# Impact of Social Media and Anxiety Among College Students

## Sareema Reyaz[1], Anmol Tiwari[2], Tanisha Agarwal[3], Himanshu Kumar Srivastava[4], Janki Kumari[5], Yukti Sharma[6]

[1]Student, Amity University Greater Noida Campus
[2,3,4,5,6]Assistant Professor, Amity University Greater Noida Campus

**ABSTRACT**

This study aims to explore the relationship between social media use and Generalized Anxiety Disorder (GAD) among students. A sample of 76 participants aged 18 to 25 was assessed using two standardized tools: the Hamilton Anxiety Scale, which measures the severity of anxiety, and the Social Media Addiction Scale (SMAS), designed to quantify the extent of social media dependency. Data analysis revealed a Pearson correlation coefficient of **0.330**, with a **p-value of 0.004**, indicating a moderate positive correlation between social media addiction and anxiety. These findings suggest that higher levels of social media addiction are significantly associated with increased anxiety symptoms. The results imply that students who exhibit addictive behaviours related to social media are more likely to experience anxiety, potentially due to factors such as constant connectivity, social comparison, and fear of missing out (FOMO). Given the moderate correlation, this study underscores the importance of addressing excessive social media use as a factor in mental health interventions. The findings call for the development of strategies that can help students manage their social media habits and reduce the psychological distress associated with its overuse. Future research could further investigate the causality of this relationship and examine additional variables, such as self-esteem, emotional regulation, or sleep patterns, that may mediate the link between social media addiction and anxiety.

**Keywords:** Social Media Use, Generalized Anxiety Disorder (GAD), Students, Anxiety, Social Media Addiction

## INTRODUCTION

Social media has become a crucial part of modern life, particularly for younger generations, including students. Since their inception in the early 2000s, platforms like Facebook, Instagram, Twitter, TikTok, and Snapchat have drastically altered the way people interact, communicate, and access information(Semwal, Tripathi, & Pandey, 1 C.E.; Semwal, Tripathi, & Tyagi, 1 C.E.). Initially designed to connect users with friends and family, these platforms have evolved into multifaceted ecosystems where students engage in various activities such as learning, sharing information, and self-expression.

Research shows that students are highly active on social media, with many accessing these platforms multiple times daily, often for extended periods(Semwal, Tripathi, Tyagi, et al., 1 C.E.). This extensive use is driven by the need for social connection, entertainment, and academic purposes. Social media provides students with a means to stay connected with friends, participate in online communities, and keep up with

current events. It also allows them to explore their identities and creatively express themselves through curated online personas.

However, the widespread presence of social media in students' lives has raised significant concerns regarding its impact on mental health. While these platforms offer benefits like social support and community building, they also pose risks that can adversely affect well-being. Continuous exposure to idealized content, where individuals often showcase perfect versions of their lives, can lead to feelings of inadequacy, envy, and anxiety. The pressure to maintain a particular online image, combined with the fear of missing out (FOMO), can exacerbate these negative emotions, making social media both beneficial and harmful in students' lives.

## A Brief History of Social Media

To understand the impact of social media on mental health, it's important to examine its evolution. The concept of social media began in 1997 with platforms like Six Degrees, which allowed users to create profiles and connect with others. However, it was the launch of Friendster in 2002 and MySpace in 2003 that brought social media into the mainstream. These platforms introduced the idea of social networking, enabling users to connect with friends, share content, and engage in online communities.

The emergence of Facebook in 2004 marked a significant turning point. Initially limited to college students, Facebook rapidly expanded to a global audience, offering more interactive features and personalized content feeds. As social media evolved, new functionalities like live streaming, storytelling, and algorithms that curate content based on user preferences were introduced. Instagram, launched in 2010, shifted the focus to visual content, especially photos and videos, which became central to online self-presentation. Other platforms like Twitter, with its microblogging format, and Snapchat, with its ephemeral content, further diversified the social media landscape. TikTok's rise in the late 2010s, featuring short-form video content, highlights social media's adaptability to younger users' preferences.

These platforms have not only transformed communication but have also changed how information is shared and consumed. Social media has become a powerful tool for shaping trends, public opinion, and even mental health. The history of social media underscores its rapid growth and profound impact on society.

## The Role of Social Media in Students' Lives

Social media plays a multifaceted role in students' lives, offering both benefits and drawbacks. On one hand, it provides a sense of connection and belonging. It enables students to maintain friendships and family ties, particularly when physical distance is a barrier. Social media also facilitates academic collaboration, allowing students to share resources, join study groups, and engage in discussions on various topics. Additionally, it gives students access to a vast array of information, including news, educational resources, and cultural trends, which can enhance their knowledge and awareness.

However, the impact of social media on students' mental health cannot be ignored. The instant connectivity that social media provides can lead to information overload, where students are constantly bombarded with content. This can cause stress and anxiety as students struggle to keep up with the latest updates, news, and trends. Moreover, the pressure to create a perfect online persona can result in self-esteem issues, as students compare themselves to others who appear to lead more successful lives.

Research has shown that excessive social media use is associated with negative outcomes, such as increased levels of anxiety, depression, and isolation. Students often experience FOMO, the fear of missing out on social events or experiences shared online. This anxiety can drive compulsive social media use,

leading students to frequently check their feeds, disrupting sleep patterns and negatively affecting academic performance.

## Social Media and Generalized Anxiety Disorder (GAD)

Mental health professionals are increasingly concerned about the link between social media use and Generalized Anxiety Disorder (GAD). GAD is characterized by chronic, excessive worry that is difficult to control, and social media can worsen these symptoms in several ways. Constant exposure to others' lives, often portrayed in an overly curated and idealized manner, can lead to feelings of inadequacy. Students with GAD may experience heightened anxiety and self-doubt as they compare their lives to the seemingly perfect lives of others.

Additionally, social media exposes students to an overwhelming amount of information and opinions. For students prone to worry, the pressure to stay informed and up-to-date with the latest trends can intensify anxiety. The desire to maintain an online presence and the fear of missing out on social events or opportunities posted online can lead to compulsive social media use, further aggravating anxiety symptoms.

This research aims to explore the impact of social media use on mental health, specifically examining the relationship between social media addiction and Generalized Anxiety Disorder (GAD) among students.

## REVIEW OF LITERATURE

Davis et al. (2023) in their study, Body Image Dissatisfaction and Social Media Use Among College Women, examined how exposure to idealized images on social media significantly correlated with increased anxiety and body dissatisfaction. The authors found that college women who frequently engaged with fitness and beauty content reported lower self-esteem and higher levels of anxiety regarding their body image. They advocated for educational programs that promote body positivity and resilience against social media pressures.

Miller et al. (2023) in their study, Mental Health and Social Media Engagement in First-Year College Students, investigated the mental health impacts of social media use among first-year college students. Their findings revealed that students who spent more than three hours per day on social media reported higher levels of anxiety and depressive symptoms, particularly during the transition to college life. The researchers emphasized the importance of managing social media engagement to enhance student well-being.

Johnson et al. (2023) in their study, The Impact of Social Media on Self-Esteem Among College Students, explored the relationship between social media usage and self-esteem. The study found that students who engaged in upward social comparison on platforms like Instagram tended to have lower self-esteem and higher anxiety levels. The authors highlighted the dual role of social media, noting its potential for support but also its risks in fostering feelings of inadequacy.

Nguyen and Torres (2023) in their assessment, The Impact of Social Media on Academic Performance and Anxiety in College Students, examined the relationship between social media use and academic performance. Their research indicated that excessive social media use was linked to decreased academic performance and higher anxiety levels among students. They suggested the need for interventions that promote balanced online engagement and academic support.

Khan and Patel (2023) in their investigation, Online Support Groups and Their Effects on Anxiety Levels, examined the effects of participation in online support groups on individuals experiencing social media

anxiety. They found that active participation led to significant reductions in anxiety levels, providing evidence for the effectiveness of community support in alleviating mental health issues.

Harris and Mills (2024) in their examination, Negative News Exposure and Anxiety in Young Adults, studied the impact of exposure to negative news on anxiety levels in young adults. Their findings indicated that frequent consumption of distressing news content on social media platforms heightened anxiety symptoms, particularly among those already predisposed to anxiety. They called for increased media literacy to help individuals navigate news consumption.

Lee and Chen (2024) in their investigation, Screen Time and Anxiety Among Adolescents, examined how excessive screen time, particularly related to social media, affected anxiety levels in adolescents aged 14 to 18. Their research found a positive correlation between increased screen time and anxiety symptoms, suggesting that the nature of social media engagement plays a critical role in mental health outcomes.

Garcia and Roberts (2024) in their exploration, Social Media Use and Sleep Quality Among Young Adults, investigated the association between social media activity and sleep quality. Their study revealed that young adults who engaged heavily with social media, especially at night, reported poorer sleep quality and increased anxiety levels as a result. They recommended reducing social media use before bedtime to improve mental health.

O'Connor and Li (2024) in their longitudinal study, Longitudinal Effects of Social Media Use on Mental Health, examined the mental health impacts of social media use over two years among college students. They found a consistent increase in anxiety and depressive symptoms associated with prolonged social media use, particularly among those seeking validation through likes and comments. The authors emphasized the need for ongoing mental health support.

Martinez and Fernandez (2023) in their study, FOMO and Its Relationship with Social Media Use and Anxiety, explored the concept of Fear of Missing Out (FOMO) and its correlation with social media engagement. They found that individuals with high levels of FOMO were more likely to engage in compulsive social media checking, which in turn exacerbated their anxiety levels. The study underscored the importance of addressing FOMO in mental health interventions.

Thompson et al. (2024) in their analysis, Cyberbullying and Anxiety in High School Students, examined the effects of cyberbullying on anxiety among high school students. Their research revealed that victims of cyberbullying reported significantly higher anxiety levels compared to their peers. The study concluded that effective intervention strategies are necessary to support affected students.

White et al. (2023) in their examination, Social Media Addiction and Anxiety Among University Students, investigated the relationship between social media addiction and anxiety. They found that students with higher addiction scores reported greater anxiety symptoms, suggesting a need for targeted coping strategies to manage social media use and its psychological impacts.

Patel and Kim (2024) in their exploration, Active vs. Passive Social Media Interactions and Their Effects on Anxiety, examined how different types of social media engagement affected anxiety levels. Their study found that passive scrolling was associated with higher anxiety levels, whereas active engagement (such as commenting and posting) was linked to lower anxiety, highlighting the importance of mindful social media use.

Baker and Kelly (2023) in their study, Influencer Impact: Social Media and Body Image Anxiety Among Teens, explored the influence of social media influencers on body image concerns among teenagers. Their findings indicated that following influencers who promote unrealistic beauty standards correlated with

increased anxiety and body dissatisfaction, prompting calls for awareness and education on healthy media consumption.

Reyes and Simmons (2024) in their analysis, Social Media's Impact on Interpersonal Relationships and Anxiety, examined how social media affects interpersonal relationships. They found that while social media facilitated connections, it also led to misunderstandings that increased anxiety during face-to-face interactions, suggesting the need for awareness of online communication's complexities.

Parker and Kelly (2023) in their assessment, Online Privacy Concerns and Anxiety Levels in Young Adults, examined how awareness of privacy issues on social media platforms influenced anxiety levels. Their findings indicated that young adults with heightened privacy concerns experienced increased anxiety, particularly in relation to their online activities.

Mitchell and Young (2024) in their examination, Social Media Activism and Anxiety Among College Students, studied the relationship between social media activism and anxiety. They found that while engagement in social causes provided a sense of purpose, it also led to increased stress and anxiety related to societal issues, emphasizing the need for balance in activism.

Santos and Young (2024) in their study, The Effects of Social Media Detox on Anxiety Reduction, explored the impact of social media detoxes on anxiety levels among college students. Their research revealed that students who participated in detox periods experienced significant reductions in anxiety, suggesting that limiting social media exposure can be beneficial.

Chen and Wu (2023) in their investigation, Social Media Interactions, Loneliness, and Anxiety Among College Students, examined how loneliness affected social media usage patterns. They found that lonely students were more likely to use social media, which paradoxically increased their anxiety levels, highlighting the complex relationship between social media and mental health.

Foster and Kelly (2024) in their exploration, Social Media Literacy and Its Impact on Anxiety in Adolescents, investigated how social media literacy affected anxiety levels among adolescents. Their findings suggested that higher levels of social media literacy were associated with lower anxiety levels, emphasizing the need for education on navigating online spaces and fostering healthy social media habits.

**METHODOLOGY**

**Aim:**

To study the impact of social media and anxiety among college student

**Objective:**

To determine whether there is a relationship between anxiety and social media.

**Hypothesis:**

1. There is a significant positive relationship between social media and anxiety among college students.

**Participants:**

The study will include 100 The data will be kept confidential, and participants will have the right to withdraw from the study at any point. Students Age from 19-26 the participants will be selected using convince sampling and all the participants will be voluntary participating in the study.

**Test and tools used:**

Hamilton anxiety scale (HAM-A) (Hamilton ,1956) is used to access the participants anxiety level The HAM-A is a widely used clinical questionnaire that measure both psychology and physical symptoms of anxiety. It consists of 14 items with 5-point Likert Scale scoring ranges from 0 (not present) to 4 (severe), with a total score range of 0–56, Scoring Internal consistency Y alpha=0.77 to 0.92

Social Media Addiction Scale (SMAS) (Paige Metcalfe, 2021) is employed to measure the extent of social media addiction among participants. There are 6 statements which are assessing compulsive social media use, withdrawal symptoms, and negative consequences of excessive usage, with 5 Likert scale score ranges from (1) very rarely - (5) very often.  The BSMAS has strong psychometric properties, including good internal consistency (Cronbach's alpha=0.86) and test-retest reliability (r=0.75)

## Procedure:

The study targeted university students aged 19-26, with a sample size of 100 participants. Recruitment was conducted using convenience sampling from online platforms, university groups, and social media channels. Data was collected via an online survey (Google Forms), with informed consent obtained from all participants. The Social Media Addiction Scale (29 items, five-point Likert scale) and the Hamilton Anxiety Scale (14 items, five-point Likert scale) were used for assessments. The data was pooled and analysed using Pearson Correlation.

## RESULTS

Table 1 provides an overview of the distribution of scores for both anxiety (HAM) and social media addiction (BSMAS) among the 76 participants in the sample. The HAM scores ranged from 0 (indicating no anxiety symptoms) to 56 (indicating severe anxiety symptoms), with a mean score of 15.08 (standard deviation = 11.61). This suggests that, on average, participants reported mild to moderate levels of anxiety, but there was substantial variability in the scores, as indicated by the high standard deviation.

**Table 1 Descriptive Statistics and Correlation Between Anxiety and Social Media Addiction**

| Variable | Mean | Std. Deviation | Pearson Cor. with Anxiety | N |
|---|---|---|---|---|
| Anxiety | 15.08 | 11.61 | 1 | 76 |
| Social Media Addiction | 14.96 | 5.52 | 0.330** | 76 |

The same has been depicted in the fig 1.

**Figure 1 Relationship between Anxiety and Social Media Addiction**
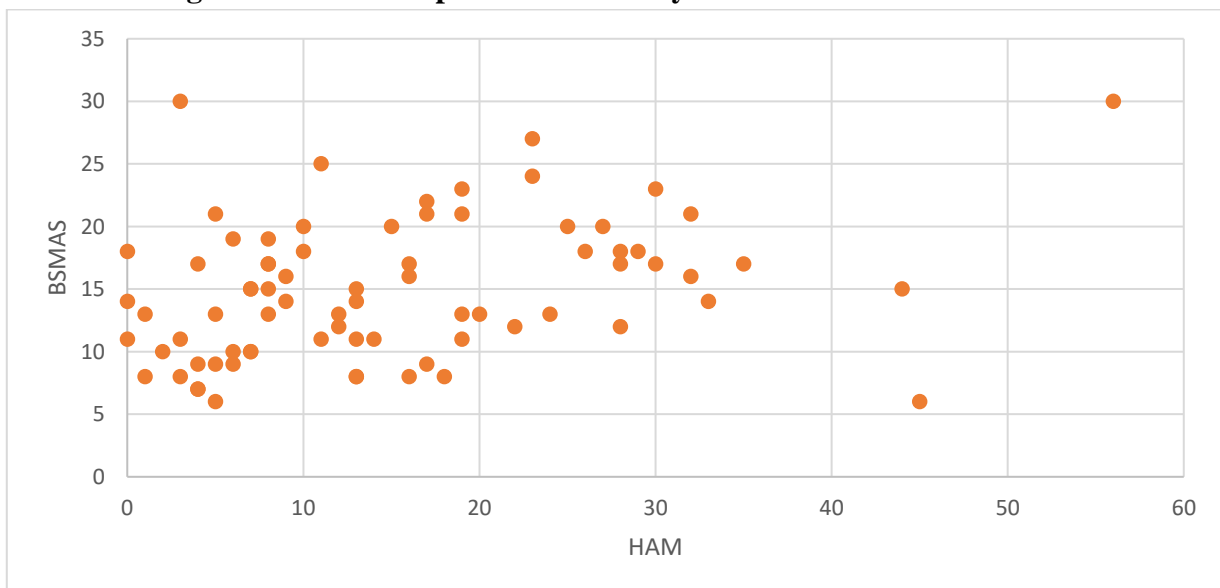
For the BSMAS, which assesses tendencies toward social media addiction, scores ranged from 6 to 30. The mean score was 14.96 (standard deviation = 5.52), indicating that participants generally reported moderate levels of social media addiction tendencies, with notable variability among responses.

The descriptive statistics reveal important insights into the levels of anxiety and social media addiction among participants. The relatively high standard deviation of 11.61 for anxiety scores reflects a significant spread, meaning some participants reported very low levels of anxiety, while others experienced much higher levels. This variability highlights the diverse experiences of anxiety within the sample.

In contrast, social media addiction, measured by BSMAS, showed a minimum score of 6 and a maximum score of 30, with a mean score of 14.96. The standard deviation of 5.52 indicates some variability, but it is less pronounced than that of anxiety scores. This may suggest that participants were more consistent in their social media usage compared to their experiences of anxiety.

The Pearson correlation coefficient between these two variables was r = .330, indicating a moderate positive correlation. This means that as anxiety levels (HAM scores) increase, social media addiction tendencies (BSMAS scores) also tend to increase. The correlation was statistically significant, with a p-value of .004, which indicates that this relationship is unlikely to be due to random chance (significance threshold of $p < .01$). While the correlation is moderate, it suggests that individuals with higher anxiety may be more likely to exhibit signs of social media addiction, though the strength of this relationship is not extremely strong.

The results indicate that while anxiety is associated with social media addiction, it is not the sole factor contributing to higher levels of addiction. Other factors may also play a role in explaining this relationship. The statistical significance of the correlation provides strong evidence for a link between these two variables, despite the correlation not being exceptionally strong.

## DISCUSSION

The results of this study provide substantial support for the hypothesis that there is a significant relationship between social media addiction and anxiety among college students. The moderate positive correlation (r = 0.330, p = 0.004) observed between these two variables suggests that higher levels of social media addiction are associated with increased anxiety. This finding aligns with the broader literature on the psychological impacts of excessive social media usage, highlighting an important area of concern for mental health professionals, educators, and students alike.

Several studies echo the results observed in this study. For instance, Ahmed et al. (2023) found a significant positive relationship between social media addiction and anxiety among university students, reinforcing the idea that prolonged and excessive social media use can lead to heightened anxiety levels. Their study focused on a similar population of students and employed a comparable methodology, which lends further credibility to the results of the current research. Moreover, Jain & Mukherjee (2024) reported that frequent social media engagement, especially late at night, contributed to sleep disturbances and anxiety, further corroborating the connection observed in the current study between social media addiction and mental health difficulties.

Other studies have demonstrated similar patterns. A longitudinal study by Kuss & Griffiths (2017) showed that social media usage, particularly in the form of passive consumption (such as scrolling through feeds), is linked to negative mental health outcomes, including anxiety, depression, and low self-esteem. The researchers found that the time spent on social media, coupled with specific behaviours like comparing oneself to others, could contribute to the onset or exacerbation of anxiety symptoms. These findings are

consistent with the results of the current study, which suggests that higher levels of social media addiction are associated with increased anxiety levels among college students.

A number of psychological theories offer insight into why social media addiction and anxiety might be linked. One such theory is Social Comparison Theory (Festinger, 1954). This theory posits that individuals have an innate drive to evaluate themselves in comparison to others. In the context of social media, where users are often exposed to idealized portrayals of others' lives, this tendency toward social comparison can lead to feelings of inadequacy and self-doubt. The participants in this study, through their use of social media, may have been engaging in constant comparisons with peers, influencers, or celebrities, leading to increased anxiety. As individuals compare their real-life experiences to the curated content they encounter online, they may experience stress and negative self-evaluation, which could heighten anxiety levels.

Moreover, Uses and Gratifications Theory (Katz et al., 1973) provides another lens through which to understand the relationship between social media addiction and anxiety. According to this theory, individuals use media, including social media platforms, to fulfill certain psychological needs, such as the need for social interaction, entertainment, or escapism. While these platforms may temporarily satisfy these needs, excessive use, as seen in participants with high social media addiction, can backfire and lead to negative outcomes, including anxiety. When online interactions do not meet the emotional needs or expectations of users, the frustration and dissatisfaction that follow could contribute to heightened anxiety. For example, not receiving enough "likes" or positive feedback on posts can lead to feelings of rejection or exclusion, which may further exacerbate anxiety in vulnerable individuals.

The relationship between social media and anxiety can also be explained through Cognitive Behavioral Models (Beck, 1976), which suggest that dysfunctional thought patterns can be reinforced through repeated exposure to anxiety-provoking stimuli. In the context of social media, users may encounter content that triggers negative self-perceptions, fear of missing out (FOMO), or exclusion. Over time, the participants in this study may have developed maladaptive cognitive patterns, such as excessive rumination or catastrophizing, which perpetuate feelings of anxiety. The moderate correlation between social media addiction and anxiety observed in this study may reflect how these cognitive distortions become reinforced through habitual engagement with social media.

One important consideration in understanding the relationship between social media addiction and anxiety is the distinction between passive and active social media use. Passive social media consumption, such as scrolling through feeds without interacting, has been found to be more strongly associated with negative emotional outcomes than active use (Verduyn et al., 2017). Passive use often leads to upward social comparisons, where users feel inferior to those they see on social media, potentially leading to anxiety. This phenomenon, known as envy-inducing content, can create a sense of dissatisfaction with one's own life and contribute to anxious thoughts.

On the other hand, active social media use, such as directly interacting with friends or posting content, has been found to have more neutral or even positive effects on mental health. This distinction is important for interpreting the results of the current study. Although this research did not differentiate between passive and active users, it is possible that participants engaging in more passive social media use experienced greater anxiety, contributing to the observed positive correlation between social media addiction and anxiety. Future studies could benefit from distinguishing between these two types of social media use to better understand their unique impacts on mental health.

Sleep disturbances, such as difficulty falling asleep or maintaining restful sleep, are another potential pathway through which social media addiction might contribute to anxiety. Research has consistently

shown that excessive social media use, particularly late at night, is associated with poorer sleep quality (Levenson et al., 2017). Late-night social media use often involves exposure to stimulating content, bright screens, and interactions that can delay the onset of sleep. For students who are already vulnerable to anxiety, sleep deprivation can further exacerbate their symptoms, creating a vicious cycle of poor sleep and increased anxiety. The moderate correlation between social media addiction and anxiety observed in this study may reflect this cycle, with participants' sleep being disrupted by their engagement with social media, leading to heightened anxiety.

The findings of this study have important implications for interventions aimed at reducing anxiety among college students. One potential intervention is the implementation of Digital Detox Programs (Wang et al., 2021), which encourage individuals to take breaks from social media use. Research on digital detoxes has shown that reducing time spent on social media can lead to significant reductions in anxiety and other mental health symptoms. Encouraging students to adopt healthier habits around social media, such as setting time limits on usage or designating "phone-free" times during the day, could help mitigate the negative effects of social media addiction on anxiety.

Additionally, psychoeducation on the risks of excessive social media use could be integrated into mental health support services provided by universities. Educating students on the potential psychological consequences of social media addiction, including its impact on anxiety, selfesteem, and sleep, could empower them to make more informed decisions about their social media habits. Workshops or counseling sessions that teach students how to balance their online and offline lives, recognize the signs of social media addiction, and develop coping strategies for managing anxiety could prove beneficial.

Despite the significant findings, there are several limitations to this study that must be acknowledged. First, the sample size of 76 participants, while adequate for the purposes of correlation analysis, limits the generalizability of the findings to larger populations. Future research could benefit from recruiting larger and more diverse samples to confirm the relationship between social media addiction and anxiety in different demographic groups.

Second, the cross-sectional design of this study prevents us from making causal inferences about the direction of the relationship between social media addiction and anxiety. While the results suggest that higher levels of social media addiction are associated with increased anxiety, it remains unclear whether social media addiction leads to anxiety or whether individuals who are already anxious are more likely to engage in excessive social media use as a form of coping. Longitudinal studies that track participants over time would be valuable for clarifying the directionality of this relationship.

Third, this study did not account for specific types of social media platforms or online behaviors. Different social media platforms may have distinct effects on anxiety. For example, platforms that emphasize visual content, such as Instagram or TikTok, may evoke stronger feelings of social comparison than text-based platforms like Twitter. Furthermore, the way individuals use social media—whether they are posting, commenting, or simply observing—could influence the extent to which social media contributes to anxiety. Future research could explore these nuances to provide a more comprehensive understanding of how social media impacts mental health.

Given the limitations of this study, future research could explore several avenues to deepen our understanding of the relationship between social media addiction and anxiety. One potential direction is to conduct longitudinal studies that follow college students over time to assess how their social media usage and anxiety levels change. This would help clarify whether social media addiction contributes to

the development of anxiety or whether individuals with pre-existing anxiety are more likely to become addicted to social media.

In addition, future studies could examine potential moderating variables that influence the relationship between social media addiction and anxiety. For instance, personality traits such as neuroticism or self-esteem may play a role in determining how individuals respond to social media use. Students with high levels of neuroticism, who are prone to experiencing negative emotions, may be more vulnerable to the anxiety-inducing effects of social media addiction. Similarly, students with low self-esteem may be more likely to engage in social comparison on social media, which could exacerbate their anxiety. Understanding these individual differences would provide valuable insights for tailoring interventions to specific subgroups of students.

Another important area for future research is the exploration of specific online behaviors that contribute to anxiety. For example, does spending more time scrolling through social media feeds (passive use) lead to greater anxiety than engaging in direct messaging or posting content (active use)? Do different social media platforms have varying effects on anxiety levels? By examining these questions, future research could provide more detailed recommendations for managing social media use to protect mental health.

## CONCLUSION

In conclusion, this study highlights a significant relationship between social media addiction and anxiety among college students, with higher levels of social media addiction associated with increased anxiety. While the findings are consistent with previous research, several limitations and areas for future exploration remain. Understanding the underlying mechanisms of this relationship, such as social comparison, sleep disturbances, and passive vs. active use, can guide future research and intervention efforts. Addressing the mental health challenges posed by social media addiction is critical for promoting the well-being of college students in today's digitally connected world.

## REFERENCES

1. American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). American Psychiatric Association.
2. Baltaci, Ö. (2019). The predictive relationships between social media addiction and social anxiety, loneliness, and happiness. *International Journal of Progressive Education, 15*(4), 73-82.
3. Becker, M. W., Alzahabi, R., & Hopwood, C. J. (2013). Media multitasking is associated with symptoms of depression and social anxiety. *Cyberpsychology, Behavior, and Social Networking, 16*(2), 132-135.
4. Boyd, D. M., & Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication, 13*(1), 210-230.
5. Carruthers, S. E., Warnock-Parkes, E. L., & Clark, D. M. (2019). Accessing social media: Help or hindrance for people with social anxiety? *Journal of Experimental Psychopathology, 10*(2), 2043808719837811.
6. Chen, Y., Li, R., Zhang, P., & Liu, X. (2020). The moderating role of state attachment anxiety and avoidance between social anxiety and social networking sites addiction. *Psychological Reports, 123*(3), 633-647.

7.  Chou, H. T. G., & Edge, N. (2012). "They are happier and having better lives than I am": The impact of using Facebook on perceptions of others' lives. *Cyberpsychology, Behavior, and Social Networking, 15*(2), 117-121.

8.  Chu, X., Ji, S., Wang, X., Yu, J., Chen, Y., & Lei, L. (2021). Peer phubbing and social networking site addiction: The mediating role of social anxiety and the moderating role of family financial difficulty. *Frontiers in Psychology, 12*, 670065.

9.  Curvis, W., Simpson, J., & Hampson, N. (2018). Social anxiety following traumatic brain injury: An exploration of associated factors. *Neuropsychological Rehabilitation, 28*(4), 527-547.

10. Dhiman, D. (2020). Influence of social media in developing social anxiety: A study of

11. Kurukshetra University students. *PalArch's Journal of Archaeology of Egypt/Egyptology, 17*(12), 1585-1592.

12. Fardouly, J., Diedrichs, P. C., Vartanian, L. R., & Halliwell, E. (2015). Social comparisons on social media: The impact of Facebook on young women's body image concerns and mood. *Body Image, 13*, 38-45.

13. Gros, D. F., Antony, M. M., Simms, L. J., & McCabe, R. E. (2007). Psychometric properties of the State-Trait Inventory for Cognitive and Somatic Anxiety (STICSA): Comparison to the StateTrait Anxiety Inventory (STAI). *Psychological Assessment, 19*(4), 369-381.

14. Handy, F., & Cnaan, R. A. (2007). The role of social anxiety in volunteering. *Nonprofit Management and Leadership, 18*(1), 41-58.

15. Hawes, T., Zimmer-Gembeck, M. J., & Campbell, S. M. (2020). Unique associations of social media usage and online appearance preoccupation with depression, anxiety, and appearance rejection sensitivity. *Body Image, 33*, 66-76.

16. Hofmann, S. G., Asnaani, A., & Hinton, D. E. (2010). Cultural aspects in social anxiety and social anxiety disorder. *Depression and Anxiety, 27*(12), 1117-1127.

17. Hutchins, N., Allen, A., Curran, M., & Kannis-Dymand, L. (2021). Social anxiety and online social interaction. *Australian Psychologist, 56*(2), 142-153.

18. Iqbal, J., Asghar, M. Z., Ashraf, M. A., & Rafiq, M. (2022). Social media networking sites usage and depression among university students during the COVID-19 pandemic: The mediating roles of social anxiety and loneliness. *Social Media + Society, 8*(3), 20563051221107633.

19. Jiang, S., & Ngien, A. (2020). The effects of Instagram use, social comparison, and self-esteem on social anxiety: A survey study in Singapore. *Social Media & Society, 6*(2), 2056305120912488.

20. college students. *Cyberpsychology, Behavior, and Social Networking, 19*(4), 264-269.

21. Kircaburun, K., & Griffiths, M. D. (2018). Instagram addiction and the Big Five of personality: The mediating role of self-liking. *Journal of Behavioral Addictions, 7*(1), 158-170.

22. Kross, E., Verduyn, P., Demiralp, E., Park, J., Lee, D. S., Lin, N., ... & Ybarra, O. (2013). Facebook use predicts declines in subjective well-being in young adults. *PLOS ONE, 8*(8), e69841.

23. Kruchten, E. A. (2021). Examining the relationship between social anxiety and social media engagement [Master's thesis, University]. Masters Theses, 4889.

24. *Relationship Between Social Media Usage and Social Anxiety Among College Students.* (2023). *The International Journal of Indian Psychology*, 20(4), 3657.

25. Lai, F., Wang, L., Zhang, J., Shan, S., Chen, J., & Tian, L. (2023). Relationship between social media usage and social anxiety in college students: Mediation effect of communication capacity. *International Journal of Environmental Research and Public Health, 20*(4), 3657.

26. Lam, T. N., Jensen, D. B., Hovey, J. D., & Roley-Roberts, M. E. (2022). College students and cyberbullying: How social media usage affects social anxiety and social comparison. *Heliyon*, e12556.

27. Lee, J. A., & Robbins, S. B. (2015). The relationship between social media usage and self-esteem. *Psychology of Popular Media Culture, 4*(4), 282-295.

28. Lee, S. Y., & Jang, K. (2019). Antecedents of impression management motivations on social network sites and their link to social anxiety. *Media Psychology, 22*(6), 890-904.

29. Leigh, E., & Clark, D. M. (2016). Cognitive therapy for social anxiety disorder in adolescents: A development case series. *Behavioural and Cognitive Psychotherapy, 44*(1), 1-17.

30. Lin, L. Y., Sidani, J. E., Shensa, A., Radovic, A., Miller, E., Colditz, J. B., ... & Primack, B. A.

31. (2016). Association between social media usage and depression among US young adults. *Depression and Anxiety, 33*(4), 323-331.

32. Lin, W. S., Chen, H. R., Lee, T. S. H., & Feng, J. Y. (2019). Role of social anxiety on high engagement and addictive behavior in the context of social networking sites. *Data Technologies and Applications, 53*(2), 156-170.

33. Mallari, G. R., & Hall, G. C. (2018). The association between social media usage and symptoms of anxiety and depression among ethnic minority college students. *Journal of Diversity in Higher Education, 11*(3), 270-283.

34. Manjunatha, S. (2013). The usage of social networking sites among college students in India. *International Research Journal of Social Sciences, 2*(5), 15-21.

35. Marshall, T. C., Lefringhausen, K., & Ferenczi, N. (2015). The Big Five, self-esteem, and narcissism as predictors of the topics people write about in Facebook status updates. *Personality and Individual Differences, 85*, 35-40.

36. Mekuria, K., Mulat, H., Derajew, H., Mekonen, T., Fekadu, W., Belete, A., ... & Kibret, S. (2017). High magnitude of social anxiety disorder in school adolescents. *Psychiatry Journal, 2017*.

37. Mese, C., & Aydin, G. S. (2019). The use of social networks among university students. *Educational Research and Reviews, 14*(6), 190-199.

38. Mundel, J., Wan, A., & Yang, J. (2023). Processes underlying social comparison with influencers and subsequent impulsive buying: The roles of social anxiety and social media addiction. *Journal of Marketing Communications*, 1-18.

39. O'Day, E. B., & Heimberg, R. G. (2021). Social media usage, social anxiety, and loneliness: A systematic review. *Computers in Human Behavior Reports, 3*, 100070.

40. Oldmeadow, J. A., Quinn, S., & Kowert, R. (2013). Attachment style, social skills, and Facebook use amongst adults. *Computers in Human Behavior, 29*(3), 1142-1149.

41. Pantic, I. (2014). Online social networking and mental health. *Cyberpsychology, Behavior, and Social Networking, 17*(10), 652-657.

42. Prizant-Passal, S., Shechner, T., & Aderka, I. M. (2016). Social anxiety and internet use – A metaanalysis: What do we know? What are we missing? *Computers in Human Behavior, 62*, 221-229.

43. Rinck, M., Rörtgen, T., Lange, W. G., Dotsch, R., Wigboldus, D. H., & Becker, E. S. (2010). Social anxiety predicts avoidance behavior in virtual encounters. *Cognition and Emotion, 24*(7), 1269-1276.

44. Schmidt, N. B., Richey, J. A., & Fitzpatrick, K. K. (2006). Anxiety sensitivity as an underlying mechanism in the relationship between anxiety and alcohol use. *Journal of Anxiety Disorders, 20*(7), 1037-1051.

45. Sponcil, M., & Gitimu, P. (2013). Use of social media by college students: Relationship to communication and self-concept. *Journal of Technology Research, 4*(1), 37-49.

46. Stollak, M. J., Vandenberg, A., Burklund, A., & Weiss, S. (2011, February). Getting social: The impact of social networking usage on grades among college students. In *Proceedings from ASBBS annual conference* (Vol. 18, No. 1, pp. 859-865).

47. Vannucci, A., Flannery, K. M., & Ohannessian, C. M. (2017). Social media usage and anxiety in emerging adults. *Journal of Affective Disorders, 207*, 163-166.

48. Wang, Y., Niiya, M., Mark, G., Reich, S. M., & Warschauer, M. (2015, February). Coming of age (digitally): An ecological view of social media usage among college students. In *Proceedings of the 18th ACM conference on computer supported cooperative work & social computing* (pp. 571582).

49. Zsido, A. N., Arato, N., Lang, A., Labadi, B., Stecina, D., & Bandi, S. A. (2021). The role of maladaptive cognitive emotion regulation strategies and social anxiety in problematic smartphone and social media usage. *Personality and Individual Differences, 173*, 110647.

50. Semwal, R., Tripathi, N., & Pandey, U. K. (1 C.E.). Leveraging Artificial Intelligence in Service Marketing to Enhance Electronic Word of Mouth (eWOM). Https://Services.Igi-Global.Com/Resolvedoi/Resolve.Aspx?Doi=10.4018/979-8-3693-7909-7.Ch012, 249–269. https://doi.org/10.4018/979-8-3693-7909-7.CH012

51. Semwal, R., Tripathi, N., & Tyagi, P. K. (1 C.E.). Leveraging AI for Diversity, Equity, and Inclusion in Service Marketing. Https://Services.Igi-Global.Com/Resolvedoi/Resolve.Aspx?Doi=10.4018/979-8-3693-7909-7.Ch017, 339–358. https://doi.org/10.4018/979-8-3693-7909-7.CH017

52. Semwal, R., Tripathi, N., Tyagi, P. K., & Nadda, V. (1 C.E.). Neural Networks and Customer Connectivity. Https://Services.Igi-Global.Com/Resolvedoi/Resolve.Aspx?Doi=10.4018/979-8-3693-7122-0.Ch023, 477–498. https://doi.org/10.4018/979-8-3693-7122-0.CH023