



Relation between social media usage and cyber victimization in adolescent

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Abstract: Two billion people utilize the platform daily. Cyber victimization—online attacks or harm—has increased with social media use. Cyberbullying, or digital bullying, affects a large number of 11- to 14-year-olds. Despite empirical evidence that spending more time on social media platforms may increase the risk of cyber-victimization, there is little research on how adolescents use social media. A study found that 20% of youth participated in cyberbullying as perpetrators or victims. Social media use has increased cyber victimization among 12-18-year-olds in several nations. This study seeks to correlate two Indian variables. The study examined social media usage and cyber-victimization it is a correlation study that helps identify patterns and relationships between variables. It also illuminates complex phenomena and future research. This study examines the hypothesis that social media use causes cyberbullying. Results show that cyber victimization is rare and mild. The correlation coefficient between the scales is 0.78, indicating a strong positive link. The association is statistically insignificant because the p-value of 0.4 surpasses the 0.05 threshold for statistical significance. This shows that social media use increases online victimization.

1.1 INTRODUCTION

Mark Zuckerberg founded Facebook at Harvard in February 2004. 650 students registered in days. Two billion people log on daily. Facebook's rapid growth concerns teens' mental health. From 2000–2007, suicide rates for 10–24-year-olds were stable. The CDC reported 57% growth between 2007 and 2017. Given these parallel trends, understanding mental health and technology use, especially social media use by youth is crucial (MIT Sloan, 2022). Social media boosts cybercrime. Cyberbullying, cyberstalking, identity theft, and harassment are examples of cyber victimization. Social media is abused. Social media anonymity and accessibility make bullying and harassment easier. Social media lies, rumours, and hatred traumatize victims. Social media doesn't cause cyberbullying. Abusers use these platforms. Social media etiquette is essential. Cyberbullying must be criminalized. Cyberbullied 11–14-year-olds (i.e., bullying that occurs online or via technology). Little is known about how adolescents use social media, which increases cyber victimization. Technology hurts cyberbullying. This includes harassing texts, emails, social media comments, humiliating photos, and online threats or intimidation (Willard, 2007). Unfortunately, teens expect cyberbullying (K. Baker & Helm, 2009). Unsupervised, global cyberbullying preserves words and images (L. Nixon, 2022). Cyberbullies don't see their victims, so they may not realize their impact. The literature calls this the "disinhibition effect" (Suler, 2004). Bullying predates the Internet and smartphones. New technology lets teens bully anonymously. Cyberbullying blinds. They can better dehumanize their victims. causing harm. Increased cyberbullying. Cyberbullying is easier because technology isolates victims (McDowell, 2017). Social media boosts cybercrime. Social media and cyber victimization policies are crucial. Teens use phones and the Internet, making cyberbullying new. Neoliberals cyberbully and isolate. This study examines whether social media causes cyberbullying. Social media boosts cybercrime. Social media's anonymity and ease of use encourage bullying and harassment. Prevent social media cybercrime. Malicious actors abuse these platforms.

2.1 NEED OF THE STUDY

Due to the COVID-19 lockout, most Indians accessed the internet more, which increased cybercrimes. The pandemic cut people off from each other in person, but they have been publishing new accomplishments and voicing their opinions more than before. Social media was most people's sole communication. Also, people have been reporting their lockdown accomplishments. Regulating online activity is crucial when people consume more content and conduct most of their social and professional interactions online. Online remarks and abuse are more likely to affect people. The tormentors' crimes affected people more. In these situations, neither the bully nor the victim realize the consequences of their online acts (Ozden & Icelliglu, 2014). Cyberbullying causes wrath, helplessness, dread, and grief, just as traditional bullying. These feelings match classic bullying. Because of the anonymity of the Internet, cyberbullying victims sometimes feel helpless and confused how to stop it (Hoff & Mitchell, 2009).

A research found that 20% of youth were victims or bullies of cyberbullying. The study found that younger pupils who played games more on weekdays experienced this. While more confident in internet and using mobile phones, they were more prone to cyberbully than other pupils. This happened regardless of whether students were competent in their internet navigation (Shin & Ahn, 2015).

Another study found that sexual minority students and those who text at least 50 times per day were more likely to be cyberbullied (Rice et al., 2015). Facebook and SMS messaging are the most prevalent cyberbullying methods. Disability was another major risk factor for cyberbullying (Kowalski et al., 2016). Social influence strongly influenced cyberbullying behavior and purpose (Lee & Wu, 2018). Additional study suggests that social media use and online activity can exacerbate cyberbullying, cyber harassment, and cyberstalking (Al-Rahmi et al., 2019). After the epidemic, many social media users reported spending more time on these platforms. The percentage of SME elders was higher among women than men and younger than older persons. Higher SME was positively connected with mental health issues, which were substantially associated with cyberbullying. Since mental health issues are linked to cyberbullying, it may have intensified it (Gao et al., 2020).

3 METHODOLOGY

3.1 Problem and objective

According to various studies done in different countries there is increase in cyber victimization with the increase use of social media among students (12-18 years) . This study aims to find the relationship between the two variables in the Indian context.

3.2. Hypothesis

H₁: There is a correlation between social network usage and cyber victimisation

H₀: There is no correlation between social network usage and cyber victimisation.

3.3. Operational definitions

Social networking refers to the online space students use to connect, share, communicate, establish, or maintain a connection with others for academic, entertainment, socialization, etc. (Savita Gupta, 2018). It refers to the activities and behaviors of individuals on social networking platforms. Social networking platforms, such as Facebook, Twitter, Instagram, LinkedIn, and Snapchat, have become integral to people's lives in recent years. Cyber victimization is how others are victimized through information and communication technologies. It refers to the experience of being targeted and victimized through online platforms or digital communication channels. It encompasses various forms of online harassment, abuse, and bullying that can have detrimental effects on individuals.

3.4. Sample

The sample for survey were individuals in the age group of 12 to 18 years. Both male and female, were eligible to participate in the study. The individuals should have been actively using at least one social media account (Instagram, Facebook, Snapchat, Twitter, etc.) and use one messenger application (WhatsApp, Facebook Messenger, Telegram, Viber, etc.) that they are actively engaged in. The individuals were students and residents of India.

Google Forms was prepared and the questionnaire link was distributed via email and WhatsApp until 100 individuals responded. Convenient sampling technique and snowball method was employed.

3.5 Research Design

The study aimed to understand the relationship between two variables (social media usage and cyber-victimization). A correlational research design was used. Correlational research design is advantageous when it is not possible or ethical to manipulate variables. Correlation research design allows researchers to examine the association between variables and identify patterns or trends. Additionally, it provides valuable insights into complex phenomena and inform future research.

3.6 Tests and Tools

3.6.1 The Social Networking Usage Questionnaire (TSNUQ)

The Social Networking Usage Questionnaire measures social media usage—academic, entertainment, and socialization—in online spaces. The scale has 19 self-reported items rated on the 5-point Likert-type scale from 1 (never) to 5 (always). The social networking questionnaire was developed to understand the purposes of social networking usage by students in an Indian context (Savita Gupta, 2018). Academic usage questions are irrelevant to our study; hence, they will be removed from the questionnaire (Holly Reid1 et al., 2021). (Refer to Appendix A)

3.6.2 Adolescent Cyber-Victimization Scale (CYBVICS)

CYBVICS is an adaptation of the Adolescent Victimization through Mobile Phone and Internet Scale (Sofía Buelga, 2019). The new scale is an updated version. With the use of the smartphones, the distinction between the cell phone and the Internet currently makes no sense. Moreover, this new scale includes eight other items, on the original scale. Thus, the Cyber-Victimization Scale consisted of 18 self-reported items on a 5-point Likert-type scale ranges from 1 (never) to 5 (always) were rated. The adolescents' experience as a victim of cyberbullying in the last 12 months are measured on this scale. A self-report measure was adopted because of its capacity to recognize adolescents' cyber-victim behaviors. (Refer to Appendix B)

3.7 Data Analysis Techniques

The Pearson correlation coefficient, a descriptive statistic, was determined to measure the magnitude and direction of the linear relationship between two quantitative variables—social media use and cyber victimization. Interpretations were made with a significance level of $p=0.05$.

3.8 Ethical Determination of the Study

Consent to participate in the survey was obtained from the individuals. Those agreed to participate voluntarily in the study were informed about the aim and application of the study.

3.9 Statistical Analysis

SPSS (The Statistical Package for the Social Sciences-PC) program was used to analyze the data statistically. The Mean and Standard Deviation were calculated. The Pearson correlation coefficient, a descriptive statistic, used to access the strength and direction of the linear relationship between two quantitative variables—social media use and cyber victimization. Interpretations were made with a significance level of $p=0.05$.

4 RESULTS AND DISCUSSION

The focus of the research study is to examine the hypothesis that social media use is correlated with cyberbullying. There is a correlation seen between social media use and increased cyber victimization. Due to the anonymity and ease of use, social media have become breeding grounds for bullying and harassment. It must be remembered that being a victim of online crime is not an inevitable consequence of using social media. Instead, it is people who intend harm to others who abuse these sites.

4.1 Table 1 Demographic Table

	Frequency (<i>n</i>)	Percentage
Gender		
Male	37	37%
Female	63	63%
Others	0	0%
Age		
12	4	4%
13	4	4%
14	8	8%
15	9	9%
16	14	14%

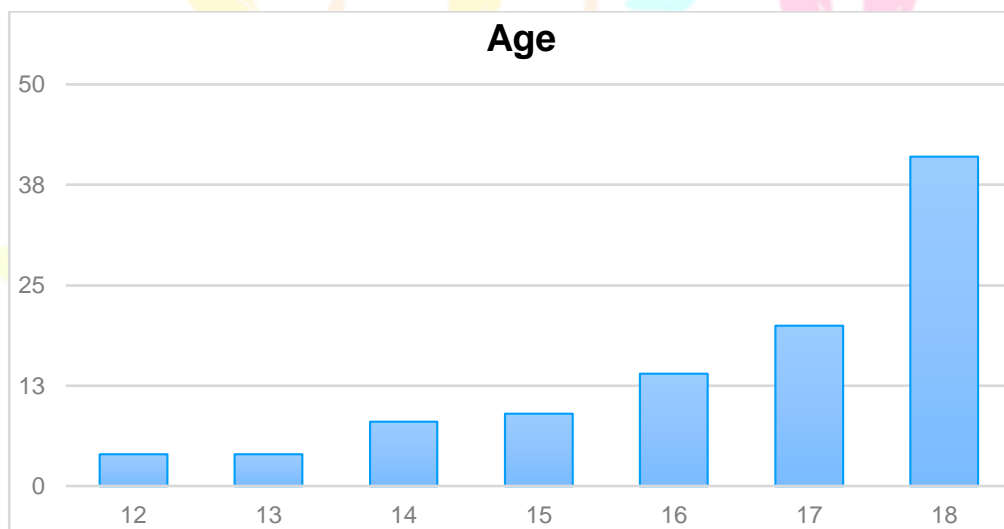
17	20	20%
18	41	41%
Education Level		
7th Standard	4	4%
8th Standard	3	3%
9th Standard	4	4%
10 th Standard	18	18%
11 th Standard	10	10%
12 th Standard	31	31%
1 st Year Graduation	6	6%
2th Year Graduation	24	24%
Social Media		
Facebook	26	26%
Instagram	74	74%
Twitter	14	14%
Snapchat	40	40%
WhatsApp	85	85%
Telegram	15	15%
Discord	3	3%
LinkedIn	2	2%
BeReal	1	1%
YouTube	5	5%
Tumblr	1	1%
Reddit	2	2%
Discovery Baby	1	1%
Pinterest	1	1%
Type of family		
Nuclear Family	65	65%
Joint Family	24	24%
Single Parent Family	5	5%
Step Family	1	1%
Grandparents Family	5	5%
Individuals working in the family		

Both Parents Working	43	43%
Only Father Working	47	47%
Only Mother Working	6	6%
I am working	10	10%
Sibling Working	14	14%

Note Demographic Table, Total number of participants $N=100$

The following table presents the demographic information that was gathered throughout the course of the study. This data facilitates a more profound comprehension of the populace, specifically in terms of the origin of individuals and the potential influence of demographic factors on their behaviours.

Figure 1 Age



Note: Age of the participants

The following bar chart depicts the age distribution of the study participants. The study's sample size consisted of 100 participants, with an average age of 16.49. Individuals aged 18 to 22 and those currently pursuing higher education are among the most frequent consumers of social media. The present cohort of university students represents the initial generation to have been raised alongside social media (Wang et al., 2015). The students exhibit a high level of engagement on diverse social media channels, such as LinkedIn, Facebook, Snapchat, Instagram, and Twitter (Soohinda et al., 2021)

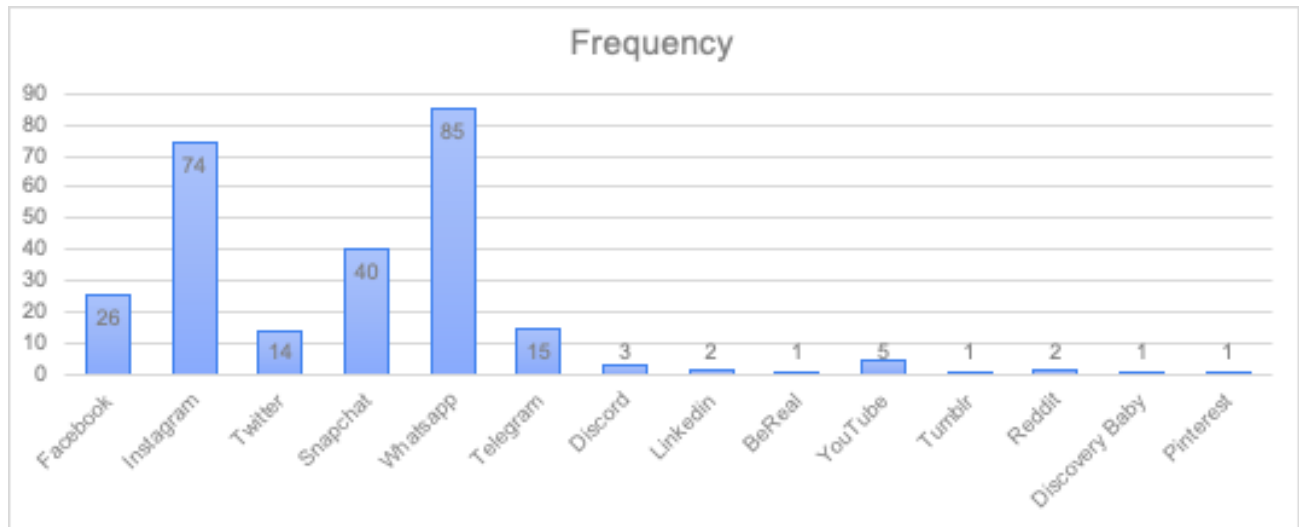
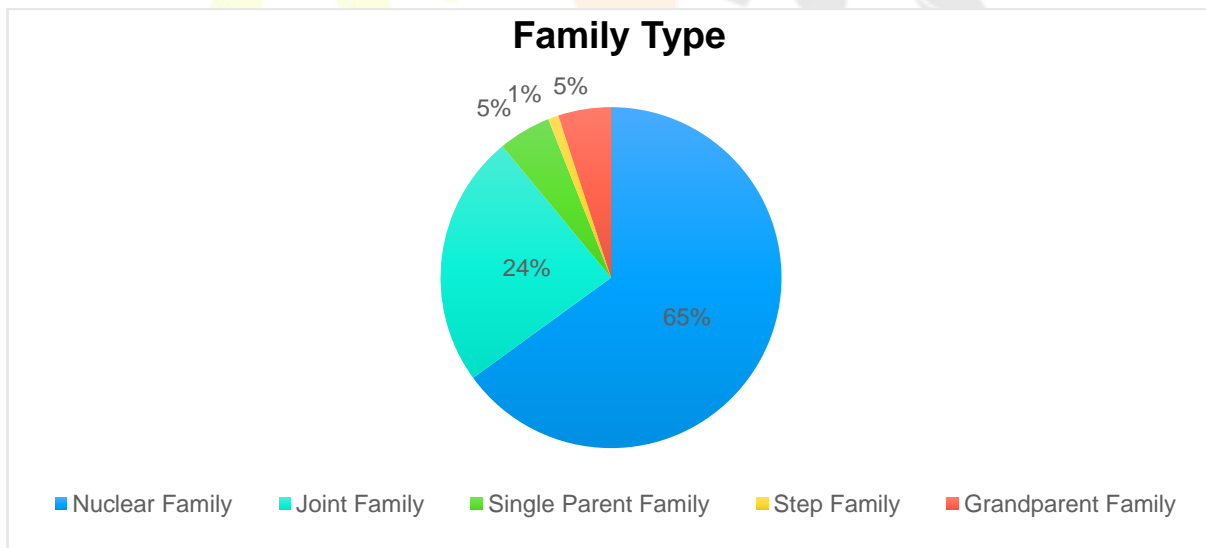


Figure 2 Social Media

Note: Social Media used by the participants

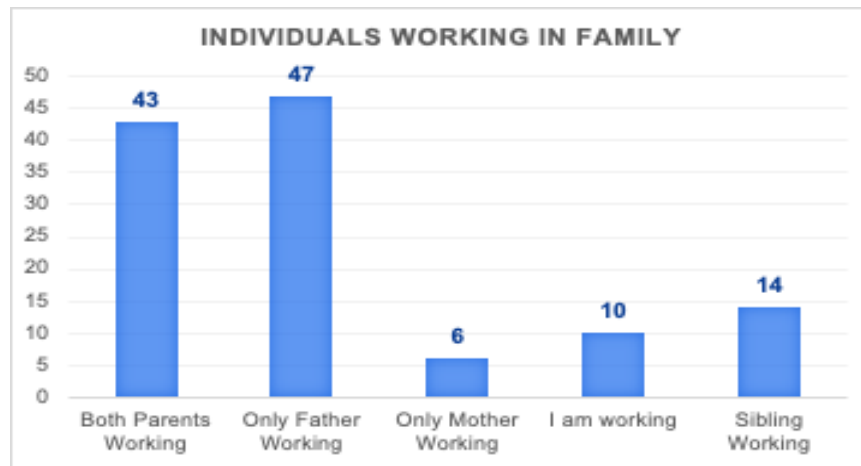
The following bar graph depicts the social media platforms utilized by the participants in the study. Among the sample of 100 participants in the study, the social media platforms that were most frequently utilized by the individuals were WhatsApp (85) and Instagram (74), respectively. In contrast to the study's results, it was discovered that Facebook garnered the greatest amount of traffic, accounting for approximately 58% of social media platform usage in India during July of 2022. (Statista, 2022).

Figure 3 Family Type



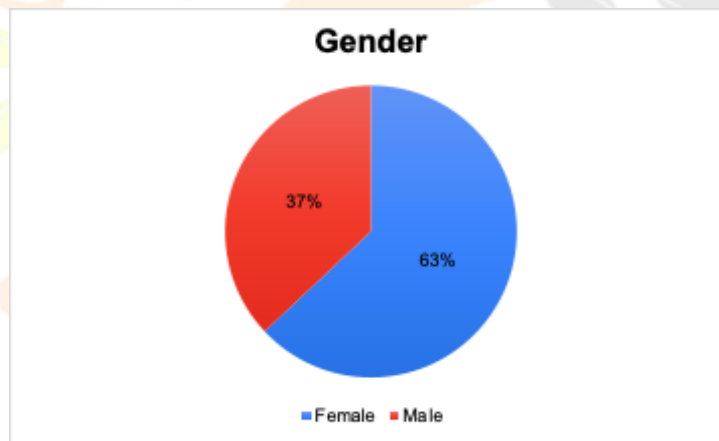
Note: Type of family of the participants

The below pie chart represents the family type of the participants in the study. The majority of the individuals i.e., 64% come from nuclear families whereas 24% come from joint family backgrounds. It also exemplifies the shift from joint families to smaller, more self-sufficient units. There is a total of 6 individuals who have scored averagely high on the cyber victimization scale 3 of them come from a nuclear family. This result indicates that the family type might have an effect on victimization.

Figure 4 Working Individuals

Note: Individuals working in the family

The following bar graph depicts the number of individuals employed within the family. The sample size consisted of 47 participants from single-income households and 43 participants from dual-income households. Ten individuals were engaged in self-employment. The available evidence does not provide a definitive indication of any association between familial employment, social media engagement, and the experience of cyber victimization.

Figure 5 Gender

Note: Gender ratio of the individuals participating in the study

Among the sample of 100 participants under investigation, 63% were identified as female while the remaining 37% were identified as male. Among the population under study, a total of 6% of individuals have obtained high scores on both scales. Of this group, 1.85% are male and 0.63% are female. This implies that a greater proportion of males have been subjected to cyberbullying in comparison to females. The "Understanding the Lives of Adolescents and Young Adults" (UDAYA) surveys conducted in 2015-16 and 2018-19 involved a cohort of 4,428 male and 11,864 female adolescents between the ages of 10 and 19 years. During a period of three years, there was an increase in the proportion of male participants who reported experiencing victimization from 1.9% to 5.6%. However, the results are inconclusive with respect to cyberbullying (Maurya et al., 2022).. Based on the results of certain research studies, it has been observed that females exhibit a higher likelihood of experiencing cyberbullying as victims. According to some sources, there is a belief that males exhibit a higher propensity to engage in cyber-attacks and experience victimization through such means compared to females (Lattanner & Schroeder, 2014; Kuss et al., 2014).

5.1 Table 2 Descriptive Statistics

	Mean	Standard Deviation	N
Media Usage	63.85	11.086	100
Cyber V	24.34	10.226	100

Note: Mean and Standard Deviation

5.2 Table 3 Correlation

	Media Usage	Cyber_V
Media Usage	Pearson correlation	.078
	Sig (2 tailed)	.442
	N	100

Note: Pearson 2-tailed correlation

It is observed that a minimum score of 19 and a maximum score of 95 on the social media usage questionnaires (TSNUQ), a mean score of 63.85, and a standard deviation of 11.08, the data indicates social media usage among the age group (12–18 years) is above average.

The minimum score on the Adolescent Cyber Victimization Scale (CYBVICS) is 18, the maximum score is 90, and the mean score is 24.34, with a standard deviation of 10.226. The findings show that although cyber victimization does occur, it is not very severe. The correlation between the two scales is $r = 0.78$ and $P = 0.4$, which is positive, high, greater than 0.05, and insignificant. This indicates that the likelihood of people becoming online victims of crime increases with increased social media use.

The present study, which was conducted on a restricted sample size, has demonstrated an association between the two variables as indicated in Table 1. Nonetheless, the magnitude of the issue will only be discernible upon examination of more substantial figures. A larger sample size may yield findings that provide a more comprehensive understanding of the relationship

6 CONCLUSION

Social media use has increased cyber victimization, and appropriate social media use and cyber victimization guidelines are needed. Because of these ideas, neoliberal subjects indulge in cyberbullying, lack discipline, and social disengagement. Cyberbullying preys on revered groups, but open family communication strengthens child-parent bonds. Cyberbullying is motivated by power, retaliation, attention-seeking, jealousy, prejudice, and boredom. Cyberbullying is complex and requires an ecological approach. College students using social media are vulnerable to cyberbullying, which may lead to mental illness and misery. Victims of cyberbullying experience fury, powerlessness, fear, and sadness, and socially influence their behaviour and purpose. These facts are evident from the secondary sources of information reviewed in the literature.

It is necessary to research to discover if teenagers subjected to both cyberbullying and school bullying are at a greater risk of psychological harm. Early PTSD diagnosis and therapy aid in the prevention of Victims of cyberbullying is more likely to have sadness and suicidal thoughts, which stay longer.

Smartphones are increasingly popular, yet they pose concerns such as child sex abuse, sexual exploitation, and unauthorized data use. Parents and educators should educate their children about responsible phone and social media use. Colleges and universities must work

to prevent cyberbullying and aid victims. Research, partnership with social media corporations, law enforcement, mental health professionals, and social media safety education are required to understand the relationship between social media use and cyber victimization. Organizations and governments have developed mobile phone safety policies and initiatives to decrease risks. Cybersecurity safeguards Internet users from cyber threats, such as identity theft, hacking, malware, phishing, cyberstalking, cyberbullying, denial-of-service attacks, online scams, IP theft, and cyber victimization.

6.1 Implications

This research may assist in gaining a better understanding of the prevalence of the usage of social media platforms as well as cyber victimization in Indian society. This will help schools and universities establish measures to identify people being bullied in online contexts and assist such individuals. Student counselors will be able to get insights into the behavioral patterns of bullies and create coping mechanisms for those who are bullied. Research findings may be used by governmental organizations such as the Cyber Cell to determine the age groups more susceptible to crime and the types of crimes often perpetrated. By identifying the age groups and types of crimes that are most prevalent, the Cyber Cell can develop targeted prevention strategies and allocate resources more effectively. Additionally, schools and community organizations can use the coping mechanisms developed in this study to better support those who have experienced bullying.

6.2 Delimitation

Adolescents and teenagers between the ages of 12 and 18 years old. There were both male and female participants, as well as other sexes. Each person should have a single social media profile (for example, on Instagram, Facebook, Snapchat, and Twitter) and use a single messaging service (WhatsApp, Facebook Messenger, Telegram, Viber, etc.). The individual must be located in India.

6.3 Limitation

There is no personal connection between the participants and which has restricted understanding of the problem. As the data was gathered online, determining its authenticity was difficult. Because the questionnaire was self-reported, participants could provide more socially acceptable responses. The sample size can be large.

6.3 Suggestions for future research

Cybervictimization and social media need more research. This has been studied extensively. Understanding social media cybervictimization mechanisms is crucial. Social media risks must be identified. Age, gender, personality, and social media use are examples. Cybervictimization's short- and long-term effects need further study. Preventing and treating social media cybervictimization requires research. Educating youth and adults, promoting responsible social media use, and improving victim reporting and support are examples. Research is needed to stop social media cyberbullying. Develop algorithms and filters to detect and block abusive content, as well as tools to protect victims and report abuse. More research is needed to understand and prevent cyber victimization from social media use. Social media, law enforcement, and mental health professionals must work together to combat cyberbullying. Social media safety education is vital. To understand how age affects cyberbullying and victimization, the age group and an equal number of samples will be considered. Gender too. The study is population-representative. Age, gender, and cyberbullying/victimization are better understood. Socioeconomic status and location may help explain cyberbullying. Teens may cyberbully due to life stresses. It's rarely discussed. Social media's negative effects on teens' mental health require this multidisciplinary approach. Clinical and research settings should consider adolescents' use of online communication platforms as part of their maturation.

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Appendix A

The Social Networking Usage Questionnaire

Sr.no.	Statements	Always	Often	Sometimes	Rare	Never
1	I use social networking sites to become more sociable.					
2	I use social networking sites to keep in touch with my relatives.					
3	I use social networking sites to seek help from my teachers.					
4	I use social networking sites for getting jobs related information.					
5	I use social networking sites to share new ideas.					
6	I use social networking sites to create my social identity					
7	I prefer using social networking sites to attending social gathering.					
8	I use social networking sites to get information regarding current social events.					
9	I use social networking sites for online academic group discussions.					
10	I use social networking sites for reading news.					
11	I use social networking sites for sharing pictures.					
12	I use social networking sites to do research work					
13	I use social networking sites to learn about my curricular aspect					

14	I communicate with my friends via social networking sites in preparation for exams.					
15	I use social networking sites to get relief from academic stress.					
16	I use social networking sites for watching movies.					
17	I use social networking sites for collaborative learning.					
18	I use social networking sites to solve my academic problem.					
19	I use social networking sites to look at funny sharing.					

Appendix B

Adolescent Cyber-Victimization Scale

Never	Once or twice	Fewtimes (between 3 to 5 times)	Several times (between 6 to 10 times)	Manytimes (more than 10 times)
1. Someone insulted or ridiculed me in social networks or groups like WhatsApp to really hurt me.				
2. Someone called my cellphone and hung up to bother or frighten me.				
3. Someone used threats to make me do things on the Internet or smartphone that I did not want to do (like recording myself on video, giving money, doing bad things).				
4. Someone told my secrets or revealed personal things about me in social networks or groups (WhatsApp, snapchat . . .).				
5. To make fun of me, someone made or manipulated videos or photos of me and uploaded or distributed them on social networks or by smartphone.				
6. Someone logged into my profile or accounts and I could not avoid it.				
7. Someone pretended to be me saying or doing bad things on the Internet.				
8. Someone purposely created a webpage, a forum, or a group just to make fun of me and criticize me in front of everyone.				

9. Someone put my cellphone number on the Internet and said bad or false things about me so that people would call me and get me into trouble.

10. Someone took my smartphone and used it to send photos, videos, or mean messages to others to get me into trouble with them.

11. Someone criticized me or made fun of comments, photos, or videos I uploaded to social networks or groups like WhatsApp

12. Someone created a false profile on the Internet with my personal data in order to impersonate me saying or doing bad things.

13. Someone ignored and did not answer messages or things I shared in groups or social networks, just to make me feel bad.

14. Someone provoked me in social networks or groups by insulting or taunting me to make me angry and cause a big argument

15. Someone eliminated or blocked me from groups to leave me without any friends

16. Someone stole my photos, videos, or private conversations and uploaded them or sent them to others.

17. Someone changed my password to social networks so that I could not access them.

18. Someone sent me taunting messages to bother and annoy me.

