



AN ANALYSIS OF SOCIAL MEDIA USE AND ITS IMPACT ON MENTAL HEALTH OF FEMALE STUDENTS

Shahnaz Bano¹ⁱ,

Arif Mohammad²

¹Research Scholar,

Department of Teacher Training and Non-formal Education (IASE),
Jamia Millia Islamia, New Delhi, India

²Assistant Professor,

Department of Teacher Training and Non-formal Education (IASE),
Jamia Millia Islamia, New Delhi, India

Abstract:

The purpose of this study was to examine the effect of the use of social media on mental health of 10th grade female students. Eighty female secondary level government school students served as the sample of the study. A free to use questionnaire on “Effect of social media on mental health”, available on Survey Monkey website was used in the study. After ethical clearance, the researcher administered the questionnaires on the subjects. To identify the positive or negative effect of social media on mental health Chi square (χ^2) test was applied on the obtained data. This study identifies the relationship between social media and health threats. The finding of the study shows that social media affects the mental health of the user students.

Keywords: social media, mental health, female, secondary level

1. Introduction

Social media is meant to discuss thoughts, opinions and ideas globally. Social media platforms are Internet-based services where people create semi-public or public profile to connect with each other. Students, especially teens are investing their major time on the Internet (American Psychological Association, 2018). On one hand, social media is opening new opportunities and career options for students and another hand it become one of the cause to spoil their physical and mental health (Nazir, 2014). The excessive involvement in social media could be a serious threat to students' health (Asiedu, 2017).

The use and popularity of social networking website among the youth is not new thing in today's era. In fact, the infants can be easily seen playing and enjoying with smartphones, they can easily differentiate between a basic and smartphone. So it is not

ⁱ Correspondence: email theshahnaz@gmail.com

difficult to assume the importance of Internet for teenagers and youth. Login to social media site is a routine activity for youth all over the world (Farah & Yanda, 2015). According to a recent poll of Statista (2018) around 2.27 billion monthly active users having their social networking account on Facebook in which more than 50% people login their Facebook account several times a day.

Although social media sites help in breaking geographical boundaries and connecting people from every corner of the world in very low expense but the excessive use of social media is a great threat for the teens and youth. Definitely active involvement on social media is decreasing our valuable time and providing less opportunity for face-to-face interaction. Due to excessive involvement in social media, people are neglecting physical activities. This changed pattern of lifestyle from active to sedentary develops numerous health issues it could be physical as well as mental.

Studies in the field showed that the students who are active on social media faced cyber bullying which leads to depressive symptoms and other mental health issues (Schneider, O'Donnell, Stueve, & Coulter, 2012). Increased use of social media sites can lead many problems to students such as poor sleeping (Aida, Behrang, & Behrooz, 2014), cyber bullying, depression and anxiety etc. Fear of missing out (FOMO) on social media is a big threat for the youth worldwide. FOMO is the feeling of anxiety arises by the realization that you may miss out the rewarding experience, which others are enjoying and because of the feeling of FOMO people stay up to date on social media, which ultimately affects their mental health (Franchina, Abeele, van Rooij, Coco, & Marez, 2018). According to Walton (2018) social media is bad for mental health; people who spend more time on social media have more chances of having mental health issues like loneliness, anxiety, depression and FOMO rather than those who spend less time on social media (van der Schuur, Baumgartner, & Sumter, 2018).

Social networking statistics shows that in India Facebook is the most popular social media site used by 142 million people in which 91% users are from 15- 34 age group (Smith, 2016). As 91% users of Facebook are from the age group 15-34, which shows, more teen and adults are involved in social networking in India. Review of literature shows very less studies are conducted in India on this topic. Thus more research needed in the field to minimize the negative effect of social media on Indian youth.

2. Methods and Materials

2.1 Research Design

The study aims to investigate the impact of social media on mental health of secondary school girl students studying in government school of South Delhi. A mixed method research design approach was used for interpretation of the result.

2.2 Populations and Sample

Secondary school students are the most vivid users of social media therefore researcher selected them as population of the study. All the secondary government school girl

students studying in school located in South Delhi were the population of study. By using random sample technique, a total of 80 secondary level girl students were recruited as the sample.

2.3 Research Tool

The researcher used a free to use (open access) questionnaire of the “Effect of Social Media on Mental Health”, which is available online on [surveymonkey.com](https://www.surveymonkey.com) to gather data.

2.4 Procedure of Data Collection

To get insight into the problem in hand and for collecting data from the sample, the researcher took the permission from the concerned department to allow her to visit the sample school. After taking the permission from the principal/administration of the school, consent from the students was obtained for collecting data. They were ensured that the information provided by them would be kept confidential. After acquiring their consent, all selected students were made sit comfortably in a classroom and the researcher explained all the necessary details required to fill the questionnaire. Around 20 minutes were given to them to complete the procedure and after that all the filled questionnaires were carefully collected by the researcher.

2.5 Statistical Analysis

The data obtained by administration of questionnaire was analyzed by descriptive statistics. Chi-square (χ^2) test was also used to establish the relationship between expected and observed frequency at .05 level of significance. All statistical analysis was performed on SPSS v.23.

3. Result

The researcher conducted an investigation on social media use and its impact on mental health of girl students. The respondents were asked questions which were based on social media use and its effect on mental health. The result of statistical analysis is presented in the following tables.

Table 1: Time spend by the respondents on social media each day

Time spent on internet	No. of Responses	Percentage of Responses
0-1 hour	76	95%
1-3 hours	0	0%
3-5 hours	04	5%
5+ hours	0	0%
	Total 80	Total 100%

The data presented in the above Table 1 shows that out of 80 respondents 95% respondents said that they spent around 0-1 hour daily on social media, while only 5% agreed that they spent 3-5 hours daily on social media.

Table 2: Respondents' views on social media as a distractive tool for productive work

Response	Observed frequency	Expected frequency	Obtained chi-square (x ²) Value
Yes	52	40	3.6
No	28	40	3.6
Total	80	80	7.2*

*Significant $p < 0.05$, Tabulated $\chi^2_{0.05}(1) = 3.84$

The analysis of data in table 2 shows that out of 80 respondents 65% respondents said, "yes" social media distract their productive work, while 35% said "no" they don't bother about it. The chi-square value indicates that significant divergence occurs among the respondents, as the obtained value of 7.2 is higher than the required value of 3.84.

Table 3: Respondents' views on the impact of likes or views getting on posts/pictures

Response	Observed frequency	Expected frequency	Obtained chi-square (x ²) Value
Yes	48	40	1.6
No	32	40	1.6
Total	80	80	3.2

Tabulated $\chi^2_{0.05}(1) = 3.84$

Data in Table 3 shows that out of 80 respondents 60% agreed that likes and comments on their post impact them and remaining 40% does not have any impact. The corresponding chi-square (x²) value indicates that there is no significant difference occurs among the respondents because obtained value of 3.2 is not higher than the required value of 3.84.

Table 4: Respondents' experience of 'cyber bullying' on social media

Response	Observed frequency	Expected frequency	Obtained chi-square (x ²) Value
Yes	36	40	0.4
No	44	40	0.4
Total	80	80	0.8

Tabulated $\chi^2_{0.05}(1) = 3.84$

Obtained statistical value presented in Table 4 indicates that the difference among the respondents is not significant because the value obtained is 0.8, which is not higher than the required value of 3.84, which means the responses are mixed.

Table 5: Respondents' response on comparing their life with others on the basis of post and pictures of intriguing events going on in others life

Response	Observed frequency	Expected frequency	Obtained chi-square (x ²) Value
Yes	44	40	0.4
No	36	40	0.4
Total	80	80	0.8

Tabulated $\chi^2_{0.05}(1) = 3.84$

Statistical analysis of data shows that there is no significant difference among the responses because the obtained value is not higher than the required value. Obtained value 0.8 is much lower than the required value 3.84. This result may mark “not significant” at the .05 level.

Table 6: Respondents’ response on the purpose of posting things on social media

Response	Observed frequency	Expected frequency	Obtained chi-square (x ²) Value
Yes	44	40	0.4
No	36	40	0.4
Total	80	80	0.8

Tabulated $x^{2_{0.05}(1)} = 3.84$

The data analyzed clearly shows that the difference is not significant because the obtained value is 0.8, which is not higher than the required value i.e. 3.84.

Table 7: Respondents’ views on body shaming by watching others perfect body type

Response	Observed frequency	Expected frequency	Obtained chi-square (x ²) Value
Yes	16	40	14.4
No	64	40	14.4
Total	80	80	28.8*

*Significant $p < 0.05$, Tabulated $x^{2_{0.05}(1)} = 3.84$

After the analysis of data, the obtained chi-square value (28.8) is much higher than the expected value of 3.84 so we can say that there is significant difference occurs among the respondents. Here 64 respondents out of 80 said that they do not put themselves down or think negative about their body if someone post their pictures of perfect body type that they desire to have.

Table 8: Responses on untagging themselves if the tagged photo of theirs is unattractive

Response	Observed frequency	Expected frequency	Obtained chi-square (x ²) Value
Yes	24	40	6.4
No	56	40	6.4
Total	80	80	12.8*

*Significant $p < 0.05$, Tabulated $x^{2_{0.05}(1)} = 3.84$

The obtained chi-square value is 12.8, which is higher than the required value i.e. 3.84 so it can be conclude that there is significant difference occurs among the respondents.

Table 9: Respondents' response when they were asked if they feel confident or well-liked based on the number of likes they get on their post or not

Response	Observed frequency	Expected frequency	Obtained chi-square (x ²) Value
Yes	52	40	3.6
No	28	40	3.6
Total	80	80	7.2*

*Significant $p < 0.05$, Tabulated $\chi^2_{0.05}(1) = 3.84$

Out of 80 respondents 65% respondents said, 'yes' their confidence is boosted because of the number of likes they get on their post, while 35% said 'no'. Further the corresponding chi-square value indicates that significant divergence occurs among the respondents, as the obtained value of 7.2 is higher than the required value of 3.84.

Table 10: Respondents' response on accepting strangers' friend request in order to be viewed as more popular

Response	Observed frequency	Expected frequency	Obtained chi-square (x ²) Value
Yes	60	40	10
No	20	40	10
Total	80	80	20*

*Significant $p < 0.05$, Tabulated $\chi^2_{0.05}(1) = 3.84$

Sixty out of 80 respondents said 'yes' they accept strangers' friend request to increase their friend list in order to be viewed as more popular. The statistical analysis of data in Table 10 shows that the corresponding chi-square value indicates the significant divergence among the respondents, as the obtained value of 20 is higher than the required value of 3.84.

4. Discussion

The objective of this research was to analyze the impact of social media on the mental health of the students. The respondents were asked about the time they spend on social media each day, 95% of total respondents were spending around 0-1 hour each day, these results are not very different from the time reported by Machold, Judge, Mavrinac, Elliott, Murphy, and Roche, (2012) who studied Irish teenagers and reported same results, only 5% students agreed that they spent 3-5 hours daily on social media, which is quite high for secondary level students. The result of a survey conducted by Salim (2019) shows that globally people are spending 142 minutes each day on social networks.

When the students were asked about the impact of social media on their creativity, most of the respondent agreed that social media distracts them while doing any productive and creative work. An experiment conducted by Eyal, Clifford and Anthony (2009) on "cognitive control in media multitaskers" revealed that the persons who are heavy media multitaskers were on average 77 milliseconds slower than the

light media multitaskers. In a longer-term, their recalling power also reduces in comparison to light media users.

The 'comments' and 'likes' received on the post or pictures have impact on mental health of students. The amount of likes and comments received on the post increase their level of confidence and in case no proper likes and comments, they feel depressed and sad. Sherman (2016) also reported that likes impact teen's brain and behavior. If there are less or no comments on the post, it negatively affects their mental health. Sherman (2016) concluded in her study that when teens were shown their own photo on photo sharing app with high amount of likes, activity across a wide variety of regions in the brain was observed. An article published in *The startup* (2017) also indicated that getting likes on the post is like winning money or eating chocolate. Each like increases the secretion of Dopamine, which is responsible for pleasure in the brain. Cook (2018) presented a worldwide survey on cyber bullying and reported about 37% Indian parents said that their children were cyber bullied in 2018. In this study, about 55% responded never experienced cyber bullying on social media, but the difference is not very significant because 45% of them admitted that they were cyber bullied on social media. Patchin and Hinduja (2006) conducted online survey to identify different categories of cyber bullying and they reported that various forms of bullying occur online like being ignored, called names, made fun of, threatened, picked on, disrespected etc.

When students were asked about the impact of others' post about the glamorous and fascinating events going on in their life, most respondents admitted that they feel disturbed and depressed while viewing others profile and joyful events posted on social media. The study conducted by Chou and Edge (2011) showed the same result that the active Facebook users who spent more time on social networks had the view that life is not fair and they were happier and had better life.

When the respondents were asked why they post things on social media. The responses given by them were clearly indicating that the activity done on social media is purposefully created to impress others and it is not always very authentic. The views of Vogel are also the same who remarked that on social media only the selectively positive version of their life is posted to show others that this great life they have and that makes other people feel worsen (Spencer, 2018).

The girls were asked when they see pictures posted of a person who has the body type that they desire, do they put themselves down or think negatively about their body? When the above question was asked mostly respondents were not upset or feel inferior at all. The result of the study conducted by Wertheim and Paxton, (2012) was quite different; they concluded that the negative body image in teens leads to low self-esteem and mood swings. Teens should understand that the post on social media is not real but pretty plastic. According to Perveen (2018), photo-shopped images on social media have put stress on youth to look perfect all the time, which influence their mental health.

When asked to the girl students if someone posts a picture of you that you deem unattractive, do you untag yourself from the photo? Result of the study showed that

respondents do not untag themselves if they found that the photo tag to them is not attractive. Lang and Barton (2015) concluded the same result that untagging on Facebook is very common activity but the men are more likely to untag than the women.

The girl students were very obsessed with the amount of likes on the post or picture they upload on social media. They agreed that the amount of likes and comments on their post or pictures boost their confidence. If they feel popular and accepted on social media, it makes them feel high or else, it leaves a negative impact on their mental health. The result of the study is no different from the studies conducted previously like Squier (2016) revealed the same result that people are so obsessed with 'likes' on social media.

The result of the study showed that the girl students were not very aware about the security issues on social media and they accept anyone's friend request in order to increase the friend list. The feeling of acceptance was more dominant than the security issues. To show themselves more popular and accepted, teens can add anyone to their friend list. The internet is full of the articles, how to increase the numbers of your followers and even the amount of likes and comment. Lee (2015) shared the article on internet with statistics and tips to improve the numbers of followers on social media. The previous studies also confirmed the result of this study.

5. Conclusion

The basic aim behind conducting this research was to examine the influence of social media on mental health of girl students. The study gives the confirming results that social media affects users mental health. Use of these social media site became the routine activity for students; they spend time on these sites and interact with each other. They post and receive likes and comments, which directly influence their mental health. Previously conducted studies also confirm the results of this study. Teens and their parents should be aware of the negative consequences of social media and they should adopt the measures to minimize them. Firstly, the students must be educated of the positive and negative effects of social media and secondly school should also educate the parents and community through different measures to make them aware because students are the precious asset of any country. Their physical and mental health should be in best condition only then they can contribute to the development of society and country so the parents, teachers and government should worry about the health of students.

References

- Aida, A., Behrang, S., & Behrooz, G. (2014). A Study on the negative effects of social networking sites such as Facebook among Asia Pacific university scholars in Malaysia. *International Journal of Business and Social Science*, 5(10), 62-65.

- American Psychological Association (2018). Teens today spend more time on digital media, less time reading: One of every three teenagers has not read a book for pleasure in a year. Science Daily. Available online at: <https://www.sciencedaily.com/releases/2018/08/180820094509.htm>. (Accessed January 11, 2019)
- Asiedu, N.K. (2017). Influence of social networking sites on students' academic and social lives: e Ghanaian Perspective. *Library Philosophy and Practice (e-journal)*, 1535.
- Beers, C. W. (2004). *A mind that found itself an autobiography*. Garden City, New York: Doubleday and Company Inc.
- Chauhan, S.S. (2009). *Mental hygiene; A science of adjustment*. New Delhi: Allied Publishers Pvt. Limited.
- Chou, G. & Edge, N. (2011). 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) 117-21.
- Cook, S. (2018). *Cyberbullying facts and statistics for 2016-2018*. Available online at: <https://www.comparitech.com/internet-providers/cyberbullying-statistics/> (Accessed on 12 January 2019).
- Digital, S. (2017). The psychology of being 'liked' on social media. The startup. Avl. on <https://medium.com/swlh/likes-on-social-media-87bfff679602>. (Accessed 12 February 2019).
- Eyal, O., Clifford, N., & Anthony, D. W. (2009). Cognitive control in media multitaskers. *Proceeding of the National Academy of Science*, 106, 15583-15587.
- Farah, F. A., & Yanda, U. (2015). The use of social networking among senior secondary school students in Abuja municipal area of Federal capital territory, Nigeria. *Education and Practice*, 6(15), 15-22.
- Franchina, V., Abeele, M.V., van Rooij, A.J., Coco, G.L., & Marez, L.D. (2018). Fear of missing out as a predictor of problematic social media use and phubbing behavior among Flemish adolescents. *International Journal of Environmental Research and Public Health*, 15(10), 2319.
- Koul, L. (2004). *Methodology of educational research*. New Delhi: Vikas Publishing House Pvt. Ltd.
- Lang, C., & Barton, H. (2015). Just untag it: Exploring the management of undesirable Facebook photos. *Computers in Human Behavior*, 43, 147-155.
- Lee, K. (2015). Why you should share to social media in the afternoon + more of the latest social media research. Available online at: <https://blog.bufferapp.com/new-social-media-research> (Accessed on 15 January 2019).
- Machold, C., Judge, G., Mavrinac, A., Elliott, J., Murphy, A.M., & Roche, E. (2012). Social networking patterns/hazards among teenagers. *Irish Medical Journal*, 105(5), 151-152.
- Nazir, T. (2014). Use of social networking sites by the secondary and higher secondary school students of Srinagar, Kashmir. *International Journal of Digital Library Services*, 4(3), 231-242.

- Patchin, J.W. & Hinduja, S. (2006). Bullies move beyond the schoolyard: A preliminary look at cyberbullying. *Youth Violence and Juvenile Justice*, 4(2): 148–169.
- Perveen, N. (2018). Social media and celebrity culture 'harming young people'. The Guardian. Available online at: <https://www.theguardian.com/.../2018/.../social-media-and-celebrity-culture-harming-yo> (Accessed on 12 February 2019).
- Salim, S. (2019). How much time do you spend on social media? Research says 142 minutes per day. Available online at: <https://www.digitalinformationworld.com/> (Accessed 12 February 2019).
- Schneider, K., O'Donnell, L., Stueve, A., & Coulter, R.W.S. (2012). Cyberbullying, school bullying, and psychological distress: A regional census of high school students. *American Journal of Public Health*, 102(1), 171-177.
- Sherman, L. (2016). *Social media 'likes' impact teens' brains and behavior*. Available online at: <https://www.psychologicalscience.org/news/releases/social-media-likes-impact-teens-brains-and-behavior.html> (Accessed on 15 January 2019).
- Smith, K. (March 7th 2016). *96 amazing social media statistics and facts for 2016 marketing*. Accessed from <https://www.postharvest.biz/en/news/marketing-96-amazing-social-media-statistics-and-facts-for-2016-marketing-by-kit-smith-on-march-7th-2016/id:79833/> on 12 January 2019.
- Spencer, K.A. (2018). *A psychology researcher explains how social media is changing us*. Available online at: <https://www.salon.com/2018/01/21/a-psychology-researcher-explains-how-social-media-is-changing-us/>. Accessed on 15 January 2019.
- Squier, C. (2016). *Why do we get so obsessed with 'likes' on social media?* Available online at: <https://graziadaily.co.uk/life/opinion/care-likes-social-media/>. (Accessed on 15 January 2019).
- Statista. (2018). *Facebook users worldwide*. Available online at: <https://www.statista.com/statistics/> (Accessed on 15 January 2019).
- SurveyMonkey.com (2018). *The effect of social media on mental health*. Online available at: <https://www.surveymonkey.com/>. (Accessed on 11 November 2018).
- van der Schuur, W. A., Baumgartner, S. E., & Sumter, S. R. (2018). Social media use, social media stress, and sleep: Examining cross-sectional and longitudinal relationships in adolescents. *Health Communication*, 9, 1-8.
- Walton, A.G. (2018). *New studies show just how bad social media is for mental health*. Available online at: <https://www.forbes.com/sites/alicegwalton/2018/11/16/new-research-shows-just-how-bad-social-media-can-be-for-mental-health/#1212f2f77af4> (Accessed 15 January 2019).
- Wertheim, E.H., & Paxton, S.J. (2012). *Body image development: Adolescent girls*. In T.F. Cash (Ed.), *Encyclopedia of body image and human appearance* (pp. 187-193). Oxford: Elsevier.

Creative Commons licensing terms

Authors will retain the copyright of their published articles agreeing that a Creative Commons Attribution 4.0 International License (CC BY 4.0) terms will be applied to their work. Under the terms of this license, no permission is required from the author(s) or publisher for members of the community to copy, distribute, transmit or adapt the article content, providing a proper, prominent and unambiguous attribution to the authors in a manner that makes clear that the materials are being reused under permission of a Creative Commons License. Views, opinions and conclusions expressed in this research article are views, opinions and conclusions of the author(s). Open Access Publishing Group and European Journal of Physical Education and Sport Science shall not be responsible or answerable for any loss, damage or liability caused in relation to/arising out of conflict of interests, copyright violations and inappropriate or inaccurate use of any kind content related or integrated on the research work. All the published works are meeting the Open Access Publishing requirements and can be freely accessed, shared, modified, distributed and used in educational, commercial and non-commercial purposes under a [Creative Commons attribution 4.0 International License \(CC BY 4.0\)](https://creativecommons.org/licenses/by/4.0/).