Cyberbullying and Its Impact on Mental Health of Adolescents

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ABSTRACT

The impact of social media in the twenty-first century is huge and extensive. Its role is simply impossible to ignore especially with reference to the young people or adolescents. According to the Merriam Webster Dictionary, bullying is an aggressive behaviour that seeks to control, harm or threaten others. Cyber-bullying refers to bullying or harassment that takes place in the virtual world such as social networking sites, emails etc., using digital devices like computer, cell-phone and so on. With the onset of technology and the rise of social media, children and adolescents are bringing their bullies home with them. There is no safe zone anymore as this form of bullying can happen at any time, anyplace and any situation.

The present study was undertaken to find out the association between cyber-bullying and mental health issues of adolescents. In order to achieve this objective, the investigators used a descriptive survey method of research. The population for the study has been defined as the eleventh and twelfth-grade students. The sample comprised of 100 students (50 male and 50 female students), which was selected with the help of incidental sampling technique. Questionnaires were used for data collection. Pearson's Product Moment Correlation was used to find out the relationship (if any) between the variables and Students' t-test was used to find the gender difference (if any) on the variables mentioned.

The study reveals that the majority of the student population have been victims or have witnessed cyberbullying and have been involved in bullying others. There is a strong association between cyberbullying and degrading mental health of adolescents. The findings and the implications of the study have been discussed in the paper.

Key words: Cyber-bullying, Social media, Mental health, Adolescents

INTRODUCTION

The 21st century may rightly be described as the era of technology. With the dawn of the internet, much of the interaction among people, especially teenagers, happens in social networking sites through electronic devices such as a computer, mobile phone, tablet etc. ; thus exposing them to the influences of instant contact and its repercussions which in many cases, may be harmful. Cyberbullying is a new form of violence that takes place in the virtual environment and has become a serious matter of concern for parents, teachers as well as researchers. Originally considered as an extension of traditional bullying, the amount of research into cyberbullying has suggested that it is a much more complicated issue. The present research aimed at analysing the perceived influence of cyberbullying on the mental health of adolescents belonging to the age group of 16 to 18 years.

CONCEPT OF BULLYING

Bullying or traditional bullying is the use of threat, force or coercion to abuse, intimidate or aggressively dominate others. Such behaviour is usually repeated and habitual and is characterized by an imbalance of power which may include verbal harassment or threat as well as physical assault or coercion. Bullying is divided into four basic types, namely, emotional, verbal, physical and cyber. Emotional bullying is a deliberate attempt to hurt someone which may include name calling, mocking, teasing, threatening, lying or excluding someone from a group. Verbal bullying is the use of insulting or demeaning language to taunt, ridicule, embarrass or insult another person. Physical bullying means using physical or bodily actions to exert power and gain control over others. Cyberbullying refers to sending derogatory and threatening messages using electronic devices with an intent to harm or harass others. It is also known as online bullying. The Bar Association of India has given a very apt definition of bullying with special reference to different spheres like bullying in schools, workplace and cyberspace as -

"Bullying means systematically and chronically inflicting physical hurt or psychological distress on one or more students or employees. It is further defined as unwanted and repeated written, verbal, or physical

behaviour, including any threatening, insulting, or dehumanizing gesture, by a student or adult, that is severe or pervasive enough to create an intimidating, hostile, or offensive educational environment; cause discomfort or humiliation; or unreasonably interfere with the individual's school performance or participation; and may involve but is not limited to: teasing, social exclusion, threat, intimidation, stalking, physical violence, theft, sexual, religious, or racial harassment, public humiliation, or destruction of property."

CONCEPT OF CYBERBULLYING

According to the Oxford English Dictionary, cyberbullying refers to "the use of electronic communication to bully a person, typically by sending messages of an intimidating or threatening nature." American National Crime Prevention Council defines it as "the process of using the Internet, cell phones or other devices to send or post text or images intended to hurt or embarrass another person."

Cyberbullying is an unfortunate social-product of recent communication technologies, particularly social networking sites like Facebook, Instagram, Snapchat, Twitter and so on. Cyberbullying may involve posting rumours, threats, sexual remarks, personal or confidential information, or pejorative labels. With the rise of social media, comments, posts, photos and content shared by individuals can often be viewed by acquaintances as well as strangers. The content shared by an individual online creates a kind of a permanent public record of their views, activities and behaviour. This public record of a person can be thought of like an online reputation. Cyberbullying can harm the online reputation of the person being bullied or the victim as well as the persons who participate in or incite bullying behaviour or the perpetrator. A few notable concerns of cyberbullying include –

- It is Persistent: Cyberbullying is persistent in the sense that the victims can hardly find any relief from it as digital devices and the internet offers the ability to continuously and immediately communicate 24 hours a day. This form of bullying can happen at any time and any place and victims cannot escape it.
- It is Permanent: Most information communicated online is permanent and public if it is not reported and removed. This is known as a digital footprint or digital shadow which refers to one's unique set of traceable digital activities, actions, contributions and communications that are manifested on the Internet or on digital devices.
- It is Hard to notice: It is hard to notice because parents, teacher or guardians may not overhear or see cyberbullying taking place and thus it may go unnoticed or unrecognized. Moreover, adolescents often do not tell their parents or guardians about being cyberbullied.

Cyberbullying, although similar to traditional bullying, has some notable distinctions. A major distinction is that victims of cyberbullying may not know the identity of the bully or why they are being targeted, whereas victims of traditional bullying are usually familiar with the bully and know the reason why they have been bullied. Cyberharassment can have wide-reaching effects on the victim as the content used to harass the victim can be easily spread and shared online and often remains accessible long after the incident.

Nancy Willard (2006), in her book "Cyberbullying and Cyberthreats", outlines various forms of cyberbullying–

- Flaming –
  Flaming is a form of cyberbullying that refers to an argument or brief exchange between two or more people involving vulgar or rude language, threats and insults (Chibbaro, 2007). It occurs in public Internet sites rather than private message exchanges.
- Cyber harassment –

Cyberharassment is a specific form of cyberbullying that involves repetitive offensive messages sent to a target (Kowalski, Limber & Agatston, 2012). Harassment usually takes place via private messages such as emails but can also be seen in public forums.

- Denigration –
Denigration is the spreading of information about another that is derogatory and untrue, including spreading gossip or rumours about someone in an effort to damage reputations and friendships (Willard, 2006). It refers to posting false information or rumours on webpages which are circulated through private communication channels. Included in this form of cyberbullying is the digital alteration of photos, most commonly in a way that portrays someone in a sexualized or harmful manner (Kowalski, Limber & Agatston, 2012).

- Impersonation –
Impersonation is a method of cyberbullying in which the perpetrator poses as the victim and either sends or posts negative, cruel, or inappropriate information in an attempt to damage that person's reputation (Willard, 2006). Impersonation may also occur if the perpetrator poses as someone else entirely in an attempt to elicit information. This relates to another form of cyberbullying known as trickery that refers to talking someone into revealing secrets or embarrassing information and then sharing it online (Kowalski, Limber & Agatston, 2012). Sometimes trickery may lead to the outing, which refers to sharing of personal secrets or sensitive information without the victim's permission.

- Exclusion or cyber- ostracism-
Exclusion or cyber-ostracism refers to intentionally and cruelly excluding someone from an online group (Willard, 2006). It basically refers to "defriending" or blocking someone on Facebook, WhatsApp and similar social networking sites. Though not as harmful as other forms of cyberbullying, exclusion or even perceived exclusion has been related to lower self-esteem (Williams, Cheung &Choi, 2000).

Research has demonstrated a number of detrimental consequences of cyberbullying victimization. Victims usually suffer from low self-esteem, frustration, anger, depression as well as increased suicidal tendencies. In fact, cyberbullying is more harmful than traditional bullying because there is no escape from it. One of the most damaging effects is that the victim begins to avoid friends and social activities, excludes himself from the society which is the very intention of the bully. It is worth mentioning that cyberbullying is a form of psychological abuse whose victims are more than twice as likely to suffer from mental disorders as compared to traditional bullying.

Moreover, research also illustrates that cyberbullying has adverse effects on adolescents than adults because they are still growing mentally and physically. They tend to hide their bullying experiences from adults or those who can help them to prevent the bullying from occurring and getting worse. Between 20% to 40% of adolescents are victims of cyberbullying worldwide. They are more vulnerable to the impact of cyberbullying through social media because adolescents are attracted to these platforms as a means of seeking validation from their peers.

CONCEPT OF MENTAL HEALTH

According to the World Health Organization (2004), mental health is –

"... a state of well-being in which the individual realizes his or her own abilities can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community." It refers to the overall well being of an individual which includes emotional well being, social well being and psychological well being. Emotional well-being means having high levels of positive emotions. Social and psychological well being is defined as possessing the necessary social and psychological skills for desirable functioning. Thus, mental health is basically about how we think, feel

and behave. It also includes a person's ability to enjoy his life, to attain a balance between life activities and efforts to achieve psychological resilience. As such, maintaining good mental health is as important as maintaining sound physical health to live a long and healthy life.

Research studies have found that adolescents who have experienced cyberbullying are more likely to suffer from severe mental health conditions, especially if they have previously been emotionally abused. They show signs of depression, dissociation, anger, irritability and they do not feel like themselves compared to those who have not experienced cyberbullying. Hence, this issue requires immediate attention so that the sense of awareness of the dangers of cybercrime can be developed among adolescents as well as to promote positive mental health and well being among them.

REVIEW OF LITERATURE

Hinduja, S.,& Patchin, J.W.(2009)in their study "Bullying, Cyberbullying, and Suicide" examined the extent to which a non-traditional form of peer aggression, that is cyberbullying related to suicidal ideation among adolescents. The sample consisted of 1,963 middle-school students from one of the largest school districts in the United States who completed a survey of Internet use and experiences. Youth who experienced traditional bullying or cyberbullying, as either a perpetrator or a victim, had more suicidal thoughts and were more likely to attempt suicide than those who had not experienced such forms of peer aggression. Also, victimization was more strongly related to suicidal ideation than offending. The findings of the study provide further evidence that adolescent peer aggression must be taken seriously both at school and at home, and suggest that suicide prevention and intervention program should be adopted in schools to help students cope with various stressors.

Bottino, S. M. B. (2015)in his paper "Cyberbullying and Adolescent Mental Health: ASystematic Review", tried to find out the association between cyberbullying and mental health of adolescents through a systematic review. It was found that the prevalence of cyberbullying ranged from 6.5% to 35.4%. Previous or current experiences of traditional bullying were found to be associated with the victims and perpetrators of cyberbullying. Daily use of three or more hours of Internet, text messages, web camera, posting personal information and harassing others online were associated with cyberbullying. Cyber-victims and cyber-bullies had more emotional and psychosomatic problems, social difficulties and did not feel safe and protected in school. Moreover, cyberbullying was also associated with moderate to severe depressive symptoms, substance abuse, ideation and suicide attempts.

Harrison, Gillan M. (2013)in his paper "Should I Tell on my Peers? Student Experiences and Perceptions of Cyberbullying" provides an analysis of with the responses of students to a survey regarding cyberbullying, and finds out the reasons students are often hesitant to report victimisation to adults. The study includes both quantitative and qualitative data obtained from self-report surveys developed to measure the prevalence of cyberbullying, the media most frequently used for cyberbullying, the nature and content of offensive communications, the extent of reporting victimisation, and student views on preventing and reducing cyberbullying. The sample consisted of 154 students aged 13 to 18 years from three schools in the Bay of Plenty, New Zealand. The results of the study provide some insights into the reasons that adolescents often do not tell an adult about being cyberbullied, the main reasons appear to be beliefs that peers can help more than an adult as well as a culture in which telling an adult may be considered "ratting". Student views on how schools can tackle cyberbullying involved issues of confidentiality and safety, appropriate discipline, and ensuring school-wide awareness of anti-bullying procedures.

Goshe, Brett M.(2016)in his thesis "Cyberbullying Among Young Adults: Effects on Mental and Physical Health" seeks to obtain an idea of the prevalence of cyberbullying at a public university campus and also attempts to examine the effects of cyberbullying on physical and mental health. The sample consisted of 180 undergraduate students who were 18 years of age or older. 32% of students reported having

experienced cyberbullying in their lifetime while 6% reported having experienced cyberbullying in the previous 30 days. Significant medium correlations were found to exist between the severity of participants' cyberbullying experiences and depressive and anxious symptomatology, reported distress, lower self-esteem and alcohol abuse. Furthermore, it was found that the severity of cyberbullying experience significantly predicts sexual risk taking behaviour.

Jan, S. (2011) in his paper "Personality Dimensions of University Students Affected by Traditional Bullying and Cyberbullying" attempted to study the extent to which cyberbullying is represented among university students in the Czech Republic, association of cyberbullying with socio-demographic characteristics, how cyberbullying reflects the mental conditions of the victims and whether students are adequately informed about the forms and the effects of cyberbullying. The sample consisted of 95 men and 421 women between the age group of 19 to 29 years. The study revealed that 14.9% of the respondents were victims of bullying through mobile phone or Internet at school or outside the school and 6.6% of the surveyed have been exposed to both bullying and cyberbullying simultaneously. Both men and women reported that cyberbullying decreases their sense of well being and increases their impulsivity, discomfort, anxiety, depression and dejection.17.2% of the students had never heard the term cyberbullying and 6% didn't know whether cyberbullying is dangerous.

Present study-

In light of the given literature, the following objectives and hypotheses have been formulated for the present study. The purpose of the study is –

- to find out the association between cyberbullying and mental health status of adolescents.
- to examine the gender differences in the variables cyberbullying and mental health.

The hypotheses of the present study are –

- There will be a significant negative correlation between cyberbullying and mental health condition of adolescents.
- There will be significant difference among males and females on the dimension of mental health.
- There will be no significant difference among males and females on the dimension of cyberbullying.

METHOD

Sample -

The sample comprised of 100 students (50 male and 50 female), studying in eleventh and twelfth grades belonging to the age group of 16 to 18years, selected from two educational institutions of Guwahati, Assam. The sample was drawn with the help of incidental sampling technique.

Variables –

The independent variable for the study has been identified as the gender of adolescents between the age group of 16 to 18 years. The dependent variables for the study have been identified as cyberbullying and mental health which was measured with the help of questionnaires.

Description of the tools –

- **Mental Health Inventory(1983) –**
  The Mental Health Inventory (MHI)is a widely accepted measure of overall emotional functioning developed by Veit and Ware (1983) which covers a wide range of negative and positive emotions. The 18-item version of the MHI has been used in this study to assess the

mental health status of adolescents because it is reasonably brief and reliable. Most items are self-explanatory. The MHI has four subscales(Anxiety, Depression, Behavioural Control and Positive Affect) and 1 total score. The subscale and total score range from 0-100, with higher scores indicating better mental health. It is a 6 point scale questionnaire ranging from 1-6. Few items of the inventory require reverse scoring.

- Self-structured Cyberbullying Questionnaire –
  Due to the unavailability of the standardised questionnaire on cyberbullying suitable for this study, a self-structured 20-item questionnaire was used. Participants provided demographic information including their age, gender, education level, socio-economic status and working status of parents. Responses were recorded on a Likert scale ranging from "Never" to "Always".The total score ranges from 20-100, with higher scores indicating more experiences of cyberbullying.

Procedure –

The study was conducted on 100 adolescents (50 male and 50 female) in the age range of 16 to 18 years studying in eleventh and twelfth grades. The sample was conveniently drawn from two educational institutions of Guwahati, Assam. After obtaining informed consent from the authorities as well as the respondents, the Mental Health Inventory (MHI) and Cyberbullying questionnaire were administered on each respondent at the same time, preceded by a brief rapport formation. Participants were able to take as much time as needed to complete the survey but were recommended to complete it in a single sitting. No identifying information, other than basic demographics such as age, gender, education level, socio-economic status and working status of parents, was collected. The participants were given the assurance of anonymity and confidentiality. The filled questionnaires were collected from the respondents with a vote of thanks for their cooperation.

Data Analysis –

All analyses were conducted using the SPSS software version 22.0. To test the first hypothesis, Pearson's correlation was used to examine the relationship between the two variables -cyberbullying and mental health condition of adolescents. To check the second hypothesis, a t-test was used to examine the differences between males and females on the dimensions of cyberbullying and mental health.

RESULT AND DISCUSSION

The first aim of the study was to examine the association between cyberbullying and mental health status of adolescents. The relationship between the variables as measured by MHI and cyberbullying questionnaire was investigated using Pearson's correlation coefficients, a summary of which is provided in Table 1.

Table 1 shows the correlation between the two variables cyberbullying and mental health -

		Cyberbullying	Mental Health
Cyberbullying	Pearson Correlation	1	-0.369**
	Sig. (2 tailed)		.000
	N	100	100
Mental Health	Pearson Correlation	-0.369**	1
	Sig. (2 tailed)	.000	
	N	100	100

**.01 level of significance (2-tailed)

It was hypothesized that there will be a significant negative correlation between cyberbullying and mental health condition of adolescents. Using Cohen's interpretation guidelines for the strength of correlations (1988), it was found that there exist significant negative "moderate" correlations between the variables cyberbullying and mental health, $r = -.369$, $p <.01$, with increased cyberbullying experiences associated with degrading mental health. The findings of the study are consistent with previous research(Bottino, 2015 & Goshe, 2016). Hence, the first hypothesis that there will be a significant negative correlation between cyberbullying and mental health of adolescents has been approved.

The second aim of the study was to examine the gender differences in the variables cyberbullying and mental health. The gender differences between the variables were investigated using a t-test for independent samples.

Table 2 presents the differences between males and females –

Variables	Gender	N	Mean	Std. Deviation	t- value (df=98)	Significance p<.05
Cyberbullying	M	50	34.26	8.65	.022	NS
	F	50	34.30	9.32		
Mental Health	M	50	61.80	13.70	1.925	NS
	F	50	56.22	15.23		

*.05 level of significance (2-tailed)

Table 2 shows that on the dimension of cyberbullying, Mean = 34.26, SD = 8.65formales (N = 50), for females Mean = 34.30, SD = 9.32 (N = 50). On the other dimension, that is mental health, Mean = 61.80, SD = 13.70 in case of males, and for females Mean = 56.22, SD = 15.23.

It was hypothesized that there will be a significant difference between males and females on the dimension of mental health.However, from Table 2 it can be interpreted that there is no significant difference the dimension of mental health based on MHI scores between males (Mean = 61.80, SD = 13.70) and females (Mean = 56.22, SD = 15.23) : t = 1.925, $p <.05$. The mean score for males was found to be above the mean score for females which indicates that males have a better mental health status than females, however the difference is not statistically significant. This finding is consistent with the study carried out by Ravelli et al but contradicts with the results of the majority of the studies conducted in this field. Hence, the second hypothesis that there will be a significant difference between males and females on the dimension of mental health has been disproved.

It was hypothesized that there will be no significant difference among males and females on the dimension of cyberbullying. Table 2 shows that small but insignificant difference was found between males (Mean = 34.26, SD = 8.65) and females (Mean = 34.30, SD = 9.32): t = .022, $p <.05$ on this dimension. This would suggest that there exists a very small difference among males and females with respect to cyberbullying experiences. However, as this difference is not statistically significant at all, it may be stated that the third hypothesis that there will be no significant difference among males and females on the dimension of cyberbullying is approved. This particular finding is consistent with the results of several research studies carried out in this field (Baker et al.2008; Hinduja, S., & Patchin, J.W.2008; Williams, K.R.2007 & Ybarra et al.2004).

CONCLUSION

With the expanding dominance of technology, cyberbullying, which is a term practically unheard of ten years ago, is gradually emerging as a growing body of research. A good deal of studies has been conducted to better understand the prevalence and detrimental effects of of cyberbullying. The present study demonstrated that there exists significant negative correlation between the variables cyberbullying and mental health of adolescents. It was also found that there exists no significant difference among males and females on the dimensions of cyberbullying and mental health.

It is worth mentioning that this study and the majority of the research studies on cyberbullying have been a self report and cross-sectional studies. For future research, a longitudinal approach would provide a clearer and in-depth understanding of the problem. Moreover, a universal definition of cyberbullying needs to be adopted which will increase the generalizability of findings of research studies and allow researchers to collaborate more easily.

With the increasing influence of the Internet and social networking sites especially among adolescents, incidences of cyberbullying are expected to rise, thus demanding the need for urgent treatment and intervention programmes for both victims and perpetrators. Social media companies should take prompt and strict action against reports of online bullying and prioritize the promotion of mental health and well being of children and adolescents across their platforms. School counsellors and psychologists need to play an active role in devising individualized intervention strategies that target cyber victims and cyberbullies alike. Children and young people should be taught how to be safe and responsible online and to respond positively to online harms caused by cyberbullying.

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