMA varies from person to person due to variables such as age, geography, and self-esteem, it is still a trigger or aggravating factor for depression. The future study needs to continue to investigate the associations between the two aspects, not only to monitor the associations that were mentioned above but also to investigate prevention and treatment strategies for social media addiction. This is because the psychological problems that are underlying it are making it more and more dangerous.

## Reference

- [1] Azem L, Al Alwani R, Lucas A, Alsaadi B, Njihia G, Bibi B, Alzubaidi M, Househ M. Social Media Use and Depression in Adolescents: A Scoping Review. Behavioral Sciences. 2023 Jun 6;13(6):475.https://doi.org/10.3390%2Fbs1306 0475
- [2] Twenge JM, Haidt J, Lozano J, Cummins KM. Specification curve analysis shows that social media use is linked to poor mental health, especially among girls. Acta psychologica. 2022 Apr 1;224:103512.https://doi.org/10.1016/j.actpsy. 2022.103512
- [3] Parashar Y, Waraich SB. Relationship Between Social Media Usage and Social Anxiety Among College Students.

- International Journal of Indian Psychology. 2023;11(4).10.25215/1104.210
- [4] Błachnio A, Przepiórka A, Pantic I. Internet use, Facebook intrusion, and depression: Results of a cross-sectional study. European Psychiatry. 2015 1;30(6):681-Sep 4.https://doi.org/10.1016/j.eurpsy.2015.04.002
- [5] Peng X, Yan D, Yuan X, Zhou CL. The Influence of Social Media on Depression. In2021 4th International Conference on Humanities Education and Social Sciences (ICHESS 2021) 2021 Dec 24 (pp. 318-323). **Atlantis** Press.https://doi.org/10.2991/assehr.k.211220.

055

- [6] Haand R, Shuwang Z. The relationship between social media addiction depression: a quantitative study among university students in Khost, Afghanistan. International Journal of Adolescence and 2020 Dec Youth. 31;25(1):780-6.https://doi.org/10.1080/02673843.2020.1741
- [7] Kircaburun K. Self-Esteem, Daily Internet Use and Social Media Addiction as Predictors of Depression among Turkish Adolescents. Journal of Education and Practice. 2016;7(24):64-72.https://eric.ed.gov/?id=EJ1112856
- [8] Sampasa-Kanyinga H, Lewis RF. Frequent use of social networking sites is associated with psychological functioning children and adolescents. Cyberpsychology, Behavior, and Social Networking. 2015 Jul 1;18(7):380-
  - 5.https://doi.org/10.1089/cyber.2015.0055
- [9] Rachubińska K, Cybulska AM, Grochans E. The relationship between loneliness. depression, internet and social media addiction among young Polish women. European Review for Medical & Pharmacological Sciences. 2021 15;25(4).10.26355/eurrev\_202102\_25099
- [10] Cao X, Gong M, Yu L, Dai B. Exploring the mechanism of social media addiction: An empirical study from WeChat users. Internet 2020 22;30(4):1305-Research. Jun 28.https://doi.org/10.1108/INTR-08-2019-0347
- [11] He Q, Turel O, Bechara A. Brain anatomy alterations associated with Social Networking Site (SNS) addiction. Scientific reports. 2017

- Mar 23;7(1):45064.https://doi.org/10.1038/srep450
- [12] Boehm NT. Stuck on social media: Predicting young adults' intentions to limit social media use. The Journal of Social Media in Society. Dec 31;8(2):143-66.Nick82.Boehm@colostate.edu
- [13] Hunt MG, Marx R, Lipson C, Young J. No more FOMO: Limiting social media decreases loneliness and depression. Journal of Social and Clinical Psychology. 2018 Dec:37(10):751-
- 68.https://doi.org/10.1521/jscp.2018.37.10.751 [14] Południak S, Ostrowska-Magoń K. Hazard
- Prophylaxis and Behavioural Addictions of Children and Teenagers on the Example of Conducted Public Duties "Teenagers and Children-Safe in the Web Since Today" Carried Out by the Training and Therapeutic Centre Self. Social Communication. 2018 Jan 1;4(s1):42-50.<u>10.2478/sc-2018-0022</u>