

ORIGINAL ARTICLE

INTERNET VICTIMIZATION AND DEPRESSION AMONG ADOLESCENTS

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**Introduction**

Internet victimization and depression has become an important public mental health issue affecting children and adolescents. According to the stress generation model of depression, individuals with depressive symptoms may contribute to the generation of additional stress in their lives, including victimization.

**Material & Methods:** Nine hundred students, aged between 13-18 years were randomly selected and surveyed regarding the involvement of violence in the last six months from the schools of Lucknow city. Among victims, the Patient Health Questionnaire 9 (PHQ9) were also administered to assess the degree of depression.

**Observations:** Out of 900 adolescents, 650 (72.2%) used the internet. Total 492 (75.7%) of children were bullied of which 270 (41.5%) were boys and 222 (34.2%) were girls. According to PHQ9 score, 414 (84.1%) suffered from depression of which 381 (77.4%) had minimal depression, 31 (6.3%) had mild depression and 2 (0.4%) had moderate depression. None suffered from severe depression. Among the remaining 250 children who were non-users of internet, 18 (7.2 %) had depression (p <0.0001).

**Discussion:** Internet usage and depression are hand-in-hand. Depressed teens are more likely to become targets of bullying than their healthier peers.

**Keywords:** victimization, bullying, depression.

**Introduction**

The rapid emergence of the Internet as a communication venue for adolescents has been accompanied by diametrically opposed views about its social consequences. The Internet motivates adolescents to form online contacts with strangers rather than to maintain friendships with their offline peers. Because online contacts are seen as superficial weak-tie relationships that lack feelings of affection and commitment, the Internet is believed to reduce the quality of adolescents' existing friendships and, thereby, their well-being. (1) Internet victimization and depression has become an important public mental health issue affecting children and adolescents in a significant proportion of the society. According to the stress-generation model of depression, individuals with depressive symptoms may contribute to the generation of additional stress in their lives, including victimization. (2) The literature shows that adolescents who are cyberbullied experience more depressive symptoms. (3) Virtually all types of online and offline victimization are independently related to depressive symptomatology, delinquent behavior, and substance abuse. (4) According to the researchers from McMaster University Canada, The side effects of internet addiction is not just limited to wastage of time, people who use the internet excessively are prone to mental health problems such as depression and anxiety These days, access to the internet is viewed as a basic necessity. Adolescents lose communication skills because they have less need for face-to-face interaction. According to a report by the Internet and Mobile Association of

India and market research firm IMRB International, the number of users who have access to the internet in India is expected to reach 450-465 million by June, 2017. This figure is up 4-8 percent from 432 million in December 2016. The overall internet penetration in the country is 31 percent. (5) In the light of these facts this study was designed to explore the effect of internet victimization on the mental health of Indian adolescents with special reference to depression.

**Methods & Materials**

A cross-sectional survey was conducted by using an anonymous pre-tested self-reported questionnaire (Annexure 1) regarding involvement in violence in the last six months among 900 students, aged between 13-18 years. These students were randomly selected from the government and private sector schools of Lucknow city. The response scale assessed in the format: 0 (never), 1 (1 or 2 times), 2 (3 or 4 times), or 3 (5 or more times). Before the process of assessment, interrogator tried to develop a confident and faithful relationship. During the interview, the pediatrician and psychologist assessed the health status of student. Further the subjects were also administered the Patient Health Questionnaire 9 (PHQ9) to assess the degree of depression among victims. (6)

**Annexure 1: Self-reported questionnaire**

|  |                                 |
|--|---------------------------------|
| 1. Are you using internet?                               | (Yes / No)                      |
| 2. How frequently do you use internet?                   | (Daily/ Every 2-3 days/ weekly) |
| 3. Do you use email?                                     | (Yes / No)                      |
| 4. Do you use Facebook?                                  | (Yes / No)                      |
| 5. Do you have twitter account?                          | (Yes / No)                      |
| 6. Do you use other social media sites?                  | (Yes / No)                      |
| 7. Have you been abused in last 6 months?                | (Yes / No)                      |
| 8. How frequently have you been abused in last 6 months? | (Daily/ Every 2-3 days/ weekly) |
| 9. Was abuse in form of bad comments?                    | (Yes / No)                      |
| 10. Was abuse in abusive language?                       | (Yes / No)                      |
| 11. Was abuse in disturbing pictures?                    | (Yes / No)                      |
| 12. Was it threats?                                      | (Yes / No)                      |
| 13. Was it to reflect your name bad in society?          | (Yes / No)                      |
| 14. Was it in connection of a love affair?               | (Yes / No)                      |
| 15. Was it revenge?                                      | (Yes / No)                      |

**Results**

Out of 900 adolescents, 650 (72.2%) used the internet, of which 397(44.11%) and 253 (28.11%) belonged to 16-18 years and 13-15 years age group

**Table 1: Internet usage and bullying in each age group**

| Internet usage                          | Age group 16-18 years | Age group 13-15 years |
|---|-----------------------|-----------------------|
| Facebook usage                          | 357 (54.9%)           | 205 (31.5%)           |
| Twitter usage                           | 51 (7.8%)             | 22 (3.3%)             |
| Other Social Media usage                | 334 (51.3%)           | 216 (33.2%)           |
| Email usage                             | 271 (41.6%)           | 185 (28.4%)           |
| <b>Bullying</b>                         |                       |                       |
| Bullying in form of bad comments        | 191 (38.8%)           | 132 (26.8%)           |
| Bullying in form of abusive language    | 87 (17.7%)            | 67 (13.6%)            |
| Bullying in form of disturbing pictures | 92 (14.1%)            | 51 (10.4%)            |
| Threatened to give bad name in society  | 201 (40.9%)           | 43 (8.7%)             |
| Threatened relating to a love affair    | 150 (30.5%)           | 67 (13.6%)            |
| Threatened in form of revenge           | 143 (29%)             | 124 (25.2%)           |

**Table 2: Internet usage and bullying as per gender**

| Internet usage                          | Age group 16-18 years | Age group 13-15 years |
|---|-----------------------|-----------------------|
| Facebook usage                          | 300 (46.2%)           | 262 (40.3%)           |
| Twitter usage                           | 41 (6.3%)             | 32 (4.9%)             |
| Other Social Media usage?               | 314 (48.3%)           | 236 (36.3%)           |
| Email usage                             | 210 (32.3%)           | 246 (37.8%)           |
| <b>Bullying</b>                         |                       |                       |
| Bullying in form of bad comments        | 171 (34.8%)           | 152 (13.9%)           |
| Bullying in form of abusive language    | 96 (19.5%)            | 58 (11.7%)            |
| Bullying in form of disturbing pictures | 57 (11.6%)            | 86 (17.5%)            |
| Threatened to give bad name in society  | 108 (21.9%)           | 136 (27.6%)           |
| Threatened relating to a love affair    | 115 (23.4%)           | 102 (20.7%)           |
| Threatened in form of revenge           | 146 (29.7%)           | 121 (24.6%)           |

respectively. Male: female ratio was 359:291. The students who assessed internet daily were 434 (66.8%) while 168 (25.8%) and 48 (7.4%) assessed every 2-3 days or weekly respectively. Of the 650 students who accessed internet, 492 (75.7%) were bullied in the last six months period, of which 270 (41.5%) were boys and 222 (34.2%) were girls and 302 (46.5%) victims were of 16-18 years and 190 (29.2%) were in 13-15 years age group (Table 1 and 2). According to PHQ9 score 414 (84.14%) suffered from the depression. Minimal depression was present in 381 (77.4%), 31 (6.3%) had mild depression and 2(0.4%) moderate depression. None suffered from severe depression. Among the remaining 250 children who were non-users of internet, 18 (7.2 %) had depression (p <0.0001). Cause of depression was not drilled in this group.

**Discussion**

Depression is a symptom of several disorders that range from mild to severe and from transitory to chronic. As per Global Peace Index 2014, about 2.8 million youth in the age group of 12-17 years have at least one major depressive episode. (7) Present study confirms the report whereby 70 percent of individuals

have more than one episode of depression before adulthood. (6) Cyberbullying and depression are hand-in-hand and most studies can't prove that the bullying caused depression. It's possible that depressed teens are more likely to become targets of bullying than their healthier peers. However, Hamm et al found that the cyberbullying preceded the teens' depression, hinting at a causal relationship. (8) In the present study, most of adolescents aged 16-18 years had depression probably as they are more conscious of their give and take relationships.

Cyberbullying has been found to increase the likelihood of depressive symptomatology in victims both in cross-sectional and longitudinal studies. (9) Cognitive theories indicate that the impact of victimization on subsequent psychopathology may be mediated by cognitive vulnerabilities, which include dysfunctional cognitive schemas about the way in which people view themselves and the world. (10,11) The experiences of victimization by peers can also negatively affect the construction of dysfunctional schemes of oneself and of social relationships which may lead to the suicidal tendency. Internet victimization predicts other cognitive vulnerabilities,

such as a negative inference style (12) and early maladaptive schemas. (13)

This is high time to make the cyber space safe, especially in digital India. We need to apply all the predictive and preventive available tools at the school level to revert the running equation in the favor of our young adults. (14)

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**References :**

1. Valkenburg PM, Peter J. Online Communication Among Adolescents: An Integrated Model of Its Attraction, Opportunities, and Risks. *J Adolesc Health*. 2011 Feb;48(2):121-7.
2. Gibb BE, Hanley AJ. Depression and interpersonal stress generation in children: Prospective impact on relational versus overt victimization. *Inter J Cognitive Ther*. 2010; 3:358-67
3. Wang J, Nansel TR, Iannotti RJ. Cyber bullying and traditional bullying: Differential association with depression. *J Adolesc Health*.2011;48:415-417
4. Mitchell KJ, Ybarra M, Finkelhor D. The relative importance of online victimization in understanding depression, delinquency, and substance use. *Child Maltreat*. 2007 Nov;12(4):314-24.
5. Vinayak G. Internet addiction disorder: Signs, symptoms and how to avoid. Available at URL: <https://in.style.yahoo.com/internet-addiction-disorder-signs-symptoms-and-how-to-avoid-113147536.html>. Accessed on 26 Feb 2017
6. Instructions for Patient Health Questionnaire (PHQ) and GAD-7 Measures. Available at URL: <http://www.phqscreeners.com/select-screener>. Accessed on 23rd Dec 2016
7. Teen Depression Statistics & Facts. Available at URL: <https://www.teenhelp.com/teen-depression/teen-depression-statistics/>. Accessed on 10th March 2017
8. Social Media Cyber Bullying Linked to Teen Depression. Available at URL: <https://www.scientificamerican.com/>

article/social-media-cyber-bullying-linked-to-teen-depression/. Accessed on 1st March 2017

9. Gámez-Guadix M, Orue I, Smith PK, Calvete E. Longitudinal and Reciprocal Relations of Cyberbullying With Depression, Substance Use, and Problematic Internet Use Among Adolescents. *J Adolesc Health*. 2013 Oct;53(4):446-52
10. Gibb BE, Abela JRZ. Introduction to Special Issue: Cognitive Vulnerability to Depression in Children and Adolescents. *Inter J Cognitive Ther*. 2008;1: 281-283
11. Morris MC, Kouros CD, Hellman N, Rao U, Garber J. Two Prospective Studies of Changes in Stress Generation across Depressive Episodes in Adolescents and Emerging Adults. *Dev Psychopathol*. 2014 Nov; 26(0): 1385-1400.
12. González Díez Z, Calvete E, Riskind JH, Orue I. Test of an Hypothesized structural model of the relationships between cognitive style and social anxiety: A 12 month prospective study. *J Anxiety Disord*. 2015;30, 59-65.
13. Dozois DJA, Quilty LC. Treatment changes in the depressive self-schema. *Psychological Science Agenda*. June 2013. Available at URL: <http://www.apa.org/science/about/psa/2013/06/depressive-self-schema.aspx>. Accessed on 25th March 2017
14. Calvete E, Orue I, Gámez-Guadix M. Cyberbullying Victimization and Depression in Adolescents: The Mediating Role of Body Image and Cognitive Schemas in a One-year Prospective Study. *Eur J Crim Policy Res*.2016;22: 271.

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