



# Impact of Social Media on Adolescent's Mental Health

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## Abstract:

**Background:** Today is the age of information and technology, in which social media playing an important role. Although social media has a positive effect on a person but its more use also has negative effects. Several studies have revealed an association between more use of social media and poor emotional state. It is shown that social media can affect people differently.

**Objective:** Purpose of this present study to observe the impact of social media on mental health-related to depression, anxiety, and stress of adolescents.

**Method:** The survey method was used in this study. A sample comprised of 100 students out of which 50 students who use social media for less two hours and 50 students who use social media for more than two hours was drowned randomly selected from the different schools of Aligarh district in the age range between 16 to 18 years. Depression, anxiety, and stress scales developed by **Lovibond and Lovibond (1995)** were used to data collection. For analyzing the collected data, mean, standard deviation and t-test were used to see the impact of social media on the mental health of adolescents.

**Result:** The result shows that there was a significant difference between adolescents who use social media for less than two hours and adolescents who use social media for more than two hours on depression, anxiety, and stress level. Adolescents who use social media for more than two hours received a higher mean score on depression, anxiety, and stress (17.5, 18.02 & 17.56) as compared to the adolescents who use social media for less than two hours (9.96, 10.08 & 9.12). The t-value of depression, anxiety, and stress level was 5.39, 5.88, and 6.86, respectively. These t-values were very high to the tabular t-value at 0.01 level of significance.

**Conclusion:** The findings of this study showed that there was a significant difference between adolescents who use social media for less than two hours and adolescents who use social media for more than two hours on depression, anxiety, and stress level. Hence, we can say that adolescents who use social media for more than two hours are poor mentally healthy than adolescents who use social media for less than two hours.

**Index Terms** - Social media, Adolescents, User, Sites.

## I. INTRODUCTION

Adolescence is a transforming period of personality development and growth from childhood to adulthood. Many physical and psychological changes in this stage (*Mihalyi Csikszentmihalyi, 2020*). Mental health is a crucial part of overall health for any person as well as adolescents (*NIMH, [15]*). According to the world health organization (*WHO, 2019*), Problems of mental health emerged in late childhood and early adolescence. 10 to 20 percent of children and adolescents experience mental health problems worldwide. **Mental Health Foundation, (2018) and Stansfeld et al., (2016)** found that Depression and Generalized anxiety disorder are most common among children and adolescents.

India is a country which is embraced the internet with open arms, In the past decade, internet users of India have been rapidly growing with over 680 million actives digital population. starting with simple email correspondences, that have expanded to a digital universe with many social networking giants like Google, Facebook, and Twitter. today it became a part of everyday life for millions of Indians (*Sandhya Keelery, 2020*).

Social media is one of the most popular online activities for uses in worldwide. In 2020, globally, an estimated 3.6 billion internet users were using social media in 2020 (*J. Clement, 2020*). The number of 574 million active Internet users were belong to India till 2019. India has second most internet users behind china. Indian internet consumer spent 2.4 hours every day and 17 hours each week on social networking sites while globally, internet users spent their time on social media approximately 2.4 hours every day (*Varun B. Krishnan, 2019*). The estimated 639 million active internet users will become in India till dec2020. The majority of internet users (97%) are mobile phone users in India. the age group of 12- 29 years are two-thirds of Internet users in India in which the number of girls is half than boys. Source: Internet & Mobile Association of India (IAMAI), GlobalWebIndex (*SANNAM S4, 2008*).

*Social media is an interactive computer-mediated technology as a worldwide phenomenon. Which is provide some facilities to the people like as creation and sharing of information, ideas, digital photos or videos, and data generated through online interactions (Geetha, 2018). At present, most people used the different types of social media platforms to serve as social networking (Facebook, LinkedIn, and google+), microblogging (twitter, tumblr), photo sharing (Instagram, Snapchat, Pinterest) and video sharing (youtube, Facebook live, periscope Vimeo), etc (Bhardwaj A. et al, 2017).*

Seventy-eight percent of people use Snapchat between the age ranges 18-24 years, seventy-one percent of people use Instagram and sixty-eight percent of people use Facebook. On the other, 94 percent of the age of 18-24 years people use youtube and 45 percent of people use twitter. (*According to Pew reaserch center, 2015*).

Social media is a part of daily life for the internet users. However, adolescents have many benefits from using social media. Adolescents can enhance communication skills and social connections through social media. Social media sides and apps can enable adolescents to make new friends, exchange ideas and digital photos, develop a new interest, and experiment with new forms of self-expression. With its use, youth can learn basic social and technical skills that are important for functioning in day to day society. Most adolescents use social media to build social communication and friendships that occur in school or during sports and other activities and extend it to the online world. They are not necessarily meeting new people, as they are currently enriching their friendship.

Social media addiction is very dangerous for both the mental and physical health of adolescents. Adolescents use social media to find community, but their mental health is often negatively affected by this culture of comparison. Several studies found that adolescents who are addicted to social media like as snap chat, Facebook, Twitter, Instagram, and WhatsApp all led to increasing the negative side effects such eyes strain, social withdrawal, lack of sleep, feeling of depression, anxiety, poor body image and loneliness, cyberbullying, lost self-esteem, etc.

## II. REVIEW of LITERATURE

Several studies have been conducted concerning social media and mental health of adolescents, which shows both positive and negative relation between adolescent's mental health and social media use.

**Kaur and Bashir (2015)**, found both positive and negative effect of social media on mental health of adolescents, in which positive aspects were social support social connectedness, enhanced communication and general awareness. While negative effect include depression, stress, fatigue, online harassment, cyberbullying, sexting, suppression of emotional and decrease the intellectual abilities.

Similarly, **Seabrook and Kern (2016)**, explore the positive interaction, social support and social connectedness on social networking sites. Whereas negative interaction and social comparison on social networking sites were related to higher level of depression and anxiety.

**Rosen et al. (2013) & Pantic (2014)**, found the major symptoms of depression among the participants who spent most of their time in online activities on social networking sites.

**McCrae et al. (2017)**, explore the positive significant correlation between number social media platforms across all three negative emotional states- depression, anxiety, suicidal idea, and stress. Similarly, other studies found a positive relationship between time spent scrolling through social media app and negative body image on Facebook. Those who had spent more time on social media had 2.2 times the risk of reporting eating and body image concerns, compared to their peer who spent less time on social media.

### III. PROBLEM

To find out the Impact of the social media on mental health related to depression, anxiety and stress of adolescents.

### IV. HYPOTHESIS

- I. There will be no significant difference between adolescents who use social media for less two hours and adolescents who use social media for more than two hours on depression.
- II. There will be no significant difference between adolescents who use social media for less two hours and adolescents who use social media for more than two hours on anxiety.
- III. There will be no significant difference between adolescents who use social media for less two hours and adolescents who use social media for more than two hours on stress.

### V. SAMPLE

The survey method was used in this study. A sample comprised of 100 students out of which 50 students who use social media for less two hours and 50 students who use social media for more than two hours was randomly selected from the different schools of Aligarh district in the age range between 16 to 18 years. In this sample, selected participants mostly used social media through mobile phones.

### VI. TOOL

In the present study DASS-42 developed by **Lovibond and Lovibond (1995)** was used for data collection. The scale consists of 42 items. DASS measured the three related negative emotional states of depression, anxiety, and stress. In this scale 14 items represent depression, 14 items represent anxiety and 14 items represent stress. There is a four-point scale from did not apply to me, some of the time, a good part of the time, and most of the time.

### VII. STATISTICAL ANALYSIS

In this study for analyzing the collected data, mean, standard deviation and t-test were used and to see the impact of social media on mental health-related to depression, anxiety, and stress of adolescents who use social media for less two hours and more than two hours (**A. Singh, 2019**).

### VIII. RESULTS AND DISCUSSIONS

This paper present main results as following. Table: 1 shows the difference between mean, SD & t- value of adolescents who use social media for less than two hours and more than two hours on depression level.

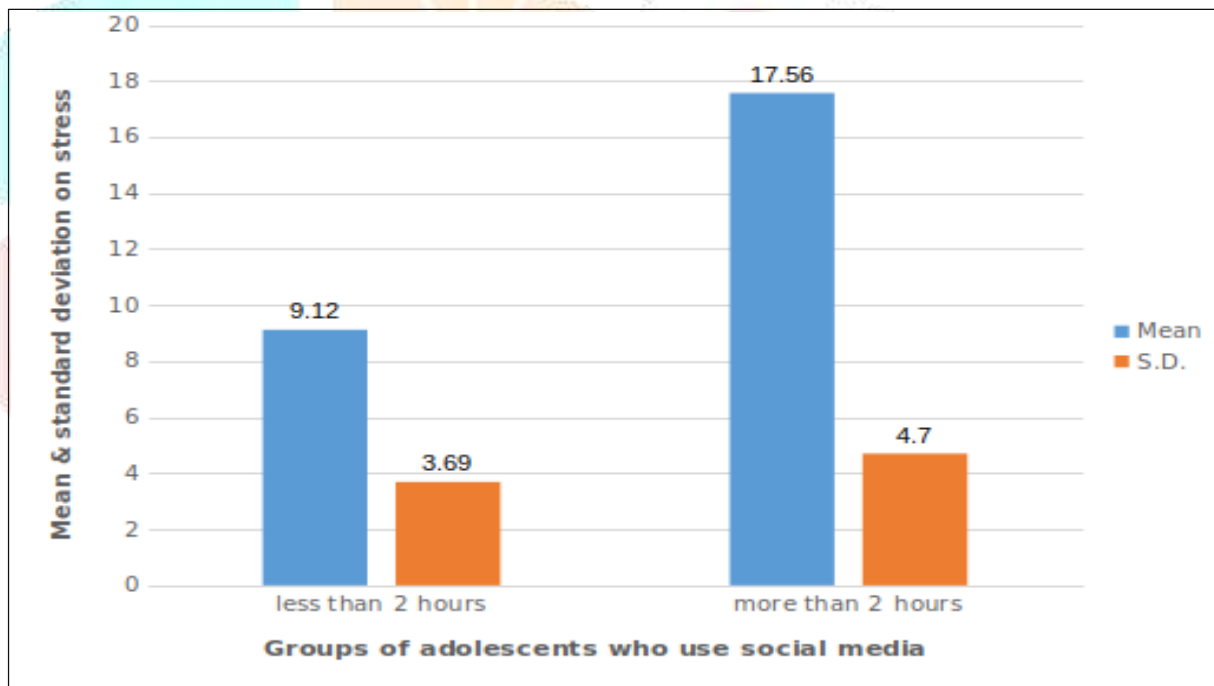
**Table 1:** This table shows that result of depression among adolescents who use social media for less than two hours and more than two hours.

Subject	N	Mean	SD	t-value	Degree of freedom	Tabular t-value*	Significant level
Social media user less than two hour	50	9.96	5.02	5.39	98	1.98	0.01
Social media user more than two hour	50	17.5	4.70				

Note: \*means t-value is taken online from link attached in references section.

The mean score on the depression of adolescents who use social media for less than two hours is 9.96 (SD=5.02) and the mean score on the depression of adolescents who use social media for more two hours is 17.5 (SD=4.70). The t- ratio of adolescents who use social media for less than two hours and adolescents who use social media for more than two hours on depression is 5.39, which is higher than t-value at 0.01 level of significance. So the first hypothesis is rejected and we can say that there was a significant difference between adolescents who use social media for less than two hours and adolescents who use social media for more than two hours on depression. It can be seen in figure 1.

According to world health organization (*WHO, 2019*), Globally, depression is one of the major factors of illness and disability in adolescents. Greater autonomy, coercion with peers, the discovery of sex identity, and the use of technology contribute to increasing stress. Media affect and gender norms can increase the disparity between adolescents' real lives and future aspirations. *Rosen et al. (2013) & Pantic (2014)*, found the similar results.



**Figure 1:** Shows the mean and standard deviation on depression of adolescents who use social media for less than two hours and more than two hours.

Table: 2 shows the difference between mean, SD & t- value of adolescents who use social media for less two hours and more than two hours on anxiety. The mean score on the anxiety of adolescents who use social media for less two hours is 10.08 (SD=4.14) and the mean score on the anxiety of adolescents who use social media for more two hours is 18.02 (SD=5.14).



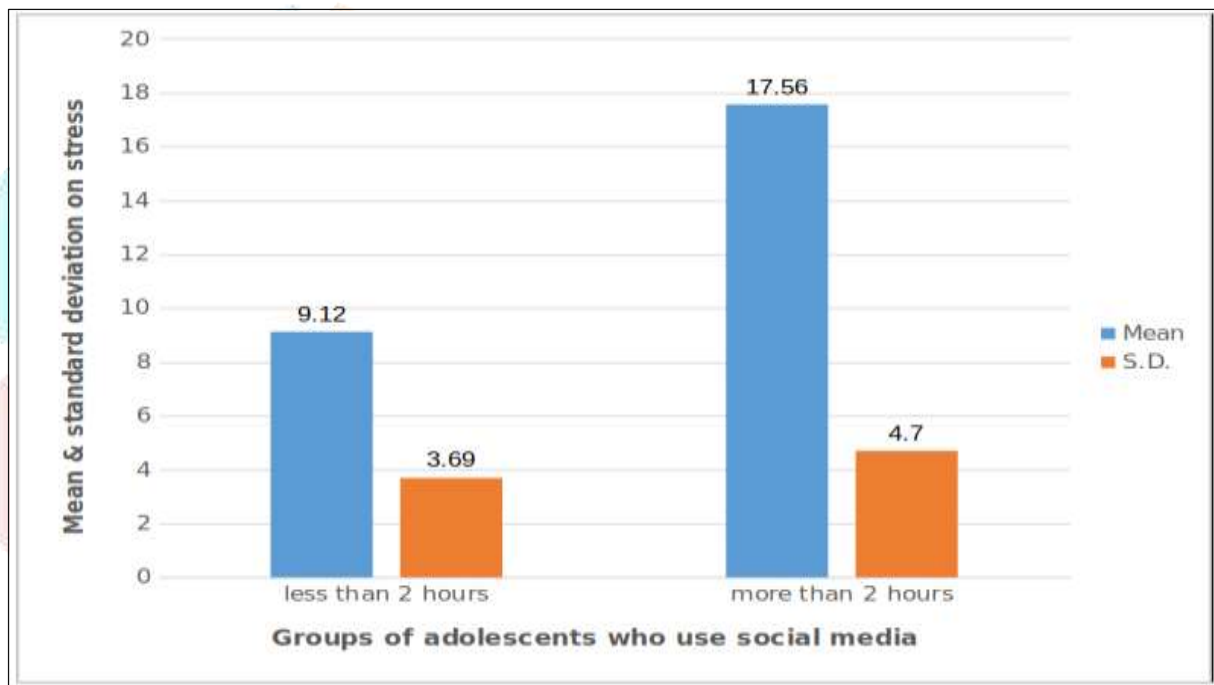
**Table 2:** This table shows that result of anxiety among adolescents who use social media for less than two hours and more than two hours.

Subject	N	Mean	SD	t-value	Degree of freedom	Tabular t-value*	Significant level
Social media user less than two hour	50	10.08	4.14	5.88	98	1.98	0.01
Social media user more than two hour	50	18.02	5.14				

Note: \*means t-value is taken online from link attached in references section.

The t- ratio of adolescents who use social media for less than two hours and adolescents who use social media for more than two hours on anxiety is 5.88. Which is high than t-value at 0.01 level. So the second hypothesis is rejected and we can say that there was a significant difference between adolescents who use social media for less than two hours and adolescents who use social media for more than two hours on anxiety. It can be seen in figure 2.

*Yan et al. (2017)*, found that academic performance was negatively associated with use of social social media , but time spent on social media was positively associated with anxiety, unhealthy behavior and poor quality of life in Chinese adolescents.

**Figure 2:** Shows the mean and standard deviation on anxiety of adolescents who use social media for less than two hours and more than two hours.**Table 3:** This table shows that result of stress among adolescents who use social media for less than two hours and more than two hours.

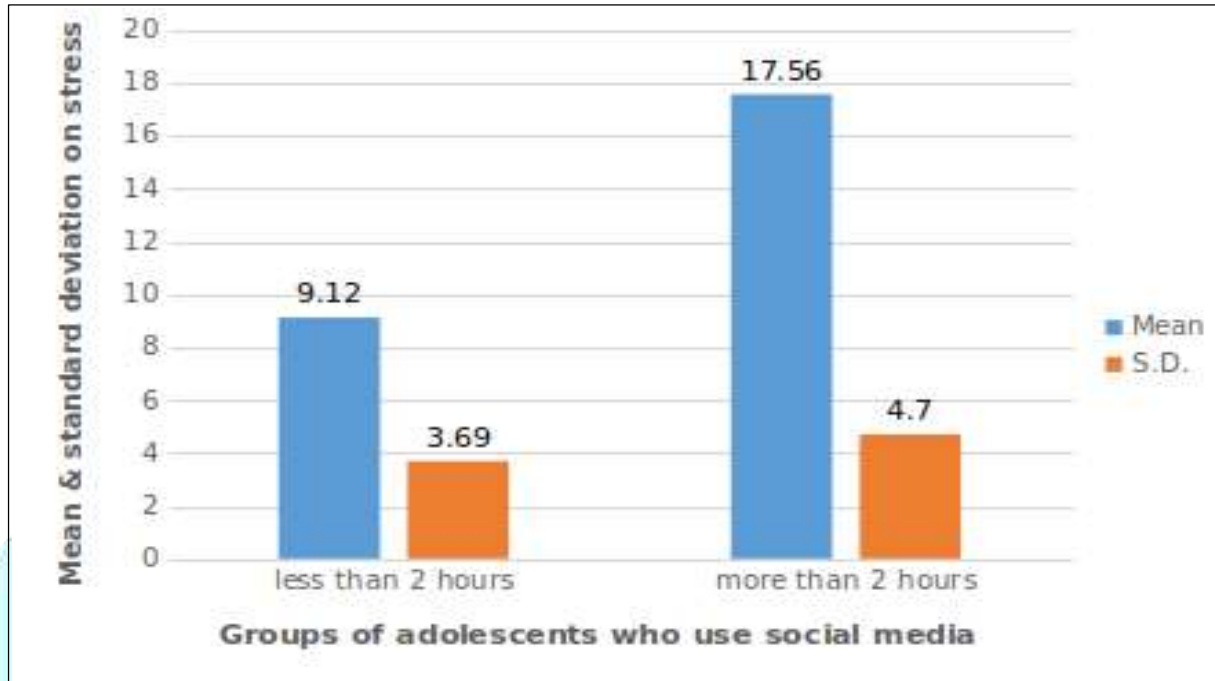
Subject	N	Mean	SD	t-value	Degree of freedom	Tabular t-value*	Significant level
Social media user less than two hour	50	9.12	3.69	6.86	98	1.98	0.01
Social media user more than two hour	50	17.56	4.79				

Note: \*means t-value is taken online from link attached in references section.

Table: 3 shows the difference between mean, SD & t- value of adolescents who use social media for less two hours and more than two hours on stress. The mean score on stress of adolescents who use social media for less than two hours is 9.12 (SD=3.69) and mean score of adolescents who use social media for more than two hours is 17.56 (SD=4.79). The t- ratio of adolescents who use social media for less than two hours and adolescents who use social media for more than two hours on stress is 6.86, which is higher than t-value at 0.01 level. So the third hypothesis

is rejected and we can say that there was a significant difference between adolescents who use social media for less than two hours and adolescents who use social media for more than two hours on stress. It can be seen in figure 3.

A meta-analysis of 23 studies by **Marino, Gini, Vieno, & Spada, (2018)**, showed correlation of problematic Facebook use and psychological distress in adolescent and young adults. **Sampasa-Kanyinga, H., & Lewis, R. F. (2015)** found that who use daily Social Networking Sites more than 2 hours was also independently related with poor self-rating of mental health and high level experiences of psychological stress and suicidal ideation.



**Figure 3:** Show the mean and standard deviation on stress of adolescents who use social media for less than two hours and more than two hours.

## IX. CONCLUSIONS

The findings of this study showed that there was a significant difference between adolescents who use social media for less than two hours and adolescents who use social media for more than two hours on depression, anxiety, and stress level. Hence, we can say that adolescents who use social media for more than two hours are poor mentally healthy than adolescents who use social media for less than two hours.

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## REFERENCES

1. Kaur, R., & Bashir, L. (2015). Impact of social media on mental health of adolescents, *International journal of education*, 5:22-29.
2. Kaur, R. & Bhatt, L. (2016). Impact of stress on mental health of students: reason and intervention, *International journal of education*, 5:30-35.
3. McCrae, N., Getting, S. & Purssell, E. (2017). Social media and depressive symptoms in childhood and adolescence; a systematic review, 2(4):315-330.
4. Pantic, I., (2014). Online social networking on mental health, cyber psychology, behavior and social networking, 24(1):90-93.
5. Pew research center (2015). Teen's social media and technology overview 2015. Retrieved from <http://www.pewinternet.org/2015/04/09/teens-social-media-technology-2015/>.
6. Rosen, L.D., Whaling, K., Rab, S., Carrier, L.M. & Cheever, N.A.(2013).Is facebook creating "disorders"? The link between clinical Symptoms of psychiatric disorders and technology use, attitudes and anxiety, *computer in human behavior*, 29:1243-1254.
7. Seabrook & Kern (2016). Social networking sites, depression and anxiety: a systematic review, *JMIR mental health*, 3 (4), e50.
8. Tabular t-value link:<https://goodcalculators.com/student-t-value-calculator/>.
9. World Health Organization (WHO), (2019). Adolescent mental health. <https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health>.
10. Yan, H., Zhang, R., Oniffrey, T. M., Chen, G., Wang, Y., Wu, Y., . . . Moore, J. B. (2017). Associations among screen time and unhealthy behaviors, academic performance, and well-being in Chinese adolescents. *International Journal of Environmental Research and Public Health*, 14(6). doi:10.3390/ijerph14060596
11. Marino, C., Gini, G., Vieno, A., & Spada, M. M. (2018). The associations between problematic Facebook use, psychological distress and well-being among adolescents and young adults: A systematic review and meta-analysis. *Journal of Affective Disorders*, 226, 274–281.
12. Sampasa-Kanyinga, H., & Lewis, R. F. (2015). Frequent use of social networking sites is associated with poor psychological functioning among children and adolescents. *Cyber psychology, Behavior, and Social Networking*, 18(7), 380–385.
13. NIMH, Child and Adolescent Mental Health. <https://www.nimh.nih.gov/health/topics/child-and-adolescent-mental-health/index.shtml>
14. Mihalyi Csikszentmihalyi(2020). Adolescence. <https://www.britannica.com/science/adolescenc>.
15. J. Clement,(2020). Statista: Number of social network users worldwide from 2017 to 2025. <https://www.statista.com/statistics/278414/number-of-worldwide-social-network-users/>.
16. Varun B. Krishnan (2019). How much time do Indians spend on social media? <https://www.thehindu.com/profile/author/Varun-B-Krishnan-16946/>.
17. SANNAM S4, (2008). Digital and Social Media Landscape in India. <https://sannams4.com/digital-and-social-media-landscape-in-india/>.
18. Geetha,U.,Subramanian, R. & Pious, T. (2018). The Effectiveness of Social Networking in Marketing: with Special Reference to Facebook. *International Journal of Engineering Research & Technology (IJERT)*, 6(8).
19. Sandhya Keelery (2020). Social media usage in India- statistics & facts. <https://www.statista.com/topics/5113/social-media-usage-in-india/>.
20. Bhardwaj A., Avasthi V., and Goundar S. (2017). Impact of Social Networking on Indian Youth - A Survey. *I.J. of Electronics and Information Engineering*, 7(1), 41-51.
21. Singh A. and Kumari S. (2019). A comparative study of personal stress among employed and unemployed graduates. *IAHRW International Journal of Social Sciences*, 7(2), 414-416.