# Social Media and University Students' Mental Health: Analyzing the Negative Effects, Causes and Proposing Remedies

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**Abstract:** Today's university students are contending with intense psychological stress. Factors such as financial hardships, concerns regarding medical treatment, family breakdown, and the overwhelming academic pressure to achieve outstanding results all play a part contribute to this stress. Recently, researchers have pointed out that the concurrent use of smartphones and social media might also be exerting a negative impact on students' mental health. Social media exerts negative impacts on students in multiple aspects. It gives rise to leads to decreased real - world social support, a shortened attention span, impaired cognitive function, and addictive propensities. This paper will conduct a comprehensive exploration of the underlying causes of these adverse effects on students' mental well - being, evaluate the severity of these impacts, and propose practical and actionable suggestions and strategies to address this urgent issue.

**Keywords:** Mental health, SAD, University Student

#### 1. Introduction

Mental health stands as one of the pivotal factors in shaping the quality of life and satisfaction levels. In both developed and developing nations, poor mental health represents a complex yet prevalent psychological issue among college students. Over the past few decades, diverse psychological and psychiatric studies carried out in numerous developed and developing countries have indicated that the prevalence of stress, anxiety, and depression (SAD) among college students is higher compared to that in the general population. At present, university students are facing significant psychological distress. Contributing factors include academic and financial pressures, feelings of isolation, loneliness, and poor self-care habits [1]. This period of distress often coincides with a critical transitional phase of life, between the ages of 17 and 25, when mental health disorders are most likely to emerge [2]. The American College Health Association (ACHA) conducts an annual nationwide survey to examine the health of college students. In 2016, a survey of 5,099 graduate and professional students from 34 institutions revealed that, within the past 12 months, 41.5% of students felt hopeless, 51.8% felt very lonely, 55.3% experienced severe anxiety, and 33.5% reported being so depressed that it was difficult to function [3]. Among undergraduate students, the results were even more alarming, with rates of 52.7%, 67.3%, 61.9%, and 39.1%, respectively [3].

Recent studies suggest that another factor may be contributing to these mental health challenges: the use of smartphones and social media. Research has shown that frequent phone use is linked to

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higher stress, sleep disturbances, and depression in young adults aged 20 to 24 (n=4156) [3]. Similar findings were reported in a study of 18- to 25-year-old university students (n=249), which found a positive correlation between excessive smartphone use and stress. Another study (n=274) found that higher smartphone or tablet use was associated with increased stress and depression. Prolonged social media use often reduces time spent on real-life relationships, depriving individuals of emotional connection and support. In addition, simply owning a smartphone can impair cognitive ability by keeping users in a constant state of "alertness," which increases the mental burden of device use.

This paper aims to explore the specific manners in which smartphones and social media exert negative impacts on the mental health of university students. It will proffer targeted suggestions and interventions designed to address these concerns, with the objective of enhancing the well - being of students in the digital era.

# 2. Analysis of traditional factors affecting college students' mental health

# 2.1. Economic pressure

Stress, anxiety, and depression (SAD) among undergraduates are associated with poor family income, inadequate financial support, and childhood poverty in both developed and developing nations. The financial status of a student's family may have an impact on their mental health. Reduced family income and poverty may cause adverse childhood psychological experiences that have long-term detrimental effects on adulthood, raising the risk of SAD in college.

## 2.2. Lifestyle factors

It takes flexibility and adaptability to start a new life away from home and fit in with a different way of life. Most undergraduates' behavior and way of life will change as they move away from home to live with friends, classmates, and peers. SAD can be impacted by a number of lifestyle choices, including drug usage, exercise, dietary habits, smoking, and alcohol intake. Excessive alcohol intake is common among students experiencing SAD. Students frequently smoke, which is another risk factor linked to SAD, especially in eastern developed and developing nations like China, Japan, and South Korea [4]. The majority of students smoke for social reasons, particularly male students, and social smoking prevalence is closely linked to SAD. Illicit substance addiction may be another key factor contributing to SAD in young people. Students may turn to illegal drug usage, smoking, and alcohol consumption as coping mechanisms as a result of academic stress and the social atmosphere in university living and dorms, which can exacerbate SAD.

## 2.3. Family factors

Students' social and emotional well-being can be impacted by having a supportive social network, which lowers the chance that they will experience anxiety and sadness while in college. The development of SAD is significantly influenced by the quality of connections with friends and family. Keeping up a healthy and encouraging relationship with family can help prevent the onset of seasonal affective disorder, which in turn affects how satisfied students are with their time in college. The onset of SAD was inversely connected with the frequency of family visits during college. For international students who live distant from their families, family visits can be considerably more difficult, which exacerbates already-existing issues for those studying and living overseas. Conversely, bad family relationships—particularly with parents—can cause SAD among college students. Similarly, a youngster was more likely to develop SAD in college if they had a rigid home as a child that restricted their conduct and activities.

## 2.4. Academic pressure

Students spend a considerable part of their time in college on academic activities, and unpleasant academic outcomes can affect their mental health. Low grades during study can have a negative impact on students' mental health, leading to seasonal affective disorder (SAD). Pursuing an advanced degree is a challenging task that requires huge mental effort. Among college students, mastery of a subject is negatively correlated with levels of anxiety and depression; students who have a good command of a subject tend to experience lower levels of stress and anxiety, while those who struggle with a subject are more likely to suffer from higher levels of these negative emotions. Different research shows that freshmen entering college and students in their final year of study experience the highest levels of anxiety and depression, with different risk factors. For first - year freshmen, the unfamiliarity of the new environment and separation from family are major contributors to SAD. However, final - year students report that their uncertainties about the future, including employment prospects, college debt repayment, and adjustment to post - college life, are major risk factors for SAD.

# 3. Analysis of the impact of social media on college students' mental health

In the contemporary digital era, social media has become an integral part of college students' daily lives, serving as their primary avenue for accessing information, seeking entertainment, and engaging in social interaction.

## 3.1. Decreased social support

People monitor and engage with others, form relationships, and receive social incentives on social media platforms [5]. People return to these websites for extended periods of time because of these social benefits, which serve as reinforcement [6]. Crucially, some people's use of social media can develop into a maladaptive condition that impairs everyday functioning and causes distress [7]. A drug use disorder is similar to this sign of poor social media use [8]. Problematic social media use is strongly associated with increased perceived social support online but decreased real-life social support. Crucially, social support in real life was linked to lower levels of social isolation, anxiety, and depression, whereas social support on social media was not linked to these mental health outcomes [9]. It is believed that the quality of social support obtained via social media is comparable to that of social support obtained in person [10].

#### 3.2. Impaired cognitive function

Alloway, Horton [11] shows that high school students who used Facebook for more than a year scored significantly higher on working memory, language ability and spelling than those who used Facebook for less than a year. There was no difference in math scores between the two groups; YouTube use was also not associated with higher cognitive scores. One possible reason for the significantly higher working memory scores among those who have used Facebook for an extended period is that the cognitive processes engaged in using Facebook bear resemblance to those involved in performing working memory tasks. However, another research found that after controlling for demographic variables, people with higher social media use had lower inhibitions and higher working memory [12].

#### 3.3. Addictive behavior

The impulse to misuse social media is a defining feature of social media addiction (SMA), which is a type of internet addiction [8]. An insatiable desire to check in and utilize social media is what drives people with social media addiction, who are frequently too preoccupied with it. According to research,

Facebook addiction has a negative correlation with subjective vitality, life satisfaction, and well-being and a positive correlation with depression, anxiety, and sleeplessness [13]. Additionally, studies have demonstrated the detrimental effects of social media addiction, particularly Facebook addiction, on academic achievement [14].

## 4. Suggested measures

College students should adopt a series of strategies to develop healthy media habits. First, college students should clearly set daily media usage time limits. During key study or work hours, they should resolutely resist the temptation of social media and avoid excessive addiction. Moreover, cultivating strong self - awareness and self - monitoring skills will help college students promptly detect and effectively control various emotional and behavioral problems resulting from excessive social media use.

From an institutional perspective, a series of support and intervention strategies are essential for addressing the challenges posed by social media. Educational institutions ought to offer media literacy courses to teach students how to critically evaluate and utilize social media. Course content includes guiding students to distinguish the authenticity of online information, deeply understanding the psychological impact of social media use, and helping them develop healthy usage habits. The government and relevant agencies can formulate policies to limit the time and content of youth's access to certain social media platforms through measures like implementing youth mode or nighttime bans, thus reducing excessive use. Colleges and universities, along with other educational institutions, can conduct mental health publicity and education activities to heighten students' awareness of the impact of social media and provide psychological counseling services to assist students in solving mental health problems stemming from social media use.

At the family level, the active participation and support of parents and other family members play a pivotal role in alleviating the negative impact of social media on college students' mental health. As the primary environment for providing emotional support and mental health guidance, the significance of family is self - evident.

## 5. Conclusion

Mental health problems among university students have many causes. Financial problems, lifestyle changes, family issues, and academic pressure are some of the main factors contributing to stress, anxiety, and depression (SAD). These factors can exacerbate students' negative emotions and have a detrimental impact on their academic performance.

In addition to these common issues, the overuse of smartphones and social media also deteriorates students' mental health. Excessive time spent on social media not only diminishes real - life social support but also impairs cognitive function and leads to addiction. Social media addiction is associated with increased anxiety, depression, and sleep disorders. Students who are overly engaged online often experience loneliness, have difficulty concentrating, and are under greater stress.

To address these problems, proactive measures should be taken. Spending more quality time with family and friends in person, reducing smartphone use, and seeking support from loved ones can be beneficial. Educational institutions should also provide students with comprehensive support and teach them effective stress - coping strategies. If students can cultivate healthy habits and use technology in a more balanced way, they will be able to improve their mental well - being and achieve better academic results

The over - reliance on technology can give rise to mental health problems. It is crucial for individuals to strike a balance between the virtual online world and real - life experiences.

Additionally, they should pay close attention to their mental health and not hesitate to seek professional help when necessary.

#### References

- [1] Mofatteh, M., Risk factors associated with stress, anxiety, and depression among university undergraduate students. AIMS Public Health, 2021. 8(1): p. 36-65.
- [2] Browne, V., J. Munro, and J. Cass, The Mental Health of Australian University students. JANZSSA: Journal of the Australian and New Zealand Student Services Association, 2017. 25(2): p. 51-62.
- [3] Cain, J., It's Time to Confront Student Mental Health Issues Associated with Smartphones and Social Media. Am J Pharm Educ, 2018. 82(7): p. 738-741.
- [4] Frank M. Snowden. Epidemics and Society[M]. Central Compilation and Translation Press: 202205.542.
- [5] Kietzmann, J.H., et al., Social media? Get serious! Understanding the functional building blocks of social media. Business Horizons, 2011. 54(3): p. 241-251.
- [6] Ainslie, G., Specious reward: A behavioral theory of impulsiveness and impulse control. Psychol Bull, 1975. 82(4): p. 463-496.
- [7] Guzman, R.A., Maladaptive Social Media Use Motives, Emotional Well-being, and Drinking Behaviors Among College Students. 2024, Old Dominion University.
- [8] Tullett-Prado, D., et al., Social media use and abuse: Different profiles of users and their associations with addictive behaviours. Addictive Behaviors Reports, 2023. 17: p. 100479.
- [9] Meshi, D. and M.E. Ellithorpe, Problematic social media use and social support received in real-life versus on social media: Associations with depression, anxiety and social isolation. Addictive Behaviors, 2021. 119: p. 106949.
- [10] Albrecht, T.L. and D.J. Goldsmith, Social support, social networks, and health, in The Routledge handbook of health communication. 2003, Routledge. p. 277-298.
- [11] Alloway, T.P., et al., Social networking sites and cognitive abilities: Do they make you smarter? Computers & Education, 2013. 63: p. 10-16.
- [12] Lara, R.S. and R. Bokoch, Cognitive functioning and social media: Has technology changed us? Acta Psychologica, 2021. 221: p. 103429.
- [13] Andreassen, C.S., Online social network site addiction: A comprehensive review. Current addiction reports, 2015. 2(2): p. 175-184.
- [14] Busalim, A.H., M. Masrom, and W.N. Binti Wan Zakaria, The impact of Facebook Addiction and self-esteem on students' academic performance: A multi-group analysis. Computers & Education, 2019. 142: p. 103651.