

IMPACT OF CYBERBULLYING ON PSYCHOLOGICAL HEALTH OF ADOLESCENTS

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ABSTRACT

Cyberbullying is becoming a serious and harmful social problem, where India stands third behind China and Singapore. It leads to physical, emotional, psychological and behavioural problems. Psychological consequences such as low self-esteem, increased anxiety and higher level of depression are the most unfavourable outcome as it cannot be recovered easily. The study was done to examine the impact of cyberbullying on psychological health (self-esteem, anxiety and depression), of adolescents in Ahmedabad city of Gujarat state. The sample consisted of 240 respondents (120 boys and 120 girls), from standard VII to XII of two private co-educational English medium schools. Rosenberg Self-Esteem Scale (Rosenberg, 1965) and The Beck Youth Inventories (Beck *et al.*, 2005) were used to elicit the data. The findings indicate that, nearly fifteen percent (14.17%) and seven (6.67 %) percent respondents were involved in cyberbullying in their lifetime and the last thirty days, respectively. Psychological health of involved respondents was low, indicating low self-esteem and moderate level of depression and anxiety. The cyberbullying and psychological health were found significantly, associated with each other. Negative association for self-esteem and positive association of anxiety and depression were found. Psychological health (self-esteem, depression and anxiety) of involved and not involved respondents, differ significantly. Overall, it can be concluded that, cyber bullying has negative impact on the psychological health of adolescents.

KEYWORDS: Cyberbullying, Psychological Health, Self-Esteem, Anxiety, Depression, Adolescents

INTRODUCTION

Bullying is a violence that threatens well being of an individual. It is an aggressive behaviour that is repeated and involves a power imbalance favouring the offender (Olweus, 1994). Fast development of information and communication technologies has changed the traditional form of bullying, into cyber bullying. It is defined as “wilful and repeated harm inflicted through the use of computers, cell phones and other electronic devices” (Hinduja and Patchin, 2012). Four types of persons are involved in cyber bullying i.e., either cyberbullies, cyber victims, both cyberbully & victims, and those who have neither cyberbullied nor been cyber victimized (Florell and Wygant, 2013).

There is a wide variation (six percent to seventy five percent) regarding the prevalence of cyber bullying (Hinduja and Patchin, 2012), among adolescents. India is in the third position with 53 percent of children bullied online behind China and Singapore (Global Youth Online Behaviour Survey released by Microsoft in 2012). Further, one in every four Indian teenager is a victim of cyber bullying (Mitch *et al.*, 2014).

Cyberbullying occurs by innumerable technological nature or ways. It encompasses publicly revealing personal information (Willard, 2005), sending harmful or threatening messages, posting derogatory comments on web site or social networking site, physically threatening and intimidating someone in a variety of online settings (Burgess, 2009),

creating web sites with content and posting pictures asking other people to rate things, without the consent of an individual (Willard, 2006), bothering someone online by teasing in a mean way, calling someone hurtful names, intentionally leaving persons out of things, threatening someone and saying unwanted sexually-related things (Patchin and Hinduja, 2006) etc.

Access to high technology (Beran and Li 2005), revenge (Raskauskas and Stoltz, 2007), perceived anonymity (Dempsey *et al.* 2009), lack of awareness (Campbell, 2005), lack of support and guidance of family (Wells and Mitchell, 2008), negative personal experiences and parental alienation (Mitchell *et al.* 2007), pleasure seeking and perceived social benefits (Hinduja and Patchin, 2009) are the main causes of cyber bullying behaviour. Male students (Nabuzoka, 2003) particularly in middle school to high school (Wolak *et al.* 2006), are more prone to it. In addition to this, students who are from lower income families, overweight or underweight, new or fresh, perceived as weak, depressed, anxious with low self-esteem, antisocial or unpopular is more vulnerable.

Cyberbullying has been linked to multiple maladaptive emotional, psychological, and behavioural outcomes (Patchin and Hinduja, 2006). The effects of cyberbullying vary depending on the individual, but its consequences include low self-esteem, anxiety, feeling sad, being scared, embarrassed, depression, anger, truancy, decreased academic achievement, an increased tendency to violate others, school violence and even suicide (Beran and Li, 2005; Willard, 2006; Hinduja and Patchin, 2009).

Among all other experiences, low self-esteem, anxiety and depression are the detrimental outcome of cyberbullying. Self-esteem is important during adolescence stage as it decides the positive or negative orientation toward oneself. Cyber bullying inversely affects self-esteem of students (Patchin and Hinduja, 2010). Moreover, bullied individuals also suffer from heightened anxiety. It is a feeling of fear, worry and uneasiness, usually generalized and unfocused as an overreaction to a situation that is only subjectively seen as menacing. One more potential risk factor is the strong link between bullying and depression. National Institutes of Health (2010) identified that the targets of cyber bullying are at greater risk for depression. Depression is a common mental disorder, characterized by sadness, loss of interest or pleasure, feelings of guilt or low self-worth, disturbed sleep or appetite, feelings of tiredness and poor concentration.

Globally, little scientific research exists till date and when it comes to India there is a dearth of research in this topic. This research was done to bridge the gap in cyberbullying research and an attempt to know the psychological consequences of cyberbullying.

METHODOLOGY

The study was conducted in Ahmedabad which is the most advanced metropolitan city of Gujarat state and supposed to be at high risk of cyberbullying. A total of 240 respondents from class VII to XII were selected from two private co-educational English medium schools through simple random sampling. Three class categories were framed, i.e. VII-VIII, IX-X and XI-XII and from each category 40 respondents consisting of 20 boys and 20 girls were selected. Psychological health of the respondents was assessed by using Rosenberg Self-Esteem Scale developed by Rosenberg (1965) (for self-esteem) and The Beck Youth Inventories 2nd Edition (BYI-II) developed by Beck *et al.*, 2005 (for depression and anxiety). Rosenberg Self-Esteem Scale measures positive and negative feelings on a four point continuum ranging from strongly agree to strongly disagree.

The Beck Youth Inventories 2nd Edition (BYI-II) is a diagnostic scale to assess anxiety and depression level on a four point scale of 0 to 3. Appropriate statistical measures were used to analyze the data.

RESULTS AND DISCUSSIONS

The present study in its broad sense is an attempt to find out the psychological consequences of cyberbullying among adolescents. The study findings have been presented in two parts-

- **Prevalence of cyberbullying among respondents**
- **Psychological health of respondents in terms of self-esteem, anxiety and depression**

Prevalence of Cyber bullying among Respondents

The prevalence of cyberbullying was seen in terms of involvement in cyberbullying in lifetime and last 30 days before data collection.

Table 1: Prevalence of Cyberbullying Victimization and Offending

| Prevalence | Not Involved | | Involved | | | | | | Total (N=240) | |
|---------------------------------------|--------------|------|----------|-----|----------|-----|----------|-----|---------------|-----|
| | | | Victim | | Offender | | Both | | | |
| | <i>f</i> | % | <i>f</i> | % | <i>f</i> | % | <i>f</i> | % | <i>f</i> | % |
| Lifetime | 206 | 85.8 | 18 | 7.6 | 10 | 4.2 | 6 | 2.4 | 240 | 100 |
| Last 30 days (before data collection) | 224 | 93.3 | 8 | 3.3 | 4 | 1.7 | 4 | 1.7 | 240 | 100 |

Evaluation of the Table 1 shows that ninety percent (85.8%) of the respondents was not involved, but nearly eight percent (7.6%) were victims, four percent (4.2%) were offender and two percent (2.4%) were both victims and offender of cyber bullying during their lifetime. When viewed for the last thirty days (before data collection) it was found that ninety three percent (93.3%) were not involved, but three percent (3.3%) were victims, nearly two percent (1.7%) were offender and nearly two percent (1.7%) were both victims and offender of cyberbullying.

Although the percentage is less for cyber bullying, but the situation is alarming and needs a timely concern in order to avoid this unfavourable incidence.

Psychological Health of Respondents

Psychological health of the respondents was viewed in terms of self-esteem, anxiety and depression of the respondents (not involved and involved in cyberbullying) in last 30 days before data collection.

Table 2: Distribution of Respondents According to their Level of Self-Esteem (Last 30 Days)

| Total Sample (N=240) | Self-Esteem Level | | | | | |
|---------------------------------------|----------------------|-------|----------------|-------|--------------|-------|
| | Low ($\geq 10-20$) | | Medium (20-30) | | High (30-40) | |
| | <i>f</i> | % | <i>f</i> | % | <i>f</i> | % |
| Not involved in cyberbullying (n=224) | 09 | 04.02 | 165 | 73.66 | 50 | 22.32 |
| Involved in cyberbullying (n=16) | 13 | 81.25 | 03 | 18.75 | 00 | 00.00 |

The levels of self-esteem of the respondents are presented in Table 2. When viewed for respondents who were not involved in cyberbullying it was noticed that most of them had a medium level (73.66%) of self-esteem, whereas nearly four percent (4.02%) had low levels of self-esteem. In case of respondents who were involved in the cyberbullying indicated low level (81.25%) of self-esteem while little more than eighteen percent (18.75%) reported medium level of self-esteem.

Cyberbullying leads to low self-esteem among students (Patchin and Hinduja 2010, Price and Dalgleish 2010, Perren *et al.*, 2010). The probable reason for low self-esteem among involved adolescents may be due to the poor social image, lack of confidence, low coping mechanism, self-doubt, withdrawal from group, lack of support, open communication etc.

Table 3 indicates distributions of the respondents according to level of depression. The majority (90.63%) of the respondents who were not involved in cyberbullying reported minimal level of depression, whereas (0.89%) of them were having moderate and severe level. Adolescents who were involved in the cyberbullying indicated moderate (62.50%), minimal (18.75%) and severe (18.75%) level of depression. Maximum (62.50%) respondents who were involved in cyber bullying had a moderate level of depression, whereas maximum not involved (90.63%) respondents had low levels of depression.

Table 3: Distribution of Respondents According to their Level of Depression (Last 30 Days)

| Total Sample (N=240) | Depression Level | | | | | | | |
|---------------------------------------|------------------|-------|--------------|-------|------------------|-------|----------------|-------|
| | Minimal (0-13) | | Mild (14-19) | | Moderate (20-28) | | Severe (29-60) | |
| | <i>f</i> | % | <i>f</i> | % | <i>f</i> | % | <i>f</i> | % |
| Not involved in cyberbullying (n=224) | 203 | 90.63 | 17 | 07.79 | 02 | 00.89 | 02 | 00.89 |
| Involved in cyberbullying (n=16) | 03 | 18.75 | 00 | 00.00 | 10 | 62.50 | 03 | 18.75 |

Cyber bullying and depressive symptomatology has a close relationship (Ybarra *et al.*, 2007). Adolescents involved in cyber bullying have higher levels of depressive symptoms (Perren *et al.*, 2010). Depression among them may be due to the negative symptoms of frustration, embarrassment, fear, scare, suicidal thoughts, loneliness, self-harm etc. (Price and Dalgleish 2010).

Table 4: Distribution of Respondents According to their Level of Anxiety (Last 30 Days)

| Total Sample (N=240) | Anxiety Level | | | | | |
|--|---------------|-------|-----------------|-------|---------------|-------|
| | Low(0-21) | | Moderate(22-35) | | Severe(36-60) | |
| | <i>f</i> | % | <i>f</i> | % | <i>f</i> | % |
| Not involved in cyber bullying (n=224) | 219 | 97.77 | 05 | 02.23 | 00 | 00.00 |
| Involved in cyberbullying (n=16) | 04 | 25.00 | 12 | 75.00 | 00 | 00.00 |

Level of anxiety among respondents is presented in Table 4. The results revealed that the majority (97.77%) of the respondents who were not involved in cyber bullying had a low level of anxiety whereas almost two percent (2.23%) had a moderate level of anxiety. Among involved respondents seventy five percent (75.00%) had moderate and twenty five percent (25.00 %) had a low level of anxiety.

Involvement of adolescents in any type of bullying behaviour often increases the risk of anxiety (Harmen *et al.*, 2005). Moreover, non - reporting of cyber bullying incidents may also result in increased levels of anxiety (Juvonen and Gross 2008) and this may be the probable reasons of higher anxiety level among respondents.

Table 5: Coefficient of Correlation between Cyberbullying and Psychological Health (N=240)

| Psychological Health | Cyberbullying |
|----------------------|---------------|
| Self-esteem | - 0.456** |
| Anxiety | 0.536** |
| Depression | 0.586** |

**Significant at 1 per cent level.

It is evident from Table 5 that cyberbullying significantly affects the psychological health (self-esteem, anxiety and depression) of the respondents. In case of self-esteem ($r = -0.456^{**}$) negative, but highly significant correlation was found, whereas highly significant positive association was noticed for anxiety ($r = 0.536^{**}$) and depression ($r = 0.586^{**}$).

These findings indicate that increase involvement in cyberbullying activities lowers self-esteem and increases the anxiety and depression level of adolescents. The probable reason may be the guilt feeling, societal disapproval, power imbalance, loneliness, hopelessness, inability to share and get relief, lack of coping ability, poor perception, attention seeking behaviour, weaken support system, age of experimentation, storm and stress, along with increasing use of technology.

Table 6: Comparison of Psychological Health on the Basis of Involvement in Cyberbullying (N=240)

| Psychological Health | No Involvement | | Involvement | | Z Value |
|----------------------|----------------|--------|-------------|--------|----------|
| | Mean | SD | Mean | SD | |
| Self-esteem | 27.40 | 04.328 | 18.50 | 04.633 | 07.907** |
| Anxiety | 09.59 | 04.148 | 20.88 | 07.623 | 09.802** |
| Depression | 09.39 | 03.968 | 21.88 | 07.898 | 11.159** |

** Significant at 1 percent level.

The difference between involved and not involved respondents in cyberbullying with regard to psychological health was assessed by calculating 'z' test (Table 6). Results for self-esteem indicate mean value 27.40 for no involvement and 18.50 for involvement with 'z' value 7.907 which shows significant difference. In case of anxiety the mean value was 9.59 and 20.88 for no involvement and involvement with 'z' value 9.802 which shows significant differences. The mean value for depression with regard to no involvement and involvement in cyberbullying were 9.39 and 21.88 respectively with 'z' value 11.159 which indicates significant difference.

About self-esteem, anxiety and depression significant differences were observed for involved and not involved respondents. It can be concluded that respondents who were involved in cyberbullying were having lower self-esteem, more anxiety and depression as compared to those who were not involved. The disturbances caused by cyber bullying incidences in the psychological characteristics of targets lead to low self-esteem (Perren *et al.*, 2010), more depression (Ybarra *et al.*, 2007) and high anxiety level (Harmen *et al.*, 2005) than non-targets.

CONCLUSIONS

Thus, it can be concluded from the findings of the present study that the prevalence of cyberbullying is not less to show the emergence of this perilous situation. As the extent is low the situation of cyberbullying can be controlled. Cyberbullying adversely impacts psychological health (self-esteem, depression and anxiety) of adolescents. It is essential to take necessary steps to safeguard adolescents from the epidemic of cyberbullying and its long term consequences on psychological health.

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