

The impact of social media on mental health

Shubham Raj¹, Deepak khatkar², Abhishek Sharma³

^{1,2,3}Lovely professional University

Abstract: It has long been known that excessive usage of social media is linked to a rise in mental wellness issues. Young adult's access to social media is rapidly increasing, which leads to worries about how it can affect their mental health and general wellness. This is especially true for populations of university students, where mental health problems are becoming more common. This study used qualitative methods to determine how social media use may lead to stress in daily life. Numerous youths express a preference for digital interventions and use social media to look for assistance as well as data online. Therefore, social media-deployed digital therapies hold the potential to reach a group that is not currently receiving therapy and may be at risk of experiencing deteriorating symptoms. Our goal in conducting this review was to locate and examine empirical studies on social media-based therapies that enhance the mental health of adolescents and young adults. Students were questioned about how they use social media and if it causes them stress. A follow-up question asked them to explain the cause of the stress. Thematic analysis was used to look at the free-text replies from participants; Over 500 students submitted statements for review. In this paper, data is given by those under the age of 30 and discusses how many hours per day people are spending time on social media, which social media platforms people are using regularly, which is the primary activity on social media, which type of content people mostly engaging with on social media, and talking about anxiety, depression, self-esteem after spending time on social media. The complex relationship between young people's use of social media and mental health is highlighted by the findings, which could help shape the creation of suitable their ages guidelines on distress awareness and management.

Index terms - Social media, mental health, anxiety, mental wellness, young people.

I.INTRODUCTION

Social media also referred to as social networking, has emerged as the most widely used platform for interaction and communication among individuals worldwide, across all age groups in the world. Social media refers to the sharing and communication of content on different technological platforms including

Instagram, Twitter, Facebook, and Snapchat[1]. Compared to young adults in the general population, students in this age range (16-30age) report significantly greater rates of psychological distress and mental disease[2], with recent inquiries for additional data regarding the possibility that young people who attend higher education institutions are more likely to experience mental health issues[3]. Knowing the variables influencing college students' mental health and wellness is essential for figuring out who needs care and how to best provide it. The potential connection between young people's mental health and social media use is one area of considerable concern[4]. Over the past 10 years, social media use (SMU), which is defined as internet-based technology and any mobile that permits online interactions and allows people to share, discuss, and edit user-generated material, has become increasingly prevalent in society[5]. Over 80% of young adults (18–29 years old) worldwide report using at least one social media platform, while young people (16–24 years old) use social media for an average of three hours per day. Additionally, social media can be a helpful tool in lowering potential obstacles that people from all walks of life may encounter when dealing with a mental health diagnosis[6]. The most famous platforms amongst young age are YouTube (used by 95% of young adults), followed by Instagram (71%), Facebook (70%), Snapchat (65%), and TikTok (48%) however trends in usage patterns and preferences change over time[7]. Young people's rates of mental illness have been rising along with the growth in social media use. The percentage of young students, aged 11 to 24, who reported having any mental illness in the previous 12 months increased from 19% to 26% between 2015 and 2018. The rise in mental illness among young people has prompted more research into potential causes and connections. An impartial WHO-UNICEF-Lancet Commission report on youth health and wellbeing identifies the concurrent rise in young social media use over the past few years as a problem

deserving of attention due to potential effects on wellbeing and mental health[8]. Nonetheless, several studies have been published in the literature that connect social media use to several mental conditions, such as anxiety, low self-esteem, and depression symptoms. Social media users may encounter harassment, humiliation, and unfavorable comments on their posts[9]. Comparing their life pleasure and self-image to other users may potentially cause distress for these people. Negative social media habits can also lead to feelings of loneliness, despair, and mood swings because of the unfavorable things users view while scrolling through social media[10].

II. LITERATURE REVIEW

Given the rise in social media usage over the past ten years, it's critical to evaluate any potential effects social media may have on mental health. Regarding the effects of social media on mental health, mental health practitioners have not yet taken many concrete steps[11]. Furthermore, not much study has been done on mental health professionals' awareness of or readiness to address the negative effects of frequent social media use on their patients' mental health[10]. Due to the notable increase in mental health symptoms, social media's impact on mental health makes it more difficult to provide social services on a micro level. There is a growing demand for more treatment providers as more people are presenting with symptoms of anxiety, depression, low self-esteem, etc. as a result of using social media. In order to provide better care for people impacted by this problem, mental health service providers must be aware of the influence social media has on mental health[12].

The relationship between social media use and mental health has been linked to a number of variables, including negative social comparisons, poor sleep from evening use, pressure to be online constantly, and fear of missing out. As an example, a U.S. survey of 386 university students discovered that social media use was connected with increased levels of anxiety about missing out on peer social contacts and events, and that worry was linked to worsening mental, emotional, and physical health[13]. The literature has shown conflicting results about the benefits and drawbacks of social media use, indicating the complexity and hidden nature of the relationship between social media use, stress, and mental health. As an example, conducted a systematic review of 30

empirical studies to examine the relationship between social media use and depressive symptoms in a variety of samples (ages 15–88 years) from 14 different countries. Their findings revealed that there was a significant positive correlation between social media use and depressive symptoms in some of the studies, but others did not find anything [3]. Two studies found a weak negative link between social media use and mental illness, which adds to the inconsistent results. The review authors came to the conclusion that there seem to be both advantages and disadvantages to social media use for mental health. They also emphasized the significance of taking contextual elements into account and delving further into the user experience to better understand how social media use affects mental health. The best research techniques for handling these complications are qualitative approaches[14].

Although there is a growing body of recent research on social media use and mental health, most of it focuses on adolescent populations (Orben & Przybylski, 2019), with few studies looking at these phenomena in older adolescents, young adults, or university student populations in particular. In one such experimental study, social media use among US university students was found to hurt psychological well-being, especially for those students who showed a stronger propensity for social comparison—that is, comparing oneself to the opinions, skills, and lives of others[15]. Another research of college students in the United States looked at the connection between mental health and "vague booking," the practice of making ambiguous but frightening messages on social media in an attempt to attract attention. According to the study, this behavior was linked to a rise in suicidal thoughts and feelings of loneliness. Six papers examining the connection between social media use and mental health among college students during the COVID-19 pandemic were found in a recent comprehensive review[8]. The review found that using social media seems to be linked to symptoms of mental illness, but methodological flaws made it difficult to conclude causality[16]. Some research indicates that the causal relationship is the opposite, with those who experience higher levels of everyday stress and mental health issues using social media use as a coping mechanism and escape[17]. The current study aims to investigate the effects of social media use on mental health and well-being in a young people population whose rates

of mental illness are rising, even if the literature acknowledges that social media use may have both potential advantages and drawbacks.

III. NEED OF STUDY

After reviewing the literature, we found that use of social media directly affecting the mental health problem and also the cause of the anxiety, depression. Many of the literature reported that use of social media affect mental health when they use social media for a long time. Use of social media cause problems in life when we used as a daily routine and used more than 5 to 6 hours so, In this study, trying to find out root cause of the mental health problem in long term by survey.

IV. RESEARCH GAP

The field of social media studies is relatively new and is expanding quickly. As a result, it has a lot of unanswered and surprising but helpful answers attached. According to recent research, using social media platforms can negatively impact a person's psychological well-being. It is currently unknown, though, how much social media use affects the general populace. According to this comprehensive review, social media envy has an impact on people's anxiety and depressive symptoms.

In this study, we are collecting data by spread sheet form from each individual how they are feeling individually after use of social media. We collected data on the basis of satisfaction, overall- esteem, which platforms people like the most, how many hours people spending time on social media etc. like that we collected many data and presented in this study.

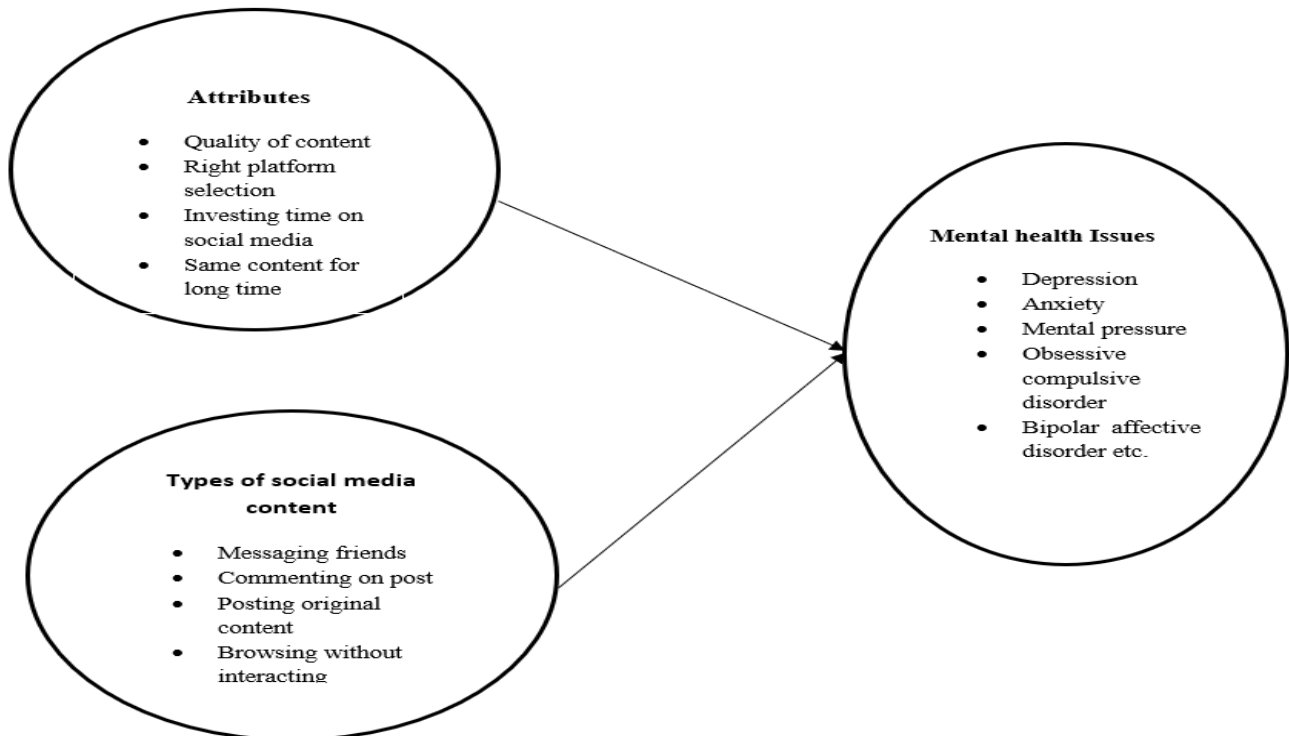
V. OBJECTIVES

- To study use of social media on mental health.
- To study how social media causing depression, anxiety.
- To study, what is the root cause of mental health issues by conducting a survey.
- To study, individual feeling like satisfaction, overall esteem and presented in this study.

VI. HYPOTHESIS

- H1: There is a significant relationship between social media use and mental health issues.
H2: There is a significant relationship between time of social media use and anxiety, depression.
H3: There is direct connection with content used on social media and mental health issues.
H4: There is significant connection between overall self-esteem and social media use.

VII. CONCEPTUAL MODEL



VIII. RESEARCH METHODOLOGY

PARTICIPANTS AND DESIGN

The data used in this study were taken from a bigger survey of college education students carried out at a reputable university. A survey examined various aspects of student health and wellness, such as mental health, risk-taking behaviors, psychological stresses, educational and academic factors, cultural and social circumstances, and knowledge of and access to wellness and health services[18]. The current study focuses on a sample of students who answered survey questions regarding their use of social media.

MEASURES

Different information with the range of data collected such as gender(female/male/self-described), age, residential area(rural/urban), enrollment status(part-time/full time), and different areas of students. People were questioned about how much time they typically spend on social media and how much stress it causes them in their daily lives. All data was collected based on the worst situation to the very good situation. People were asked about negative content on social media, symptoms of anxiety, symptoms of depression, and rate overall self-esteem on this basis trying to find out the cause of mental health problems because of social media.

IX. RESULTS AND DISCUSSION

9.1 PEOPLE SPENDING TIME ON SOCIAL MEDIA

People asked about spending time on social media, and 47% of respondents has replied, they are using social media for 1-2 hours. Then 3-4 hours social media users which is 19%, 26% of respondents has replied, they use less than 1 hour and rest 4% respondent has replied, they use more than 5 hours. Very less people used social media for more than 6 hours as shown in Figure 1. This social media use creates stress, depression, and anxiety because of negative content on social media. Social media use is also a very important tool to connect the world and know what is going on in our surroundings. Most of the people replied use of social media for more than 3 hours is the cause of depression, anxiety, and stress in the long term. The use of social media for 1-3 hours is feasible to connect

with the world and our surroundings as collected data represents.

9.2 PEOPLE USING SOCIAL MEDIA PLATFORMS REGULARLY

People asked about social media platforms used regularly so data represented in Figure 2 most of the people using Instagram, LinkedIn, and Snapchat. The data conclude that people like that platform which has messaging options as well as seeing different post options. People also asked about what is the reason to spend time more than 3 hours on social media, people replied reel in the main reason is the use of social media for more than 3 hours. Almost 100 people used Instagram then LinkedIn then Snapchat and then Twitter. Very less people using Tiktok as represented in Figure 2.

9.3 PEOPLE'S PRIMARY ACTIVITY ON SOCIAL MEDIA

People asked about their primary activity on social media so data representing most of the people spending time on social media by messaging friends, commenting on posts, and posting original content. 30% of respondents has replied that they do massaging friends and 30% are posting original content which may be the cause of stress in the long term because typing daily for more than 4 hours may give people anxiety, and depression which creates mental health issues. This type of issue comes in young age people who are using social media a post original content, and message friends as shown in Figure 3.

9.4 PEOPLE USING WHICH TYPE OF CONTENT

People asked about which type of content they like to do/see on social media so from Figure 4 most people use social media for entertainment, lifestyle, and personal stories. Almost 39 people are interested in art and creativity and almost 500 people are interested in entertainment so from the graph conclusion is entertainment and posting stories are not the only ways to get out of depression, anxiety sometime it will help but for a longer time it will create anxiety, mental health issues so feel happy, sometimes need to do or involve in art, creativity, and current events etc.

9.5 How often people encounter negative content on social media

People asked about encountering negative content on social media, and 27% people replied very often

getting negative content on social media that may be the cause of depression, anxiety, and mental health issues. If people do not like the content which are coming on social media like negative content then it will cause stress in the longer term. Very less people said never they were getting negative content so from Figure 5 conclusion is most people getting negative content on social media.

9.6 how often people feel symptoms of anxiety

People were asked about symptoms of anxiety and symptoms of depression in the past month, data in Figure 6, 34% people replied often, and sometimes after using social media for a long time so the conclusion is social media use in the long term may cause anxiety, depression, and mental health issues. Very less people replied that social media does not cause any depression, anxiety, and mental health issues. People also said using social media for a long time causes depression which is why 24% of people replied in sometimes.

9.7 People rate their overall self-esteem

People asked about their overall self-esteem after the use of social media. Most of the people replied with moderate overall self-esteem. Around 34% people replied with moderate and around 23% people replied

with very high and high overall self-esteem so we can conclude that social media is not the only reason for treating anxiety, depression, and mental health issues, there will be other reasons also which create depression and mental health issues in long term. In Figure 7 some also replied in less and very less so we can not say social media is not affecting our mental health issues and is not a cause of depression.

9.8 People scale use of social media affected their self-esteem

People asked about scale use of social media on the basis of their self-esteem, and most of the people said social media use positively affects their self-esteem. As shown in Figure 8, 75% responded positively, 19% responded negatively, 1% responded with no effect, and 1% of people were confused means not sure. So, from here conclude that social media use has a positive impact on the mental health as well as a negative impact on mental health because social media connects you through the whole of India as well as the world about news, education, different surveys, different world data, different world education, different world politics, and different culture. After doing this sometimes people feel happy and sometimes people feel bad depending on the content.

S. NO.	Question	p-Value
1.	"How many hours per day do you spend on social media?"	0.021
2.	"Which social media platforms do you use regularly?"	0.048
3.	"What is your primary activity on social media?"	0.0053
4.	"What type of content do you mostly engage with on social media?"	0.0134
5.	"How often do you encounter negative content on social media?"	0.0455
6.	"In the past month, how often have you felt symptoms of anxiety?"	0.00775
7.	"In the past month, how often have you felt symptoms of depression?"	0.00123
8.	"How would you rate your overall self-esteem?"	0.0234
9.	"Has your use of social media affected your self-esteem?"	0.012556

In contrary, the p-value will follow the values of alpha if it is greater than or equal to it, then the null hypothesis cannot be rejected. The corresponding confidence interval, however, does not contain zero, implying that the observed disparity in means is insignificant statistically. Therefore, we conclude that there is no noticeable difference in the mean answers of the two age categories. Taking our designated alpha level of 0.05, p-value of all hypothesis has already

come under the provided condition. As a result for this question, the null hypothetical is rejected.

9. CONCLUSION

The use of social media has both impacts on people's self-esteem positively as well as negatively. Most of the people responded people started feeling anxiety, depression, and mental health issues after using social

media long time. Negative content on social media is one of the reasons for anxiety, depression, and mental health issues in the long term. Many people are saying depression is not the short-term use of social media, this is coming after spending time more than 6 hours on social media. Anxiety, depression, and mental health-related issues also depend on, which type of content people are watching on social media. These problems are also related to spending time, which platforms people are using, and which type of activity people are doing on social media. The use of social media, sometimes makes people feel happy and sometimes people feel bad. If bad feelings go a long way after the use of social media then people start feeling depression, anxiety, and mental health problems.

REFERENCES

- [1] A. M. Kaplan and M. Haenlein, "Users of the world, unite! The challenges and opportunities of Social Media," *Bus. Horiz.*, vol. 53, no. 1, pp. 59–68, 2010, doi: 10.1016/j.bushor.2009.09.003.
- [2] E. C. Hurley, I. R. Williams, A. J. Tomin, and L. Sancu, "Computers in Human Behavior Reports Social media use among Australian university students : Understanding links with stress and mental health," *Comput. Hum. Behav. Reports*, vol. 14, no. November 2023, p. 100398, 2024, doi: 10.1016/j.chbr.2024.100398.
- [3] T. McCloud, S. Kamenov, C. Callender, G. Lewis, and G. Lewis, "The association between higher education attendance and common mental health problems among young people in England: evidence from two population-based cohorts," *Lancet Public Heal.*, vol. 8, no. 10, pp. e811–e819, 2023, doi: 10.1016/S2468-2667(23)00188-3.
- [4] S. M. Coyne, A. A. Rogers, J. D. Zurcher, L. Stockdale, and M. Booth, "Does time spent using social media impact mental health?: An eight-year longitudinal study," *Comput. Human Behav.*, vol. 104, no. July 2019, p. 106160, 2020, doi: 10.1016/j.chb.2019.106160.
- [5] J. H. Kietzmann, K. Hermkens, I. P. McCarthy, and B. S. Silvestre, "Social media? Get serious! Understanding the functional building blocks of social media," *Bus. Horiz.*, vol. 54, no. 3, pp. 241–251, 2011, doi: 10.1016/j.bushor.2011.01.005.
- [6] H. Astleitner, A. Bains, and S. Hörmann, "The effects of personality and social media experiences on mental health: Examining the mediating role of fear of missing out, ghosting, and vague booking," *Comput. Human Behav.*, vol. 138, no. February 2022, 2023, doi: 10.1016/j.chb.2022.107436.
- [7] X. Hu *et al.*, "Understanding the impact of emotional support on mental health resilience of the community in the social media in Covid-19 pandemic," *J. Affect. Disord.*, vol. 308, no. September 2021, pp. 360–368, 2022, doi: 10.1016/j.jad.2022.04.105.
- [8] X. Zheng, M. Yang, W. Li, and H. C. Lin, "The mediating roles of mental health problems and racial differences in the linkage between social media use and E-cigarette use among American youth," *Prev. Med. (Baltim.)*, vol. 179, no. September 2023, p. 107842, 2024, doi: 10.1016/j.yjmed.2023.107842.
- [9] K. Escandón, "Toward non-stigmatizing media and language in mental health: Addressing the social stigma of schizophrenia," *Schizophr. Res.*, vol. 264, no. January, pp. 491–493, 2024, doi: 10.1016/j.schres.2024.01.032.
- [10] S. Azagba, T. Ebling, and A. Korkmaz, "Social media and e-cigarette use: The mediating role of mental health conditions," *J. Affect. Disord.*, vol. 344, no. June 2023, pp. 528–534, 2024, doi: 10.1016/j.jad.2023.10.053.
- [11] G. Andrews *et al.*, "Computer therapy for anxiety and depression disorders is effective, acceptable and practical health care: An updated meta-analysis," *J. Anxiety Disord.*, vol. 55, no. August 2017, pp. 70–78, 2018, doi: 10.1016/j.janxdis.2018.01.001.
- [12] C. J. Bunker, J. M. Balcerowska, L. M. Precht, J. Margraf, and J. Brailovskaia, "Perceiving the self as authentic on social media precedes fewer mental health symptoms: A longitudinal approach," *Comput. Human Behav.*, vol. 152,

no. June 2023, p. 108056, 2024, doi: 10.1016/j.chb.2023.108056.

[13] I. Beyens, E. Frison, and S. Eggermont, “‘I don’t want to miss a thing’: Adolescents’ fear of missing out and its relationship to adolescents’ social needs, Facebook use, and Facebook related stress,” *Comput. Human Behav.*, vol. 64, pp. 1–8, 2016, doi: 10.1016/j.chb.2016.05.083.

[14] K. P. Kruzan *et al.*, “Social media-based interventions for adolescent and young adult mental health: A scoping review,” *Internet Interv.*, vol. 30, no. June, p. 100578, 2022, doi: 10.1016/j.invent.2022.100578.

[15] P. Vorderer, N. Krömer, and F. M. Schneider, “Permanently online - Permanently connected: Explorations into university students’ use of social media and mobile smart devices,” *Comput. Human Behav.*, vol. 63, pp. 694–703, 2016, doi: 10.1016/j.chb.2016.05.085.

[16] P. M. Valkenburg, A. Meier, and I. Beyens, “Social media use and its impact on adolescent mental health: An umbrella review of the evidence,” *Curr. Opin. Psychol.*, vol. 44, pp. 58–68, 2022, doi: 10.1016/j.copsyc.2021.08.017.

[17] J. Brailovskaia, J. Velten, and J. Margaf, “Relationship between daily stress, depression symptoms, and Facebook addiction disorder in Germany and in the United States,” *Cyberpsychology, Behav. Soc. Netw.*, vol. 22, no. 9, pp. 610–614, 2019, doi: 10.1089/cyber.2019.0165.

[18] H. Hassan, H. M. Hsbollah, and R. Mohamad, “Examining the interlink of social media use, purchase behavior, and mental health,” *Procedia Comput. Sci.*, vol. 196, no. 2021, pp. 85–92, 2021, doi: 10.1016/j.procs.2021.11.076.

QUESTIONNAIRE

Name:
 Email:
 Gender : Male Female ...
 Other
 Age : 20-24 25-29
 30-34 35-39 ...

Directions: For each statement in the survey, please indicate how much you agree or disagree with the statement by putting a check in the box on the right side of each statement.

1. What is your age?
 18 to 20
 21 to 25
 26 to 30
 31 to 38
 39 to 45
 Other:

2. What is your gender?
 Male
 Female
 Non-binary/Third gender
 Prefer not to say

3. How many hours per day do you spend on social media?
 Less than 1 hour
 1-2 hours
 3-4 hours
 5-6 hours
 More than 6 hours

4. Which social media platforms do you use regularly? (Select all that apply)
 Instagram
 Twitter
 LinkedIn
 TikTok
 Snapchat
 Other:

5. What is your primary activity on social media?
 *
 Posting original content
 Commenting on posts
 Browsing/Lurking without interacting
 Messaging friends
 Other:

6. What type of content do you mostly engage with on social media?

Entertainment (e.g., memes, funny videos)

News and current events

Educational content

Content related to art and creativity

Lifestyle and personal stories

Other:

7. How often do you encounter negative content on social media?

Very often

Often

Sometimes

Rarely

Never

8. In the past month, how often have you felt symptoms of anxiety?

Very often

Often

Sometimes

Rarely

Never

9. In the past month, how often have you felt symptoms of depression?

Very often

Often

Sometimes

Rarely

Never

10. How would you rate your overall self-esteem?

Very high

High

Moderate

Low

Very low

11. Has your use of social media affected your self-esteem?

Positively

Negatively

No effect

Not sure