



Effects of cyberbullying on college-going girls in Tangail Sadar: Nature, causes, and consequences

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Abstract

Cyberbullying has turned into a vital issue in the recent world. Especially, girls are the main victim of cyberbullying. This study has focused on the nature, causes, and effects as well as identifying the relationship between spent time on social media and the effects of cyberbullying on college girl students in Tangail Sadar. 153 students between the ages of 16 and 19 served as the study's respondents and a mixed approach was employed. Multistage sampling and purposive sampling methods are used, Survey and interview techniques are used to gather data from the respondents. The study reveals that cyberbullying emerges most commonly from a low mentality towards girls, revenge, for having fun or entertainment, social media activities, clothing of girls, lack of morality, etc. and most of the bullying is related to messaging, sexual harassment, spreading rumors, comments, disclosing private info, sending unwanted images or videos type of cyberbullying; Victims experience bad effects as consequences, especially on their psychology (stress, depression and impact on their academic life). Cyberbullying is a type of bullying that does not need any strong reason to have occurred because the offender stays confidential in the cyber world. Therefore, our government must be conscious of solving this issue.

Keywords:

Adolescent
Colleges
Cyberbullying
Internet
Social-media.

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Publisher:

Scientific Publishing Institute

Received: 3 August 2023

Revised: 12 September 2023

Accepted: 25 September 2023

Published: 9 October 2023

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Funding: This study received no specific financial support.

Institutional Review Board Statement: The Ethical Committee of the Mawlana Bhashani Science and Technology University, Bangladesh has granted approval for this study (Ref. No. MBSTU/CPS/Che.c(13)/2023/38).

Transparency: The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

Competing Interests: The authors declare that they have no competing interests.

Authors' Contributions: Study conception and design, analysis and interpretation of results and draft manuscript preparation, A.A. and M.O.F.; data collection, A.A.; Both authors have read and agreed to the published version of the manuscript.

1. Introduction

Social media is a significant plot for communication and interaction, especially among adolescents all over the world. Adolescents are the young generation in a life period between childhood and adulthood and aged from 10 to 19. Among other social media platforms, Facebook plays the dominant role with 75.27% of the use rate. Twitter and Instagram are also getting famous nowadays with 7.5% and 6.11% of using rate worldwide (Social Media Stats Worldwide, 2012), and out of 4.8 billion internet users worldwide, 20.83% use TikTok. These huge amounts of being active on social media are creating a big issue in the modern world that is called cyberbullying. Hence, Cyberbullying means using cell phones, instant messaging, e-mail, chat rooms, or social networking sites such as Facebook and Twitter to harass, threaten, or intimidate someone for self-satisfaction or revenge. It is a serious issue that can harm adolescents' physical, mental, and social health. It can be defined as a willful and repetitive act of aggression via electronic communication devices that have adverse psychological consequences such as depressive disorder, anxiety, low self-esteem, post-traumatic stress disorder, substance abuse, self-injury, and suicidal ideation (Samara et al., 2017).

According to the International Telecommunication Union (ITU), 65% of adolescents in developing countries and 94% in developed countries are actively participating in multiple online activities. It reported internet use is higher than the general population in the adolescent period (Özdemir & Bektaş, 2021).

Children's charity NCH reported that 14% of 11- to 19-year-olds had been troubled or bullied using the short-message service (SMS) on smartphones (NCH, 2005) and O'Connell discovered that 20% of children aged 9-16 had been bullied within an on-line chat (p-4). The elements of perceived anonymity online, and the safety and security of being behind a computer screen, aid in freeing individuals from traditionally constraining pressures of society, conscience, morality, and ethics to behave in a normative manner. The use of pseudonyms or pseudonymous e-mail or user accounts also makes it difficult for victims to easily determine the identity of offenders and presumably contributes to the freedom an offender has on the Internet (Hinduja & Patchin, 2008). It is rudimental and necessary to educate teachers, parents, and guardians to help students with these facts.

Cyberbullying in Bangladesh has received little attention on the social front and in the educational research literature. According to a recent Safe 2 internet survey conducted by the Telenor group, 49% of Bangladeshi teenage learners are the victims of cyberbullying ("49% Bangladeshi school pupils," 2016). To make a safe educational environment for the students, an all-inclusive effort by educators, parents, and students is very important. This study explores the severity and causes of cyberbullying, addresses its negative effects, and suggests some guidelines to handle it in a better way (Mohammad, 2004). A theme of Qing Li's study that emerged was the anonymity associated with cyberbullying in that over 40% of the cyber-victims had no idea who the bullies were which is vital to thrive bullying. Further, a small amount of the bystanders reported the incident to adults, and some reported they had never witnessed cyberbullying (Li, 2010). More importantly, Research showed that cyberbullying can affect students' ability to learn at school (Shariff & Strong-Wilson, 2005) and those victims experience a range of emotional effects (Patchin & Hinduja, 2006). The most common form of cyberbullying victimization reported was "Received an upsetting e-mail from someone you know" (18.3%). Also, common was "Received an instant message that made you upset" (16%) or "Had something posted on your Myspace that made you upset" (14.2%) (Patchin & Hinduja, 2010). Like any other country, the use of modern technology as well as social media is increasing rapidly in Bangladesh mostly in urban areas. For instance, Dhaka city is the second biggest city based on the Facebook platform which indicates regular engagement with online social media and might face more unwanted cyberbullying in their day-to-day life activities (Hossain, Wahab, Islam, Khan, & Mahmud, 2022). Children around the world are suffering from the negative effects of technology, particularly in developing countries such as Bangladesh. According to a 2012 study, at least 800,000 youths have become victims of online victimization on Facebook. The proportion of middle school students who experienced cyberbullying nearly doubled and more importantly, 49.5% of students said they had been the target of online bullying. Therefore, this causes mental harm, and students become more vulnerable which leads them to consider suicide (Sarker & Shahid, 2018). Now a new platform has been introduced to the world named 'TikTok'. TikTok currently has about 700 million active users, with the number growing rapidly every day. The most concerning aspect is that TikTok is being used negatively rather than positively in the Asian subcontinent. Youths have been bullied in many cases for posting bizarre TikTok videos. This has an impact not only on their daily lives but also on their academics (Farabi, 2021). Cyber abuse is an extension of the traditional form of abuse in internet platforms, where perpetrators can hide behind the screen, and it includes cyberbullying, cyberstalking, phishing, cyber sexual abuse, and hacking (Mishna, Cook, Saini, Wu, & MacFadden, 2011). But unfortunately, there has not been enough study on the impact of this highly concerning idea of cyberbullying in Bangladesh. Therefore, to get an estimated idea of the impact of cyberbullying among the students of Bangladesh, this study feels the necessity to find out the impacts of cyberbullying on the most famous social media platforms of recent times. Besides this, it focuses on the social media bullying of college-going adolescent girls and the nature, causes, and consequences of cyberbullying in Tangail Sadar as a reflective image of Bangladesh. Tangail is a small city in the Dhaka district that is diverse. Because there is no study on cyberbullying in Tangail, no one knows how many girls are bullied every day. This

research will improve people's understanding of cybercrime and help them fight back. This study has included three renowned college students to identify the rate and condition of cyberbullying among Tangail Sadar adolescent girl students who are more vulnerable to this crime. Almost every child in the city area has a smartphone for gaming, social media, video chat, education, and so on. That is why cyberbullying is becoming more prevalent and offenders are remaining anonymous. This study should concern each parent and help them understand their children's smartphone usage patterns. They will know when their child should be online, allowing them to avoid cyberbullying and keep their child safe in the cyber world. This study can help to improve the law in this country by highlighting the current state of online bullying in this city, which is part of the country as well as contributing to other studies related to cyberbullying as a reference and helping them to understand cyberbullying in this city.

2. Materials and Methods

2.1. Study Area

Tangail Sadar had been considered as the study area. For conducting the study, I selected three renowned colleges in the district randomly and they were Sristy College of Tangail, Kumudini Govt. College and Govt. M. M. Ali College. These three colleges were the most renowned colleges in Tangail Sadar where both girls' colleges and mixed colleges were included.

2.2. Research Design

The mixed research method was used in the study. This method was used because it could bring a potential strength to this study and make it more acceptable.

2.3. Sample Determination

This study was conducted with probability and non-probability sampling which includes multistage sampling and purposive sampling in order. These sampling methods were followed in this study to collect data from targeted different educational institutions. Students' consciousness was considered for taking part in this study voluntarily and those who did not participate were asked to silently read, study, or work on their college materials. This study included the students of only classes XI and XII from targeted colleges. All the students from specific classes XI and XII in these institutions would be considered as the population.

2.4. Sample Size

In this study, Slovin's formula was used to determine the sample size from classes XI and XII where the total population was 644. Data were collected by multi-stage sampling. Each class was divided into clusters and each cluster consisted of 62 students (average). Simple random sampling was used in each cluster for collecting data. The attendance rate in those classes had defined the exact sample size. The total sample size (153) was divided by cluster number (6) to identify the sample size per cluster to make the survey easier. To match up the total sample size, some of the cluster's sample sizes had been changed. Therefore, the exact sample size was 153.

2.5. Data Collection Method

Data were collected through the survey method (multi-stage cluster sampling) and in-depth interviews (purposive sampling) from the classes with the help of the teacher's cooperation and the consent of the respondents. The questionnaire included around 30 to 40 mostly close-ended as well as open-ended questions in some cases related to their being cyberbullying. In terms of in-depth interviews, the same questions were asked to the participants, but the answers were more descriptive so that the case study could be done properly with depth data.

2.6. Data Analysis

A software called SPSS (version 26.0) was used to analyze the data. At first, data were inserted into the program, and it gave some output. Based on that output, analysis of the data with frequency distribution, crosstabulation, and hypothesis test then interpretation and summary of the results were conducted sincerely with proper process. As the data were not normally distributed in this study, non-parametric Spearman correlation tests were conducted to prove the hypotheses.

3. Results and Discussion

The final findings from the data analysis, which include the nature, causes, and effects of cyberbullying among college-bound girl adolescents in Tangail Sadar, are presented in this paper. Additionally, it will highlight the prevalence of cyberbullying among adolescent girls as well as the relationships between different forms of cyberbullying and their impact on the online community.

Table 1 presents the socio-demographic characteristics of the respondents.

Table 1. Socio-demographic characteristics of the respondents.

Socio-demographic characteristics	Frequency	Percent
Age	Less than 16	2.1%
	16-17	44.8%
	18-19	47.9%
	More than 19	5.2%
	Total	100.0%
Study class	Eleven	51.0%
	Twelve	49.0%
	Total	100.0%
Living area	Urban	54.2%
	Semi-urban	25.0%
	Rural	20.8%
	Total	100.0%
Marital status	Unmarried	85.4%
	Married	14.6%
	Total	100.0%
Religion	Islam	89.6%
	Hindu	10.4%
	Total	100.0%
Family type	Nuclear	70.8%
	Combined	29.2%
	Total	100.0%
Presence of both parents	Yes	93.8%
	No	6.3%
	Total	100.0%
Social status	Lower class	6.3%
	Lower-middle class	41.7%
	Upper-middle class	46.9%
	Upper class	5.2%
	Total	100.0%
Father's occupation	Absence of father	5.2%
	Farmer	6.3%
	Service holder	28.1%
	Businessman	45.8%
	Job holder	2.1%
	Govt. officer	4.2%
	Retired	5.2%
	Others	3.1%
Total	96	100.0%
Mother's occupation	Absence of mother	1.0%
	Housewife	84.4%
	Businesswoman	1.0%
	Job holder	9.4%
	Govt. officer	3.1%
	Others	1.0%
	Total	96
Skin tone	Bright	17.7%
	Medium bright	54.2%
	Moderate brown	22.9%
	Brown	3.1%
	Dark	2.1%
	Total	96
Monthly pocket money	Below 500 Tk	38.5%
	500-1000 Tk	29.2%
	1000-1500 Tk	19.8%
	Above 1500TK	12.5%
	Total	96

3.1. Socio-Demographic Characteristics

This table elucidates the percentages of socio-demographic characteristics among respondents who faced cyberbullying. Maximum respondents were between 18 to 19 years old (47.9%) (case 3,4) and 16 to 17 (44.8%) (case 1,2,5) and the maximum studied in class twelve (Intermediate second year). So, it concludes that second-year students (49%) face less cyberbullying than first-year students (51%). Among them 54.2% was from urban area, 25% from semi-urban and 20.8% from rural area. There was no respondent from the slum area. Victimization of cyberbullying prevalence is higher in unmarried (case 1,2,4,5) students (85.4%) than in married (case 3) (14.6%) and Muslims 89.6% and Hindus 10.4%. This table also elucidates the rate of cyberbullying between nuclear (70.8%) and Combined (29.2%) families which are quite different from each other. Most of the respondents have both parent's presence (93.8%) in their life. In the case of social status, 46.9% were upper middle class, 41.7% were lower middle class, 6.3% were lower class and only 5.2% were upper class. So, it tells us that the cyberbullying rate among middle-class families is higher. Most of their father was a businessman (45.8%) and service holder (28.1%) and their mother was a housewife (84.4%). Other occupations were very low such as govt. officer 4.2%, retired 5.2%, farmer 6.3%, Job holder 2.1%, others 3.1% and absence of a father was 5.2% in terms of the father. In terms of mother, there was 1.0% absence of mother, 1.0% businesswoman, 9.4% job holder, 3.1% govt. officer and 1% others. Skin tone plays a vital role in terms of cyberbullying. This study brought out the result that bright-skinned girls face more cyberbullying than others. Here are the percentages of the result- bright 17.7% (case 1,4), Medium bright 54.2%, medium brown 22.9% (case 3,5), brown 3.1%, and dark 2.1%. There is a down-going relationship between pocket money and cyberbullying rate. Such as below 500 TK is 38.5%, 500-1000 TK – 29.2% (Cases 1,2 and 5), 1000-1500 TK- 19.8%, and above 1500 TK- 12.5% (Cases 3,4).

Figure 1 exhibits the Prevalence of cyberbullying among college-going girl adolescents.

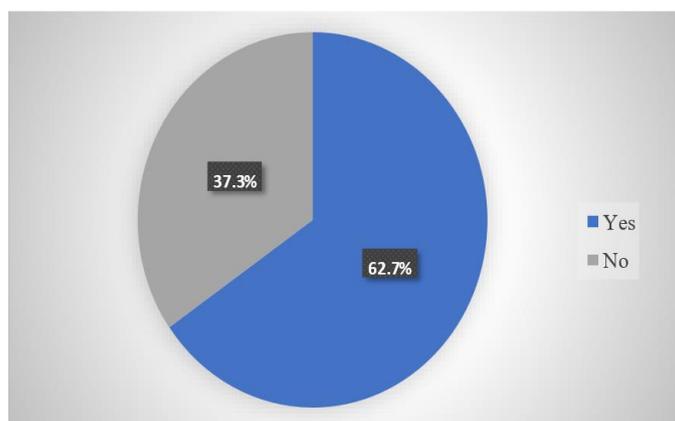


Figure 1. Prevalence of cyberbullying among college-going girl adolescents.

3.2. Cyberbullying

It shows us that the cyberbullied rate is 62.7% (yes) and the negative rate is 37.3% (no). On the other hand, more than 97% of youth experience cyberbullying in the USA (Tokunaga, 2010). So, the cyberbullied rate is quite high in Tangail Sadar.

Table 2 shows the usage of the internet and social media.

Table 2. Use of internet and social media.

Types of accounts	High use	Little bit high use	Moderate use	Low use	No use	Total users	Mean	Std. deviation	Priority rank
Facebook	39.6%	16.7%	33.3%	9.4%	1.0%	99%	2.16	1.089	1
Instagram	10.4%	8.3%	16.7%	17.7%	46.9%	53.1%	3.82	1.376	5
Whatsapp	13.5%	17.7%	18.8%	21.9%	28.1%	71.9%	3.33	1.404	3
Twitter	1.0%	0.0%	5.2%	12.5%	81.3%	18.7%	4.73	.657	7
TikTok	4.2%	8.3%	14.6%	13.5%	59.4%	40.6%	4.16	1.199	6
YouTube	15.6%	14.6%	30.2%	22.9%	16.7%	83.3%	3.10	1.294	2
Google	15.6%	7.3%	25.0%	28.1%	24.0%	76%	3.38	1.348	4
Others	0.0%	0.0%	6.3%	14.6%	79.2%	20.9%	4.73	0.571	7

The five-point Likert scale is considered an interval scale. The mean is very significant in data interpretation. Here, 1-1.80 means High use, 1.80-2.60 means Little Bit of High Use, 2.60-3.40 means Moderate Use, 3.40-4.20 means Low Use, and 4.20-5.00 means No Use.

This table indicates the social media platform using rate such as Facebook shows 99% users (priority rank is 1), YouTube 83.3%, Google (76%) and so on WhatsApp (71.9%), Instagram (53.1%), TikTok (40.6%), Twitter (18.7%) and Others (20.9%). Most of the high users in Facebook. Case 5 stated that-..... “My leisure time is always spent on social media. Most of the time I stay busy with Facebook and TikTok. I enjoy creating videos on TikTok and watching Videos on Facebook. I can stay without food but cannot stay without my phone.”

Table 3 indicates the most common platform of cyberbullying.

Table 3. Most common platform of cyberbullying.

Platforms	Yes	Percent	No	Percent
	Frequency		Frequency	
Facebook	91	94.8%	5	5.2%
Instagram	22	22.9%	74	77.1%
Whatsapp	20	20.8%	76	79.2%
Twitter	1	1.0%	94	97.9%
TikTok	22	22.9%	72	75.0%
YouTube	2	2.1%	94	97.9%
Google	5	5.2%	91	94.8%
Others	6	6.3%	90	93.8%

This table shows that Girls face most of the cyberbullying in Facebook platforms which is 94.8% and secondly in Instagram and TikTok which are equal to 22.9%. Another significant result is WhatsApp (20.8%). In negative results, Twitter (97.9%), YouTube (97.9%), and Google (94.8%) are the highest position where cyberbullying occurs at a very low rate.

3.3. Nature of Cyberbullying

According to this study, 43.8% of girls experienced cyberbullying more than four times in their life. Other percentages are, onetime -17.7%, two times -16.7%, three times- 8.3%, and at last four times -13.5%.

Figure 2 shows the preferred time to stay online.

This chart indicates that girls mostly use to be online whenever they are free (42.7%). Case 3 stated that-..... “Though I get time during the day, I like to use the internet at night. Most of the people stay online at that time and I feel safe at night as it is quiet and calm, and no one bothers us.”

Other ways they like to stay online from 6-11.59 am (4.2%), 12-6.59 pm (9.4%), 6-9.59 pm (19.8%), 10 pm-12.59 am (19.8%) and 1 am-5.59 am (4.2%).

Table 4 indicates the Nature of cyberbullying.

The five-point Likert scale is considered an interval scale. The mean is very significant in data interpretation. Here, 1-1.80 means Most of the time, 1.80-2.60 means Often, 2.60-3.40 means Sometimes, 3.40-4.20 means Rarely and 4.20-5.00 means Never.

The five-point Likert scale is considered an interval scale. The mean is very significant in data interpretation. Here, 1-1.80 means Most of the time, 1.80-2.60 means Often, 2.60-3.40 means Sometimes, 3.40-4.20 means Rarely and 4.20-5.00 means Never.

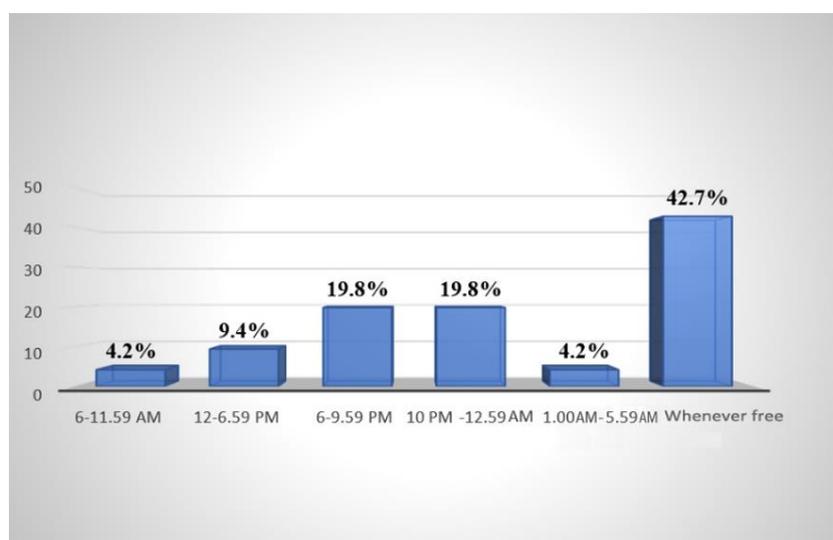


Figure 2. Preferable time to stay online.

Table 4. Nature of cyberbullying.

Natures	Most of the time	Often	Sometimes	Rarely	Never	Total	Mean	SD	Priority rank
Massaging	38.5%	15.6%	20.8%	22.9%	2.1%	97.8%	2.34	1.263	1
Picture or videos	14.6%	13.5%	16.7%	20.8%	34.4%	65.6%	3.47	1.451	2
Unwanted posts	1.0%	5.2%	6.3%	6.3%	81.3%	18.8%	4.61	0.899	7
Unwanted comments	5.2%	12.5%	10.4%	27.1%	44.8%	55.2%	3.94	1.238	3
Threat or violent behaviors	2.1%	11.5%	8.3%	12.5%	65.6%	34.4%	4.28	1.149	4
Spreading rumors	3.1%	7.3%	7.3%	16.7%	65.6%	34.4%	4.34	1.094	5
Disclose information by hacking account	0.0%	1.0%	3.1%	9.4%	86.5%	13.5%	4.81	0.529	8
Sexual harassment or speech	3.1%	4.2%	7.3%	17.7%	67.7%	32.3%	4.43	1.013	6
Others	1.0%	0.0%	1.0%	6.3%	91.7%	8.3%	4.88	0.508	9

Source: Colleges of Tangail District Most of the time -1, Often -2, Sometimes -3, Rarely -4, Never -5.

The table indicates one of the most often occurring types of cyberbullying ‘messaging’ (case 1,2,3,4,5) which is in total 97.8%. In detail, For massaging – most of the time 38.5%, often 15.6%, sometimes 20.8%, rarely 22.9%, and in total 97.8%. For pictures or videos (case 1)- most of the time 14.6%, often 13.5%, sometimes 16.7%, rarely 20.8%, and in total 65.6%. For unwanted posts – most of the time 1.0%, often 5.2%, sometimes 6.3%, rarely 6.3%, and in total 18.8%. For unwanted comments- in total 55.2%. For threat or violent behaviors – in total 34.4%. For spreading rumors – in total 34.4%. For disclosing information by account hacking - in total 13.5% and for sexual harassment or speech in total 32.3%. The mean of messaging is only 2.34 which means girls face it often most of the time. According to this study, one of the most often occurring types of cyberbullying is ‘messaging’ which is in total 97.8%. Other natures are- pictures or videos (65.6%), unwanted posts (18.8%), unwanted comments (55.2%), threat or violent behaviors (34.4%), spreading rumors (34.4%), disclosing information by accounts hacking (13.5%), and sexual Harassment or speech (32.3%).

Figure 3 indicates Cyberbullied by a Known Person.

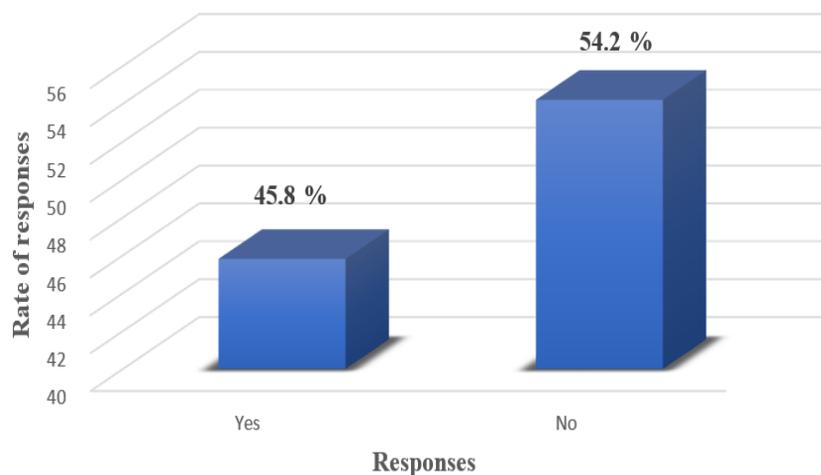


Figure 3. Cyberbullied by known person.

3.4. Causes of Cyberbullying

According to this study, though 67% of girls do not include unknown persons in their accounts, 54.2% of girls experience cyberbullying by unknown persons. This chart shows that 45.8% of girls experience cyberbullying by known persons and 54.2% of girls experience it by unknown persons.

Table 5 shows the Nature of offenders.

Table 5. Nature of offenders.

Nature	Yes	No
Partner or spouse	7.3%	92.7%
Close friends	11.5%	88.5%
Friends	27.1%	72.9%
Relatives	10.4%	89.6%
Facebook friends	59.4%	40.6%
Unknown persons	82.3%	17.7%
Others	4.2%	95.8%

Like cyberbullying offenders, the study found different types of offenders such as partner or spouse 7.3%, close friends 11.5%, friends 21.7%, relatives 10.4%, Facebook friends 59.4% which is the second largest amount in this study, unknown persons 82.3% which is the largest one and at last other types which is only 4.2%. Case 1 stated that-

.....” I got bullied by my close friend and lover which was devastating for me. I just kept thinking that I should not have shared my secrets with them and I got mentally broken.”

Table 6 depicts the Causes of cyberbullying.

The five-point Likert scale is considered an interval scale. The mean is very significant in data interpretation. Here, 1-1.80 means Strongly Agree, 1.80-2.60 means Agree, 2.60-3.40 means Neutral, 3.40-4.20 means Strongly Disagree and 4.20-5.00 means Disagree.

This study finds different causes beyond cyberbullying against adolescent girls such as Clothing, social media activities, fun or entertainment, revenge, peer pressure, gender, race and ethnicity, traumatic experience of victim, perverseness of offender, without any reason, lack of morality and thought of women as weak in our society. Maximum respondents voted for gender (case 3) as the reason for their victimization which got 62.5% vote as strongly agree, 20.8% as agree, 11.5% as neutral, 1% as strongly disagree, and 4.2% as disagree. The next one is ‘Fun or entertainment’ which has 15.6% strongly agree vote, 47.9% agree, and 16.7% neutral vote. The next position was ‘lack of morality’ which includes 2.1% strongly agree and 46.9% agree vote. Next comes ‘social media activities’ (case 2) which has 7.3% strongly agree on votes, 26% agree, and 25% neutral vote. Perverseness 2.1% strongly agree and 30.2% agree respondents. So, the significant causes behind cyberbullying are gender, fun or entertainment (case 3), Lack of morality, social media activities, and clothing. Here, gender’s mean is less than other reasons which is only 1.81. That means most of the girls face cyberbullying only because of their gender and victims strongly agreed to this cause.

Figure 4 indicates the rate of Impact on Cyberbullied victims.

Table 6. Causes of cyberbullying.

Causes	Strongly agree	Agree	Neutral	Strongly disagree	Disagree	Total positive opinion	Mean	Standard deviation	Priority rank
Clothing	9.4%	7.3%	32.3%	27.1%	24.0%	16.7%	3.63	1.267	6
Social media activities	7.3%	26.0%	25.0%	17.7%	24.0%	33.3%	3.33	1.303	3
Fun or entertainment	15.6%	47.9%	16.7%	8.3%	11.5%	63.5%	2.66	1.336	2
Revenge	6.3%	21.9%	25.0%	15.6%	31.3%	28.2%	3.47	1.256	5
Peer pressure	1.0%	12.5%	32.3%	12.5%	41.7%	13.5%	3.92	1.023	8
Gender	62.5%	20.8%	11.5%	1.0%	4.2%	83.3%	1.81	1.348	1
Race or ethnicity	11.6%	15.8%	27.4%	21.1%	24.2%	27.4%	3.40	1.348	4
Traumatic experience	7.3%	6.3%	30.2%	25.0%	31.3%	13.6%	3.71	1.178	7
Perverseness	2.1%	30.2%	43.8%	6.3%	17.7%	32.3%	3.71	1.353	7
Without reason	1.0%	7.3%	49.0%	15.6%	27.1%	8.3%	4.16	1.009	10
Lack of morality	2.1%	46.9%	41.7%	2.1%	7.3%	49%	3.40	1.469	4
Women as weak	1.0%	15.6%	52.1%	8.3%	22.9%	16.6%	4.09	1.152	9

Note: Strongly agree -1, Agree -2, Neutral -3, Strongly disagree -4, Disagree-5.

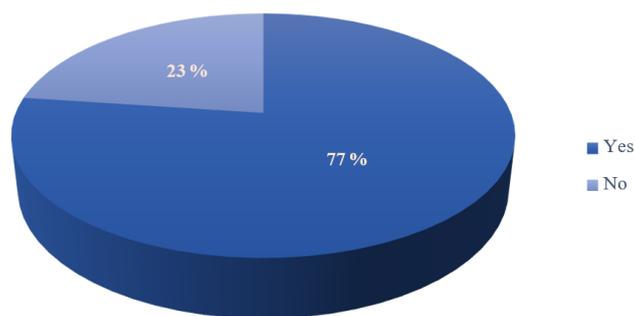


Figure 4. Rate of impact on cyberbullied victims.

3.5. Consequences of Cyberbullying

This chart indicates that cyberbullying is not an issue of defocusing. 77% of respondents had the impact of being bullied in the web world in their lives which is noticeable. Only 23% of respondents had no impact.

Table 7 displays the types of impact on cyberbullied Victims.

Table 7. Types of impact on cyberbullied victims.

Impacts	Strong impact	Little bit strong impact	Moderate impact	Low impact	No impact	Total impact	Mean	SD
Physically	3.1%	4.2%	3.1%	6.3%	60.4%	16.7%	3.48	2.127
Stress	25.0%	13.5%	16.7%	17.7%	4.2%	72.9%	1.94	1.561
Depression	20.8%	13.5%	13.5%	15.6%	13.5%	63.4%	2.19	1.761
Education	9.4%	13.5%	9.4%	14.6%	30.2%	46.9%	2.74	1.975
Result	9.4%	5.2%	8.3%	16.7%	37.5%	39.6%	2.99	2.049
On the family	3.1%	8.3%	7.3%	11.5%	46.9%	30.2%	3.22	2.063
Lifestyle	3.1%	4.2%	8.3%	16.7%	44.8%	32.3%	3.27	2.039
Others	1.0%	1.0%	4.2%	8.3%	62.5%	14.5%	3.61	2.089

Source: Strong impact -1, Little bit strong impact -2, Moderate impact -3, Low impact -4, No impact- 5.

The five-point Likert scale is considered an interval scale. The mean is very significant in data interpretation. Here, 1-1.80 means Strong impact, 1.80-2.60 means Little Bit of Strong Impact, 2.60-3.40 means Moderate impact, 3.40-4.20 means Low impact, and 4.20-5.00 means No impact.

This table specifies the impacts that 77% of respondents had experienced due to being bullied. As this table shows the maximum of respondents experienced stress (72.9%) and depression (63.4%) after being bullied in the cyber world. Even strong impacts were also in stress (25%) and depression (20.8%). Other significant impacts can be observed in education (46.9%), results (39.6%), family (30.2%), and lifestyle (32.3%) (case 2). The lowest mean (1.94) is in stress. So, this table shows that as the impact of cyberbullying most of the girls have a slightly strong impact on stress. Cases 1,2,3,4 and 5 had stress and depression as impacts in their life.

Figure 5 shows the Prevalence of trying suicide.

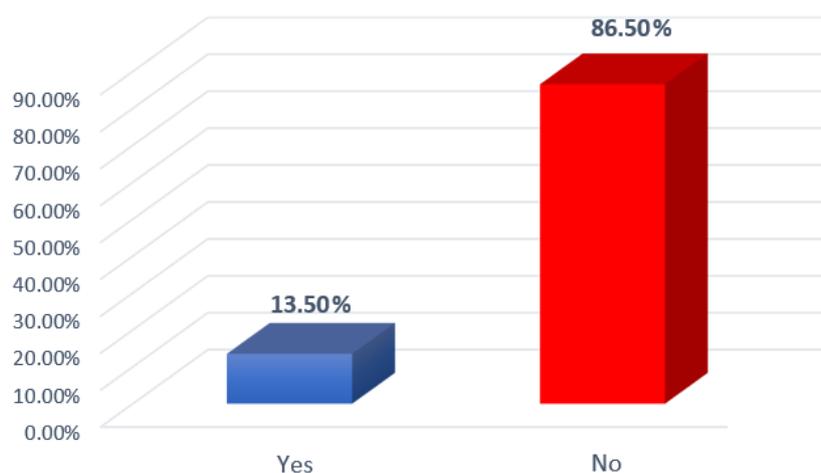


Figure 5. Prevalence of trying of suicide.

Though most of the suffered victims thought of committing suicide this bar chart clarifies that most of the victims did not try to commit suicide. 86.50% of respondents did not try and 13.50% tried (case 1) to commit suicide.

According to this table, the respondents who used to be online at night experienced more victimization in the cyber world. 56.1% of respondents experienced more than four times because they used to be online maximum time of the day. The same thing goes with other categories as well such as 50% experienced it who stays online from 1.00 am-5.59 am and 47.4% for 10 pm-12.59 am. 41 respondents experienced it for 'whenever free', 19 for 10 pm-12.59 am, and 19 for 6-9.59 pm among 96 respondents which are significant results.

The table displays that among 26 bright victims, 13 victims have faced cyberbullying more than four times which is 50% and 42 (43.8%) respondents experienced cyberbullying more than four of 96 respondents. Another significant result came out with medium bright skin tone where 37.5% experienced it more than four times. This survey proves that skin tone matters in being bullied in the cyber world. Bright girls experienced more cyberbullying than other skin-toned girls.

Table 8 indicates the preferred time and number of being cyberbullied crosstabulation.

Table 9 presents the skin tone and Number of being cyberbullied Crosstabulation.

3.6. Hypothesis Tests

Hypothesis-1: Cyberbullied by Known Person and Its Impact on Victim.

Null Hypothesis: There is no significant relationship between cyberbullying by a known person and its impact on the victim.

Alternative hypothesis: There is a significant relationship between cyberbullying by known persons and its impact on victims.

Table 10 shows the correlations.

From the table, the correlation coefficient value is 0.502 which indicates a strong relationship between cyberbullying by known persons and impact on victim. As there is a strong relationship and the p-value is less than 0.05 ($\rho < 0.05$), the null hypothesis is rejected, and the alternative hypothesis is accepted. So, there is a relationship between cyberbullying by a known person and its impact on the victim.

Hypothesis-2: Purpose of Entertainment and Cyberbullied by Massaging.

Null Hypothesis: There is no significant relationship between the purpose of entertainment and cyberbullying by massaging.

Alternative hypothesis: There is a significant relationship between the purpose of entertainment cyberbullying by massaging.

Table 11 indicates the Correlations.

From the table, the correlation coefficient value is 0.400 which indicates a strong relationship between the purpose of entertainment and cyberbullying by massaging. As there is a strong relationship and the p-value is less than 0.05 ($\rho < 0.05$), the null hypothesis is rejected, and the alternative hypothesis is accepted. So, there is a relationship between the purpose of entertainment and cyberbullying by massaging.

Table 8. Preferable time and number of being cyberbullied crosstabulation.

Preferable time	Time zone	Unit of calculation	The number of being cyberbullied					Total
			One	Two	Three	Four	More than four	
6-11.59 am		Count	2	2	0	0	0	4
		% within the preferable time	50.0%	50.0%	0.0%	0.0%	0.0%	100.00%
12-6.59 pm		Count	1	2	1	1	4	9
		% within the preferable time	11.1%	22.2%	11.1%	11.1%	44.4%	100.00%
6-9.59 pm		Count	6	4	3	2	4	19
		% within the preferable time	31.6%	21.1%	15.8%	10.5%	21.1%	100.00%
10 pm -12.59 am		Count	4	2	1	3	9	19
		% within a preferable time	21.1%	10.5%	5.3%	15.8%	47.4%	100.00%
1.00 am- 5.59 am		Count	0	0	2	0	2	4
		% within a preferable time	0.0%	0.0%	50.0%	0.0%	50.0%	100.00%
Whenever free		Count	4	6	1	7	23	41
		% within a preferable time	9.8%	14.6%	2.4%	17.1%	56.1%	100.00%
Total		Count	17	16	8	13	42	96
		% within a preferable time	17.7%	16.7%	8.3%	13.5%	43.8%	100.0%

Table 9. Skin tone and number of being cyberbullied crosstabulation.

Skin tone	Unit of calculation	The number of being cyberbullied					Total
		One	Two	Three	Four	More than four	
Bright	Count	2	2	2	7	13	26
	% within skin tone	7.7%	7.7%	7.7%	26.9%	50.0%	100.0 %
Medium bright	Count	11	12	3	4	18	48
	% within skin tone	22.9%	25.0%	6.3%	8.3%	37.5%	100.0 %
Moderate brown	Count	4	2	3	2	6	17
	% within skin tone	23.5%	11.8%	17.6%	11.8%	35.3%	100.0 %
Brown	Count	0	0	0	0	3	3
	% within skin tone	0.0%	0.0%	0.0%	0.0%	100.0%	100.0 %
Dark	Count	0	0	0	0	2	2
	% within skin tone	0.0%	0.0%	0.0%	0.0%	100.0%	100.0 %
Total	Count	17	16	8	13	42	96
	% within skin tone	17.7%	16.7%	8.3%	13.5%	43.8%	100.0 %

Table 10. Correlations.

Name of the test	Variables		Have you been bullied by a known person?	Do you have any impact of cyberbullying in your life?
Spearman's rho	Have you been bullied by a known person?	Correlation coefficient	1.000	0.502**
		Sig. (2-tailed)	.	0.000
		N	96	96
	Do you have any impact of cyberbullying in your life?	Correlation coefficient	0.502**	1.000
		Sig. (2-tailed)	0.000	.
		N	96	96

Note: **. Correlation is significant at the 0.01 level (2-tailed).

Table 11. Correlations.

Name of the test	Variables	Unit of the calculation	Entertainment	Cyberbullying by messaging
Spearman's rho	Entertainment	Correlation coefficient	1.000	0.400**
		Sig. (2-tailed)	.	0.000
		N	96	96
	Cyberbullying by Messaging	Correlation coefficient	0.400**	1.000
		Sig. (2-tailed)	0.000	.
		N	96	96

Note: **. Correlation is significant at the 0.01 level (2-tailed).

4. Conclusion and Recommendation

4.1. Conclusion

A large number of adolescents in urban Dhaka use the World Wide Web and are subjected to online bullying. Adolescents who spend time online seem to be more probably to be cyberbullied. However, if used correctly, the internet has the power to broaden adolescents' perspectives and creativity. Adolescents must be preserved at the core of online guidelines to ensure their justice as well as guard them against the most severe forms of cyberbullying. Besides that, tech companies must create specifications for their application areas to protect adolescents and young users. Further research is also required from a variety of societal perspectives to gain a deeper understanding of the dynamics, such as the dangers and protective factors of being cyberbullied.

The study offers some significant findings that can assist college authorities and other responsible organizations in comprehending the nature and implications of cyberbullying and materializing persuasive interventions for students. The study reveals that a large percentage of students are simulated by cyberbullying and that the messages they obtain are often frightening, hostile, and unsettling. The digital world lacks precise rules or norms for suitable behavior and thus becomes a venue for exacerbating typical adolescent relationship issues, such as break-ups, anger, refusal, and peer pressure. Students, who often do not have the moral guidance or leadership skills to regulate their actions, engage in increased conflict with their peers in this unmonitored setting. Adults, who would normally supervise and mentor teenagers, are excluded from this environment due to their lack of technological expertise and awareness. The study corresponds cyberspace to the Wild West, where anything is possible and there is no authority to safeguard the vulnerable. As a result, people resort to vigilantism and retaliation. Cyberbullying adversely affects students' lives by creating a primitive online world that spills over into their offline reality. Students experience emotions such as frustration, powerlessness, fear, depression, and sadness as a consequence of cyberbullying. The study suggests that cyberbullying shares some of the same causes, effects, and harmful outcomes as traditional bullying, which has been associated with (among other things) sadness and depression, helplessness, fear, and criminality, as well as more violent or abusive behavior.

The study also points out an added complication: cyberbullying is easier to commit because of the nowhere-ville of the attacker and the wider reach of the invasion. A large number of students are involved in cyberbullying, either as perpetrators or victims. Cyber victims may be helpless because they do not know how to prevent the abuse, as indicated by the participants in this study. Students are impromptu to cope with cyberbullying and its intrusion into their lives. They often do not seek help for fear of retaliation, humiliation, or because they think adults will not help. Some attempt to avoid the situation, which may prevent a specific incident but does not guarantee their safety or prevent future cyberbullying. Those who do react often wait until the bullying becomes intolerable before fighting back, which is both ineffective and potentially destructive.

4.2. Recommendation

Though there is not enough prevention or scope of prevention of cyberbullying due to the lack of adequate equipment in our country, some recommendations from this study can help to reduce the prevalence of this issue. The recommendations are:

There should be some programs to change the mentality or way of thinking of our society towards girls which can reduce the problem of cyberbullying and bring enough respect to girls. Also, we have to create awareness among people and adolescents about cyberbullying which can alert adolescents of being bullied in the cyber world. Moreover, have to make cyber security stronger so that bystanders think twice before committing any crime online. There is another suggestion to create and enforce appropriate written laws on cyberbullying and punishment must be more adequate compared to the crime and concentration of internet website providers in the safety of users and provide a more secure software system. Targeted girls also need to be more careful. They should put a strong password to their accounts and use the g-mail two-step verification process to secure their accounts. Every girl should share the incidents with adults so that they can take action to stop the offender. In this case, guardians should support their victim's children rather than scolding them. Along with this, girls

should not add any unknown person to their accounts. It is expected that the results and recommendations of this study will help to reduce cyberbullying issues and help students to be aware of this problem.

All praise and appreciation to Allah, the Almighty, for His never-ending showers of blessings that enabled me to complete my monograph. It was a difficult task to research an emerging issue like " Effects of Cyberbullying on College Going Girl Adolescents in Tangail Sadar: Nature, Causes, and Consequences".

In this respect, I would like to convey my heartfelt appreciation to my monograph supervisor, Professor Dr. Md. Omar Faruk, Chairman, Department of Criminology and Police Science, Mawlana Bhashani Science and Technology University, for offering important assistance, constructive suggestions, and encouragement throughout this study. His enthusiasm, vision, genuineness, and determination have greatly motivated me to finish the assignment effectively. Next, I would like to thank our honorable teacher, Mahmuda Akter, Assistant Professor, Department of Criminology and Police Science, Mawlana Bhashani Science and Technology University for helping me in this study. I would like to convey my heartfelt gratitude to the Head of the Administration of Stristy College of Tangail, Kumudini Govt. College and Govt. M.M. Ali College, for providing me assistance during data collection from their institutions. I also want to thank everyone who participated in this study by being respondents. It was a wonderful pleasure and joy to complete my monograph at this respected university.

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