Research Article

Action for Cyber Health Promotion: A Mixed-Method Assessment to Study the Effect of Cyberbullying on Health

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A B S T R A C T

Background: Cyberbullying is one of the present global challenges which negatively impacts both the physical and mental health of an individual. It has been found that people of all age groups are affected by cyberbullying at some point.

Objective: The objective of the present assessment was to study the effect of different types of cyberbullying on physical and mental health.

Methodology: Data collection included both qualitative and quantitative methods. A short survey questionnaire was used to collect quantitative data while qualitative was collected through anonymous confessions, discussions, and in-person interviews.

Results: The majority of participants (86%) reported using the internet frequently, while 34% revealed they had faced cyberbullying. Of the individuals who experienced cyberbullying, 37% did not report the incident. According to the participants, males indulge more in cyberbullying (65%) as compared to their female counterparts (24%). Of the various types of cyberbullying, trolling and harassment were the most commonly experienced ones. The majority of the participants experienced a negative impact on their mental health, which also affected their physical health. The anonymous confession box response revealed that 41% experienced cyberbullying while 7% confessed to having conducted cyberbullying.

Conclusion: Of the various emotions reported due to cyberbullying, anger was the most common, followed by fear, embarrassment, suicidal feelings, sadness, loneliness, and depression. The anonymity of the online platform was found to be one of the factors that encourage people to commit cyberbullying.

Keywords: Bullying, Cyber Crime, Surveys, Confession Box, Psychological Impact

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Introduction

There is an increase in the development of new technology subsequently increasing usage of electronic gadgets among people of all age groups due to which the internet has been connected to a rise in cyberbullying. In September 2023, Petrosyan published a report that stated 64.6% of the population worldwide used the internet which comprised 4.88 billion social media users. It was also mentioned, that in ranking countries, China has the largest population of internet users while India ranked second.[1]

With the increasing usage of the internet, there is an increase in the trend of cyber communication. It provides a new form of interpersonal communication. Smartphones with cheap data plans are easily available nowadays in India. Although this has proven to be a boon to society, research and news articles highlight different aspects of the internet. There is a dark side of internet usage which people are aware of, but partially.[2]

Cyberbullying is a common public issue nowadays that affects the health of every age group. Willard, in her book, mentioned common cyberbullying: flaming, online harassment, cyberstalking, denigrations (put-downs), outing, exclusion, and masquerade.[3]

The salient features of cyberbullying as reported include perpetrators hiding their identity, constant approach to targets, a high number of intended users, and the target's immediate reaction not being visible. It has also been reported that the perpetrators may otherwise be less superior but they might be good at technological skills.[4]

Suler mentioned a term called online disinhibition in his article, which means people develop the habit that some things can be easily communicated digitally as compared to being said in person.[5]

Multiple risk factors contribute to engagement in cyberbullying. Vendebosch and Cleemput found that people who are involved in cyberbullying are mostly cyber-victims or victims of traditional bullying.[6] Wright and Li also found that people who faced rejection and cyber victimisation noticed aggression later.[7]

It was found that willingly disclosure of personal information online by people was one of the risk factors for victimisation. In the present world, cyberbullying is wide-ranging and is beyond text messages or emails.[8]

Cyberbullying involves different platforms of bullying by phone calls, text messages, sharing pictures and video clips of others, and circulating pictures of others on mobile phones. It impacts people's lives in many ways including mental health, low self-esteem, and physical health. Privacy invasion can lead to various psychological disorders among individuals. It has been seen that the victims of online bullying have increased levels of depressive symptoms, uncertainties, and seclusion.[8]

Although cyberbullying is still a relatively new field of research, cyberbullying among adolescents is considered to be a serious public health issue that is closely related to adolescents' behaviour, mental health, and development.[8] There are significant identified factors contributing to it such as gender, culture, technology, and cyber safety.[9]

Thus, this assessment was planned to explore the rate and kind of cyberbullying along with its potential health impact on people.

Methodology

Study Plan and Participants

The current cross-sectional assessment was conducted from October 5 to October 10, 2023 at the Health Mela of Indraprastha University, New Delhi. The participants included individuals of all age groups above 15 years. Since it was a pilot study, a convenient sampling of one hundred and four individuals who consented to participate in the assessment was recruited.

Tools Implemented

A short survey questionnaire comprising 27 questions was created to gauge visitors. The questionnaire was developed in consultation with experts.

- The first section of the questionnaire comprised general information related to the participant and internet usage.

- In the second section of the questionnaire, questions related to cyberbullying were asked.

- The third section of the questionnaire also comprised questions related to cyberbullying but was based on evaluation, which was assessed using the Likert scale.

The questionnaire was shared electronically through Google Forms. For qualitative data collection, an anonymous box was used to gather the experiences of participants who had been victims of cyberbullying. The participants were explained the objective of the study, and whoever was willing to participate was included after giving their consent.

Descriptive statistics such as frequency and percentages were calculated using Microsoft Excel.

Results

Quantitative Analysis

We received 104 survey forms: 57 from males, 46 from females, and 1 that did not provide gender information. Out of 104 surveys, 82 participants were students, while

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the remaining 22 were working professionals. The majority of the participants were from the age group 31–45 years.

Eighty-six percent of the participants mentioned that they use the Internet very often. Some participants responded that they use it rarely, accounting for 18%.

When asked about cyberbullying, 35 (34%) of the participants agreed that they had faced problems related to cyberbullying, while 61% responded that they had not experienced cyberbullying. Additionally, 5% of participants were unable to decide whether they had faced this issue or not. Thirty-four percent of the participants acknowledged being cyberbullied; out of those, 63% reported the incident while 37% did not report it.

Out of those who acknowledged experiencing cyberbullying (34% of the participants), 63% reported the incident, while 37% did not report it. When asked further about the reasons for not reporting, 77% of the participants mentioned the rationale for not reporting. The various reasons reported were that either the participants were scared of the consequences of reporting the incident, or they were not aware of the actions to be taken. Additionally, they felt that there would not be any action taken against the perpetrators. Further, some of the participants did not report the incident as they were bullied by their friends.

Types of Cyberbullying Experienced

As depicted in Figure 1, it was found that trolling and harassment were the most experienced types of cyberbullying, while outing/ doxing was the least prevalent.

The survey revealed that the cyberbullying victims experienced various emotions ranging from anger to suicidal feelings (Figure 2).

The survey also revealed that the participants had the perception that the majority of the bullies were males (65%), while 23% perceived them to be females (Figure 3).

The common reasons were found to be fun, money, and revenge, followed by other factors, as depicted in Figure 4.

Participants expressed their concerns about sharing with a trustworthy person, with 56% responding 'Yes,' 28% responding 'No,' and 16% responding 'Maybe' (Figure 5).

The third part of the questionnaire was evaluated through the Likert scale (statements related to cyberbullying) (Table 1).

Qualitative Analysis

Data was analysed through content analysis. It involves extracting meanings embedded in original data. A detailed analysis was performed on the 43 confessions submitted by the participants. Out of those 43 confessions, 13 were selected as appropriate in the context of this study (Table 2).

Anonymous Reporting of Incidents

A confession box or anonymous box was provided as a way for people to report instances of cyberbullying anonymously. Forty-three people came forward and shared their experiences anonymously. Later on, those confessions were analysed and 13 were selected as appropriate in the context of this study (Table 2).

Participants shared various incidents related to themselves and their family members, describing how they were victims of cyberbullying and how it impacted their physical as well as mental health. A few said that they were in severe depression after being bullied.
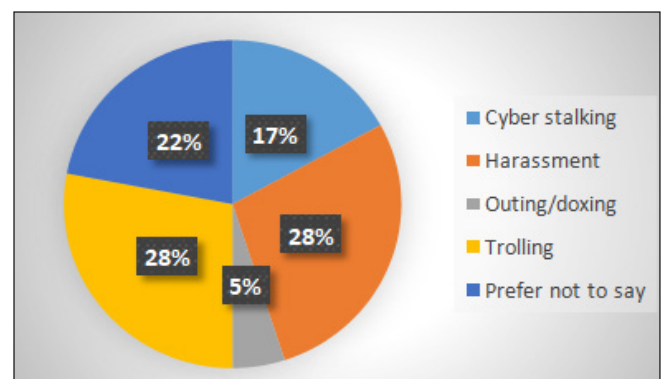

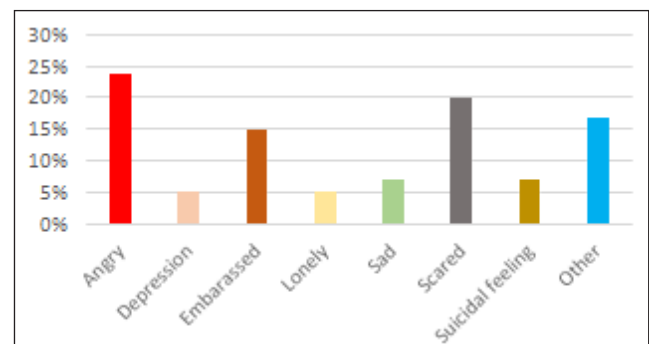**Figure 1.Different Types of Cyberbullying Experienced**
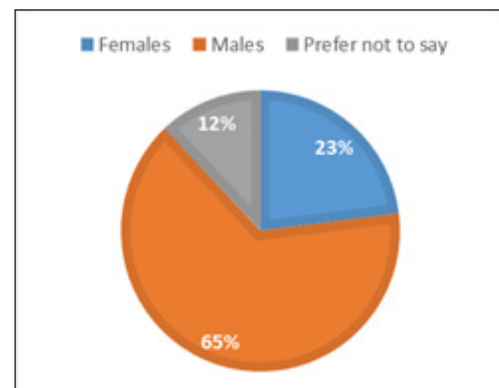

Figure 2.Impact of Cyberbullying on Emotions

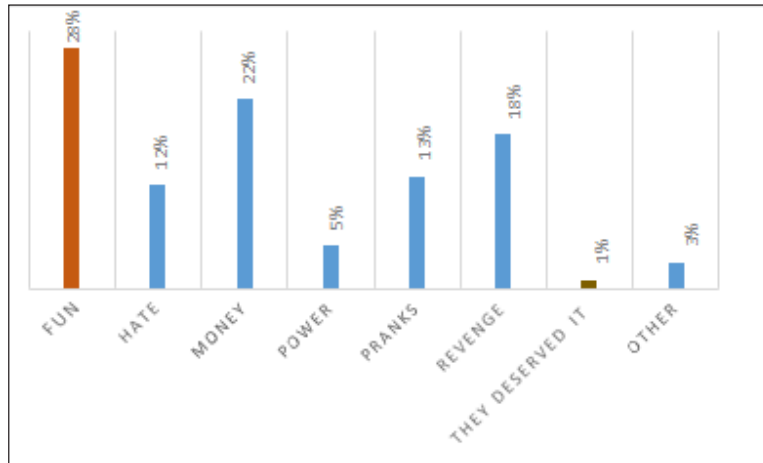**Figure 3.Perception of Participants Regarding the Gender of Bullies**

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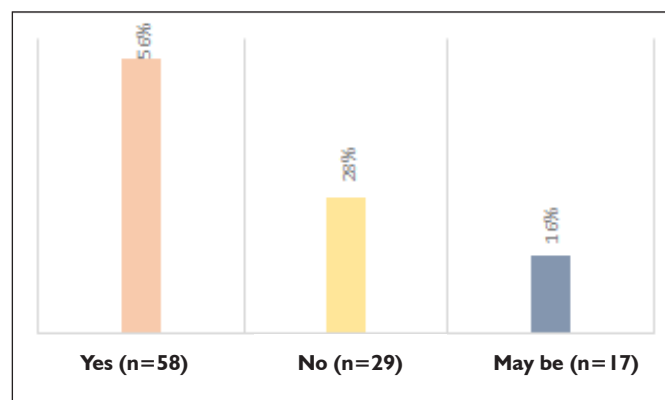**Figure 4.Common Reasons for Cyberbullying**

Figure 5.Informing Trusted Adults Regarding Cyberbullying

Table 1.Evaluation of Likert Scale Statements

Statement	Strongly Disagree n (%)	Disagree n (%)	Disagree n (%)	Agree n (%)	Strongly Agree n (%)
Cyberbullying is on the rise.	3 (2.80)	3 (2.80)	6 (5.70)	82 (79.00)	10 (9.60)
Cyberbullying is a significant/ big problem nowadays.	12 (11.50)	5 (4.80)	11 (10.57)	44 (42.30)	32 (30.70)
Cyberbullying is a violation of privacy, regardless of the intent of the perpetrator.	3 (2.80)	4 (3.80)	13 (12.50)	55 (52.80)	29 (27.80)
Do you believe cyberbullying is a serious problem that needs to be addressed?	2 (1.90)	2 (1.90)	13 (12.50)	38 (36.50)	49 (47.10)
Do you feel safe on the internet?	18 (17.30)	17 (16.30)	47 (45.10)	16 (15.30)	16 (15.30)

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Table 2.Confessions from the Anonymous Box

Participant Number	Confessions
Participant 1	Someone from my colony, who was a 25-year-old boy, whom I considered a brother, photoshopped my photos and faked them with nudes. I was so worried I wanted to die, I couldn't even imagine my family's reaction to this. Even if it was fake, my respect was harmed. Just for money, he did this I am still not over this.
Participant 2	In the comment section of my post of a *nukad natak* in which I had a line which said 'I am smart and sexy', someone mentioned in the comment section 'You look like gay', which hurt me badly.
Participant 3	A few years back, someone blackmailed me on Facebook. The girl asked me to share my naked pictures and if I did not share then she would upload my photoshopped pictures on the internet. I was afraid and sent her my original pictures and this went on and on. I was scared to share it with my family.
Participant 4	One of my friends got my nude picture viral.
Participant 5	I got a notification on my phone that my friend was sharing nude pictures of his girlfriend.
Participant 6	It is difficult for me to speak to girls face to face, but convenient online.
Participant 7	I am a boy and I made a fake Instagram account of a girl and bullied my two friends, one of them was very disturbed by that act.
Participant 8	I would often intimidate others to suppress my anger.
Participant 9	Hi, I want to share my experience. I was body-shamed and was made to feel insecure about my weight. These things used to affect me but in the long run, it does not matter to me anymore, though it can affect any individual.
Participant 10	My Telegram account was hacked and the person who hacked my account indulged in sexual talks with one of my friends and shared my nude pictures. I was in severe depression for months.
Participant 11	My best friend recorded a video of mine while I was urinating and made it viral.
Participant 12	I uploaded a picture on Instagram. One user commented ugly/ fat which affected me a lot. I blocked her from my account.
Participant 13	A hacker asked Rs. 70,000 from my friend as he had hacked my friend's account, used her photos and converted them into sexual content. We hired a professional hacker, paid Rs. 8,000 to them and made him delete all the content.

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Discussion

The present assessment researched the understanding and impact of social media and cyberbullying among adults. The majority of participants reported frequent internet use. The findings indicate that 34% of participants had faced cyberbullying which is corroboration with the findings of the study Zhu et al.[10] A systematic review was done of 2070 studies of which 63 were selected. These studies focused on the preponderance rate (13.99% to 57.5%.) and leading factors related to cyberbullying. Cyberbullying victimisation was found to be 13.9%–57.5%. Over 5 years, it has been seen cyberbullying has surged and there hasn't been sufficient research in this field.[11]

As reported by Zhu et al. the present assessment also witnessed trolling and harassment as one of the major types of cyberbullying experienced by the participants. A significant number of participants perceived that males are more indulged in cyberbullying as compared to females.[10] A similar finding was reported by Kesharwani and Sharma in which authors reported that males were more likely to bully and fight in person than females.[2]

Although the exact reasons for practising cyberbullying have not been reported yet our findings depicted that participants indulge in cyberbullying for fun, money, revenge, and various other factors. Gabriel from Binus University mentioned that revenge motivated individuals to indulge in cyberbullying. He also mentioned that being a victim of cyberbullying one can think harassing other people is something normal.[12]

Cyberbullying often hurts the mental health of the victims. A study was conducted among adolescents of Swiss and Australia and it was found participants who experienced cyberbullying exhibited higher symptoms of depression than non-victims.[13] Sharma et al. also found in their study that depression, mood disorders, insomnia, and the feeling of guilt are primary symptoms seen in the behaviour of the victims.[8] As seen in our findings anger came out to be the most expressed emotion, scared being the next. Embarrassed, sad, feeling to commit suicide and depression were the other emotions. Bauman and Newman also mentioned in their study that cyber victimisation results in several serious repercussions.[14] In Gradinger et al.'s study, it was seen people who were victims of traditional as well as cyberbullying were more likely to report depression and physiological symptoms as compared to non-victims.[15] A study was conducted among 599 adolescents in Canada; it was found people involved in cyberbullying had depressive as well as suicidal symptoms.[16]

The confessions collected in the present assessment highlighted various instances of online harassment, bullying, and privacy invasion. We also observed the emotional and psychological toll experienced by participants in their encounters. The findings emphasised the need to sensitise and promote a culture of online respect and responsibility among people of all age groups. Therefore, health education and promotional activities with a special focus on cyber etiquette are warranted.

Conclusion

A notable percentage of participants acknowledged having faced cyberbullying and related issues. Gender specificity in identifying cyberbullies varied among participants. The key findings from the confessions should be analysed and the broader implications for society should be discussed. The importance of raising awareness, implementing stricter security measures, and fostering a culture of online respect and responsibility should be emphasised. Further research should be conducted and proactive measures should be taken to mitigate the impact of online harassment.

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