Cyberbullying among University Students: A Study on Bangladeshi Universities

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Abstract

Purpose: The study aimed to disclose the factors which directly and/or indirectly influence cyberbullying among university students and to find solutions and/or provide suggestions about overcoming cyberbullying among university students.

Methodology: The study's goal is to identify the factors that influence cyberbullying among university students. The research team collected 202 data points through a seven-point Likert scale questionnaire. A descriptive research methodology was used for this study. The sampling method was probability. The descriptive statistics analysis, reliability testing, and regression analysis were all carried out using the SPSS 26.0 Version.

Results: All of the independent variables, including social influences, use of social media, internet addiction, social anxiety, and trait anger, have a positive impact on cyberbullying.

Limitations: The study used only five variables and focused on Bangladeshi university students as a sample.

Contribution: This research will help to understand cyberbullying and raise awareness about it among students, authorities, the government, and other interested parties, as well as provide recommendations to students on how to stay safe online and prevent cyberbullying among them.

Keywords: Cyberbullying, University Students, Bangladesh, Internet, Online, Technology

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1. Introduction

Bullying is a major problem in schools, colleges, and universities. The crux of bullying in universities is serious and intercultural, and it has drawn considerable attention in Europe, Asia, and North America's universities (Akiba, 2004), and recently it has attracted considerable attention in Bangladeshi universities. In the era of globalization, there is the availability of smartphones, laptops, desktops, tablets, etc., and bullying has transformed into cyberbullying. Cyberbullying is a way for students to express their anger, in a violent manner, as it is pretty easy to gain access to social media and technology. According to Tokunaga (2010), cyberbullying is any behavior performed over electronic media by any person or group of persons who repeatedly communicate adverse or invective messages meant to strike harm or trouble others. A global mobile phone demon has found in a survey that 49% of school students and 26% of university students have been victims of cyberbullying in one form or another, exposing students or young people to becoming previous to such harassment (Rahman, Hasan, Hossain, & Kabir, 2021). There are several types of cyberbullying such as flaming (angry and rude messages via chatrooms), online harassment (aggressive messages for hurting someone), outing (publishing a secret matter which should be kept private), misinformation (spreading false information about someone), and sexting (sending sexual images or videos), etc. (Newey & Magson, 2010). Many studies around the world have proved the relationship between cyberbullying victimization and hostile health and psychological problems. For example, depression, anxiety, self-harm, and even suicidal behavior have been connected with cyberbullying victimization (Koyanagi et al., 2019). Students are socially connected together through the internet and by using other communication technologies, and these

instruments or devices have become the main medium of cyberbullying. Technologies are a blessing for society if it is used (Hossain & Yasmin, 2022). However, Some experimental evidence has shown that student involvement in cyberbullying. A bully or victim, generates a series of little, medium-and long-term influences on their psychological health, potentially leading to university dropout, social isolation, depression, and may turn into suicidal tendencies (Lee & Wu, 2018). Cyberbullying hurts students more than physical damage, and in some cases, students commit suicide for it. With the rising acceptance of social networking sites like Facebook, Messenger, Instagram, Snapchat, Twitter, and Instant Messages (IM) among students, the risk of cyberbullying cannot be ignored. Based on the current cyberbullying situation, is also a pandemic issue because it is a problem that causes emotional distress for university students in Bangladesh and around the world (Kim, Song, & Jennings, 2017). Since going online is a regular part of university students' lives, it is fearful that cyberbullying is a major problem for students' educational and emotional health (Nwufo & Nwoke, 2018). At present, the problem of bullying is of considerable public interest in Bangladesh, as recent years have seen students bullied within their universities and some of them have lost their lives as a result (Chowdhury, 2020). The increasing rate of technology adoption in Bangladesh and the popularity of social media among university students have made this situation worse, with most students experiencing cyberbullying in their lives. The availability of technology worldwide and the creation of virtual environments create a new bullying world for students without geographical boundaries. On account of this, cyberbullying may be one of the greatest powerful problems nowadays. The main intention of the current study was to find out the factors that encourage cyberbullying among university students. Furthermore, this research will provide insight into cyberbullying and the cyberbullying protection system. The recommendation will present some suggestions that will help to reduce cyberbullying in Bangladesh, especially at the university level. This study will collect and analyze data from 19 Bangladeshi universities. Finally, the findings of this study will convince everyone that cyberbullying plays a dangerous role in university students' normal lives.

2. Literature Review

2.1 General Strain Theory (GST)

General strain theory proclaims that an individual or person who experiences significant strain will experience anger and frustration in reaction, which then sets them at risk for engaging in abnormal behavior (Espelage, RAO, & Craven, 2012), like bullying, cyberbullying, and crime. Agnew (1992) defines strain as a connection in which others are not treating the person as he/she would like to be treated. Crime like cyberbullying may be a method for diminishing strain, seeking revenge, or removing negative emotions (Agnew, 2017). General Strain Theory builds on strain theories in many ways, like the loss of positive stimuli, the presentation of negative stimuli, and new categories of goal blockage. Much of the recent research illustrates that many of the particular strains falling under these types are related to crime (Agnew, 2017), like cyberbullying. In relation to cyberbullying, students who have experienced victimization at university might engage in cyberbullying discharge to release their anger and frustration (Espelage et al., 2012).

2.2 The General Theory of Crime (GTC)

A General Theory of Crime is a mounting framework amplify to integrate the main causes of risk and advance a clear and sparing theory of crime. The theory pint out that crime and convict behaviors are most probably to occur when motivations for crime are strong and constraints are low (Kabiri, Shadmanfaat, Choi, & Yun, 2020). Gottfredson and Hirschi (2022) proclaim that antisocial behavior is accomplished by people with low self-control. They visualized low self-control as a steady personality trait that enlarges in the context of scarce early childhood socialization and that is obvious itself as impulsivity, a preference for dangerous activities, simple tasks, physical rather than mental activities, and a rapid temper and self-absorption. A person with low self-control is more likely to engage in criminal antisocial (like bullying or cyberbullying) behavior because they go after their self-interest and want to fulfill pleasure, and furthermore, they lack the capacity to govern their attitude in pursuit of this happiness (Gottfredson & Hirschi, 2022). Agnew states that constraints discourage people from engaging in criminal activities (Cochran, 2017). The theory also suggests that people are motivated toward crime as a result of forces that either drag them or push them toward crime (Ngo, Paternoster, Cullen, & Mackenzie, 2011), like cyberbullying. Moon and Alarid (2015) found both self-control and

chance were significant predictors of cyberbullying. Relation to cyberbullying is explained variously as time spent on the internet or association with networks and abnormal peers has been found to interconnect with low self-control in predicting the behavior (Pendry & Salvatore, 2015).

2.3 Definition of Cyberbullying

Belsey (2007)defines cyberbullying as a situation in which a person or group of people uses digital media to threaten others enviously and repeatedly. Actually, this form of bullying uses the internet as a stage to send or post mocking, humiliating, cynical comments or unsightly images (Lee & Wu, 2018). All researchers around the world agree that there is no way to engage in cyberbullying without the use of electronic media. The concept of cyberbullying is complicated by the fact that cyberbullying can take so many forms and happen in several ways. Giumetti, Kowalski, and Feinn (2022) have generated an assortment of types of cyberbullying that include flaming, offensive messages sent to individuals, outings and trickery, exclusion, cyber stalking, and sexting. Cyberbullying refers to the use of information and communication technologies such as mobile phones, laptops, desktops, instant messages, text messages, personal websites, public websites, and hostile behavior by a person or group of people that is meant to harm others (Neves & de Oliveira Pinheiro, 2010). Many researchers have interpreted cyberbullying as simply bullying that happens through digital media (Schneider, O'donnell, Stueve, & Coulter, 2012). Jacobs, Völlink, Dehue, and Lechner (2014) defined cyberbullying as repeated hostile and intentional behavior carried out by a person or group of people using electronic media. This behavior is directed toward an individual who cannot positively defend himself/herself. Cyberbullying is abuse or mistreatment by mocking or insulting or teasing individuals' body shapes, family background, outfits, language, birthplace, attitude, class, name-calling, etc. using digital media like the internet, mobile phones, etc. (Jaishankar, 2020). When a student or some students say painful things or make fun of other students, they completely ignore or remove him or her from their group, spread false news about him or her, or try to influence other students to dislike him or her, and other hurtful things happen repeatedly in cyberbullying (Beran & Li, 2005).

2.4 Social Influences

Social influence is the length to which social media/networks influence individuals' behavior through messages and signals that help form insight into an activity's value (Venkatesh & Brown, 2001). Every single person who uses social media or the internet is influenced by the messages, comments, and/or behavior of others. Compared to network or media effects research on computer games or television, the role of the internet or network for cyberbullying is even more multifaceted for the reason that it not only provides media/network content but also provides pure opportunities for perpetrators and opportunities for victims through online submission, and finally enables straight observation of other individuals' online behavior (Festl, Scharkow, & Quandt, 2013). Children's behaviors and attitudes are influenced by different socialization representatives, including parents, peers, teachers, and other adults with different roles who play an important role in students' lives (Bastiaensens et al., 2016). Students are convinced directly or indirectly to create conventional and normative options mainly because of their relationships with friends, peers, educators, and other valued students. Children and young students observe and embody behavioral norms and standards of conduct from older children and young students as they grow and socialize through social media, and they progress down a path of general societal conformity (Hinduja & Patchin, 2013). At the time of socialization, students have a huge opportunity to enter the network by using the media, and the students observe the behavior of others, especially peers or peer groups. The peer group has a great influence on students' attitudes and actions. In considering norms in an educational setting, studies have scrutinized students' perceptions of the expectations of seniors, teachers, and other peers in relevant departments (Venkatesh, Morris, Davis, & Davis, 2003). In the context of cyberbullying, when a student's cyberbullying behaviors are known by teachers, friends, or other employees, she/he can lose the admiration and good opinion of them. If students believe that their teachers, friends, or other peers do not expect them to engage in cyberbullying, they should reduce cyberbullying on campus (Choi, 2018).

H1: There is a positive relationship between social influences and cyberbullying among university students.

2.5 Use of Social Media

Using social media is a normal part of student life nowadays. It is a popular medium for people to spend time, especially students (Yasmin & Hossain, 2021). It has a huge benefit for students, like communicating with classmates, getting information, learning new things such as what's happening in the world currently, getting class updates, contacting peers or family members, etc. Social media is a form of electronic communication (such as Facebook, websites, Twitter, Instagram, etc.) through which users create online communities to share opinions, information, ideas, personal information, and other content (Taprial & Kanwar, 2012). Using social media is booming day by day, and the boom using social media leads to the vast spread of cyberbullying, which is a big problem for teenagers and young students (Zhao, Zhou, & Mao, 2016). And this problem connected with social media use is cyberbullying, which has become an important concern that can lead to mental and behavioral health issues and raise the risk of suicide (Garett, Lord, & Young, 2016). More recently, social media sites such as Facebook, Twitter, Instagram, and the like appear to be surfacing as popular media/sites for cyberbullying execution or victimization, in part a mirroring of their popularity (Whittaker & Kowalski, 2015). In the current world, social media is one of the most popular platforms for cyberbullying. All of the citizens have the opportunity to enter social media and follow each other and bully scope. Crosssectional findings have shown that both enormous and problematic social media use are related to increased cyberbullying and cyber victimization in students (Erreygers, Vandebosch, Vranjes, Baillien, & De Witte, 2019). Social media permits the selective sharing of content and information based on the user's settings on his or her account. This capability to share has given students or young people unequaled access to secret information and a readily accessible platform to support that information against others (Garett et al., 2016). Bullying messages on social media will not go away but will continue to bother users around the clock. The consequences of cyberbullying based on social media are even more far-reaching and serious than another bullying (Zhao et al., 2016).

H2: There is an effective connection between social media use and cyberbullying among university students.

2.6 Internet Addiction

Technology makes it easy for students to demonstrate their knowledge, understanding, and skills (Khaneghahi, Nasripour, & MahmoudZehi, 2022). For that reason, the use of the internet has become a regular activity for Bangladeshi students. The internet offers many benefits for students, such as completing assignments, getting class updates, communicating with classmates and/or teachers, etc. Although there is a huge benefit to using the internet, there are also some problems like internet addiction, inappropriate use, etc. Lopez-Fernandez (2015) defines Internet addiction means a person's inability to control his or her internet use, which might lead to an increase in addictive symptomatology, utilitarian impairment, and in some users' comorbidity. Internet addiction is a matter defined as using the internet out of command or control and harmfully. But there are no severe descriptions and rating scales for internet addiction yet (Eksi, 2012). Internet addiction means a kind of technology or internet addiction and is a subset of behavioral addiction (Griffiths, 1998). Internet addiction can be classified under behavioral addictions like media addiction, mobile addiction, computer addiction, gambling, eating, sex, etc. Internet addiction is a mess that carries a risk in terms of causing social problems like social phobia, depression, cyberbullying, etc. (Eksi, 2012). It was found that students are the most likely to use the internet inordinately (Stodt, Wegmann, & Brand, 2016). Using the internet has positive sides, and these positive sides encourage people to reuse the internet in the future for benefits. Different authors argue that the functional use of the internet is related to cognitive command over one's own behavior, which guides one to end internet use as soon as the tasks or needs are satisfied (Stodt et al., 2016). Lack of command over personal information on the internet and the uncontrollable use of the internet may lead to addiction and personality disorders and increases the risk of uncovering abuse via the internet (Ortega Ruiz, Rey Alamillo, & Casas Bolaños, 2012).

H3: Internet addiction is positively related to cyberbullying among university students.

2.7 Social Anxiety

Social anxiety is a mental/psychological problem that is acknowledged as an important construct for understanding interpersonal behavior. It is based on various factors such as fear of negative appreciation, social shuffle and distress, and social avoidance unique to new people or situations. A

defining characteristic of social anxiety is the dread that one will make a mistake and be criticized (Pabian & Vandebosch, 2016). Social anxiety is a big problem for students and children's given that it may be hard for socially anxious youth to create social interactions, become accepted within the big peer group, and develop close-to-close friendships (Bowles, 2017). Anxiety is a major factor in cyberbullying in the modern age. In most cases, anxiety drives students into cyberbullying. Wei, Ding, Huang, and Zhu (2022) explain that anxiety has an impact on students' cyberbullying perpetration. Individuals with poor relationships with parents or family, whose needs and wants cannot be met by their family, will create unsafe attachment systems, form negative perceptions of themselves and others, and inhabit uncertain perceptions of the world around them, thus generating anxiety, and this anxiety can help drive students into cyberbullying. When a student feels depressed or anxious and cannot share with someone close, then it can lead them to cyberbully behavior. According to (Navarro, Serna, Martínez, & Ruiz-Oliva, 2013), students who have a high level of social anxiety and limited social skills in physical interaction may turn to social networks to communicate and make new friends, interacting with strangers more frequently and being more vulnerable to online victimization. On the other hand, many studies have revealed online bullies' availabilities to choose their victims from those who have high levels of social anxiety and who are less able to defend themselves (Olweus & Breivik, 2014).

H4: A positive relationship exists between social anxiety and cyberbullying among university students.

2.8 Trait Anger

Anger is a strong emotion shared by bullies and victims of both physical and electronic media of bullying (Lonigro et al., 2015). Trait anger is a personality trait that refers to a person's differences in the tendency to experience irritation as an emotional state. Feelings of anger are probably due to poster participation in cyberbullying (Wang, Yang, Yang, Wang, & Lei, 2017). The experience of irritation or anger may be a product of an inner predisposition that is characterized by trait anger (Lonigro et al., 2015). According to Yang, Li, Gao, and Wang (2022), trait anger means a tendency to behave with anger across situations and times, where a single person becomes irritated often at various times and situations. Some previous research suggests that anger is one of the prime predictors of cyberbullying perpetration (Lonigro et al., 2015). A positive relationship between giant levels of trait anger and cyberbullying perpetration has been found(Tanrikulu & Campbell, 2015). Lovegrove, Henry, and Slater (2012) found factors of bullying or cyberbullying involvement among American middle school children and reported that excessive feelings of anger were related to a high possibility of being in the bully or bully-victim groups. Trait anger is connected with the propensity to approach with a desire to advance against other people. It can be considered as the emotional association of aggression. Many studies have shown that people with excessive traits of anger are more likely to show physical aggression, indirect aggression, direct aggression, and online aggression (Li, Zhang, Zhao, & Yu, 2020). Many empirical studies suggest that anger is one of the prime predictors of cyberbullying not only for children and adolescents but also for young adults (Ak, Özdemir, & Kuzucu, 2015) and also for university students. **H5:** Trait anger and cyberbullying among university students have a positive relationship.

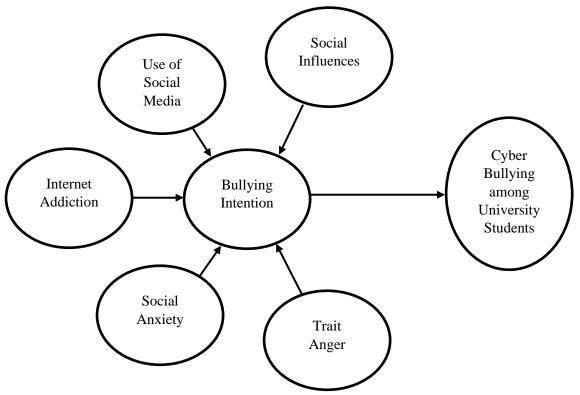


Figure 1. Conceptual Framework

Research Questions

- Q1: Do social influences have an effect on cyberbullying among university students?
- **Q2:** Is there any link between social media use and cyberbullying among university students?
- Q3: Does internet addiction have an influence on cyberbullying among university students?
- **Q4:** Is there any relationship between social anxiety and cyberbullying among university students?
- **Q5:** Does trait anger influence cyberbullying among university students?

3. Research Methodology

The choice of a suitable research method is based on the study of the objectives and literature to determine the research question (Baeshen, Al-Karaghouli, & Ghoneim, 2017). In this research, literature reviews assume that the survey method is the best way to investigate the relationship (Fakir & Miah, 2021). A quantitative method of study was conducted in collecting, analyzing, and interpreting data. The time of the survey was four months.

3.1 Design of the Study

In this research article, various factors have been recognized that directly influence cyberbullying. This research article was survey-based. To understand the cyberbullying factors, descriptive research was conducted first. Then quantitative research was applied to analyze these factors' effects on cyberbullying.

3.2 Population and Area

Every university student in Bangladesh who used the internet and at least experienced cyberbullying was part of the population of this study. The study focuses only on university students in Bangladesh who are facing cyberbullying.

3.3 Sampling Techniques

The respondents who are studying and/or studying at Bangladeshi universities and have experience browsing the internet, the social media, and collecting information were chosen for this study sample. The probability sampling technique was chosen for this study. The probability sampling technique has the best chance of properly representing this research. Furthermore, because it is impossible to reach

every single person in every university to know which students have experienced cyberbullying, so the probability sampling technique is best for gathering proper data, and researchers use this technique. An online questionnaire is engaged with the conditions of this study, which focuses on the people who are students at Bangladeshi universities and know and/or have experience with cyberbullying. Data were collected from July 2022 to September 2022. A total of 202 respondents responded to the online questionnaire.

3.4 Research Instrument

In this study, data was gathered through an online questionnaire with a seven-point Likert scale where [1] was strongly disagreed upon and [7] was strongly agreed upon. In independent variables, all of the variables have four items, and in the dependent variable, there are five items. The other part of the questionnaire was demographic questions such as gender, age, educational qualification, profession, and monthly income.

3.5 Data Collection

An online questionnaire that was closed-ended was used to gather the data. For collecting data, "Google forms" were created and distributed to the respondents through different electronic media like Facebook, Instagram, WhatsApp, and e-mail. The response rate of the questionnaire was high. Out of the 226 distributed questionnaires by targeting the list, we got an 89% response rate. However, 202 respondents responded to this survey.

Data Quality Assurance

Reckoner and the caregiver were aware of the study's objectives, sample size, methodology, and questionnaire. The overseer properly controlled the data collection, and earlier tests were done to ensure the accuracy and dependability of the data. The information was entered into SPSS version 26.0 for additional deals and analysis.

Data Analysis

The descriptive statistics analysis, reliability analysis, and multiple regression analysis have been measured by the SPSS 26.0 version.

4. Results and Discussions

Table 1. Demographic Background of Respondents

Variables	Categories	Frequency	Percentages
Gender	Female	119	59%
	Male	83	41%
	18-22	83	41%
Age	23-27	95	47%
	28-32	24	12%
Educational	Under Graduate	168	83%
Qualification	Graduate	23	11%
	Post Graduate	11	06%

Source: SPSS Output

Table 1 illustrates the demographic background of the respondents. Here, 59% of the respondents are female, and male respondents make up 41%. The age of most of the respondents is 23-27 (47%) and 41% of the respondents age is 18-22. Among those who responded to the questionnaire, 168 (83%) were undergraduate students, 23 (11%) were graduate students, and 11 (06%) were postgraduate students.

Table 2. Descriptive Statistics

Variables	N	Mean	Standard Deviation (SD)
Social Influences	202	4.71	1.44213

Use of Social Media	202	4.60	.890761
Internet Addiction	202	4.53	1.189474
Social Anxiety	202	4.89	1.308975
Trait Anger	202	3.98	.990732

Source: SPSS Output

Table 2 describes the factors which influence cyberbullying. Social anxiety (Mean 4.89; SD 1.30) is the most important factor in cyberbullying. The second influential factor is social influence (Mean 4.71; SD 1.44). Use of social media (Mean 4.60; SD 0.890761) is the third significant factor, and the fourth is internet addiction (Mean 4.53; SD 1.18). The least essential factor is trait anger (Mean 3.98; SD 0.99).

Table 3. Reliability Test

Variables	Cronbach's Alpha
Social Influences	.730
Use of Social Media	.751
Internet Addiction	.600
Social Anxiety	.808
Trait Anger	.728

Source: SPSS Output

Table 3 presents the reliability of the factors to measure the consistency of the factor. When the value of Cronbach's Alpha is more than 0.70, it indicates higher internal consistency, and anything less than 0.35 indicates that there is lower internal consistency and the factor should be excluded (Nasir & Neger, 2022). Here, Cronbach's alpha value of social influences, use of social media, social anxiety, and trait anger are more than 0.70, and internet addiction's Cronbach's alpha is near the value of 0.70. So, the questionnaire used in this paper has good reliability.

Regression Analysis

Regression analysis explains the relationship between dependent variables and independent variables. In this paper, the dependent variable is cyberbullying and the independent variables are social influences, use of social media, internet addiction, social anxiety, and trait anger.

Table 4. Model Summary

Model	R	R Square	Adjusted R Square	Standard Error of the Estimate
1	.776	.586	.562	.38961

Source: SPSS Output

Table 4 represents the correlation coefficient. R = 0.776 (77.6%) indicates that social influences, use of social media, internet addiction, social anxiety, and trait anger have a very strong positive relationship with cyberbullying. $R^2 = .586$ (58.6%) variation in cyberbullying (Dependent Variable) occurs due to social influences, use of social media, internet addiction, social anxiety, and trait anger (Dependent Variables). The adjusted R^2 is 0.562, which means that all of these (five) factors can occur at a 56.2% variance in cyberbullying. It indicates that there is a huge impact of these five factors on cyberbullying.

Table 5. Analysis of Variance (ANOVA)

Model	Sum of	df	Mean Square	F	Sig.
	Squares				
Regression	17.841	5	3.568	23.507	.000
Residual	12.599	83	.152		
Total	30.440	88			

Source: SPSS Output

Table 5 was conducted to compute the link between social influence, use of social media, internet addiction, social anxiety, and trait anger with cyberbullying. The value of F is 23.507 with a significant value of 0.000 as well as 5 and 88 degrees of freedom. It ensures the fitness of regression analysis.

Table 6. Coefficient

Unstandardized Coefficient Standardized Coefficient						
Model	В	Std. Error	Beta	t	Sig.	Result
(Constant)	.423	.480		.881	.381	
Social Influences	.293	.079	.323	3.718	.000	Accepted
Use of Social Media	.188	.070	.204	2.665	.008	Accepted
Internet Addiction	.431	.095	.401	4.549	.000	Accepted
Social Anxiety	.346	.143	.116	3.007	.003	Accepted
Trait Anger	.353	.098	.341	3.581	.001	Accepted

Source: SPSS Output

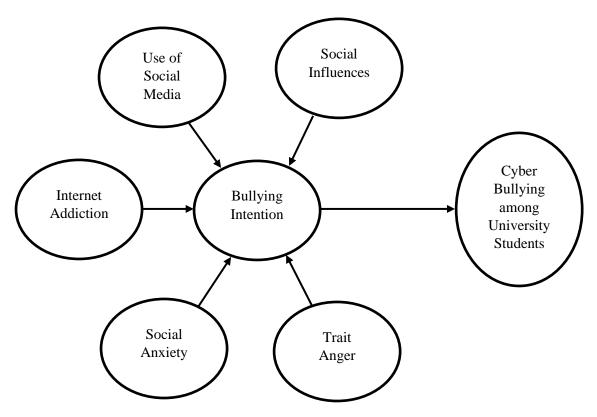


Figure 2. Result of Model of Cyber Bullying among University Students

Table 6 and Figure 2 show that the five factors are significantly related to cyberbullying. The first factor, social influence, has a positive influence on cyberbullying (Sig = 0.000 < 0.05). So, H1 is accepted. The second factor, the use of social media, is also having a positive influence on cyberbullying (Sig = 0.008 < 0.05). So, H2 is also accepted. The next one is internet addiction, and it has a positive influence on cyberbullying (Sig = 0.000 < 0.05). The fourth factor is social anxiety (Sig = 0.003 < 0.05) has a significant positive influence on cyberbullying. It means H3 and H4 are accepted. The last variable is trait anger, and it has a positive relationship with cyberbullying (Sig = 0.001 < 0.05). It proves that H5 is also accepted.

Discussions on findings

Nowadays, much consciousness is focused on the matter of cyberbullying among university students. These research findings explain the factors that have been displayed and make an effort to find out which factors have a noteworthy impact on cyberbullying among university students. All of the

independent variables like social influences, use of social media, internet addiction, social anxiety, and trait anger have a positive connection with cyberbullying among university students. Using the internet is the most valuable thing in cyberbullying. Social influences ($\beta 1 = 0.323$, t = 3.718), use of social media (β 2 = 0.204, t = 2.665), internet addiction (β 3 = 0.401, t = 4.549), social anxiety (β 4 = 0.116, t = 3.007), and trait anger ($\beta 5 = 0.341$, t = 3.581). In sum, the entire hypotheses are supported by the results of this paper (Al-Rahmi et al., 2018). According to the analysis, social influence was supported by cyberbullying at a significant value of 0.000, which is lower than the p-value of 0.05. This indicates that social influences have a positive and significant relationship with cyberbullying among university students. Based on the output of the analysis, the use of social media was supported by cyberbullying at a significant value of 0.008, which is lower than the p-value of 0.05. This considers that the use of social media has a positive and significant association with cyberbullying among university students. So, the use of social media has a positive impact on cyberbullying among university students. Another variable, internet addiction, was also supported by cyberbullying at a significant value of 0.000, which is less than the p-value of 0.05. This shows that internet addiction has a relationship with cyberbullying among university students. Based on the analysis, social anxiety was supported by cyberbullying at a significant value of 0.003, which is lower than the p-value of 0.05. This indicates that social anxiety has a positive and significant association with cyberbullying among university students. According to the analysis, the trait of anger was supported by cyberbullying at a significant value of 0.001, which is lower than the p-value of 0.05. This proves that trait anger has a positive relationship with cyberbullying among university students. We found in this research that the use of social media is much needed for cyberbullying. It is not possible to cyberbullying, and students use social media the most as a cyberbully medium.

5. Conclusion

5.1 Conclusion

Cyberbullying is becoming a major problem among university students, and it creates many problems among students, like mental problems, physical problems, etc. Even students drop out because of it, and in some cases, they commit suicide. Akcan and Öztürk (2017)recommended that developing different programs to prevent cyberbullying and cope with it is very important for university students. In addition, students must be informed about cyberbullying and the effects of cyberbullying so that they can be aware of it and prevent it. This study looks at the factors that directly or indirectly influence cyberbullying in university students. It identifies several factors that influence cyberbullying, such as social influences, use of social media, internet addiction, social anxiety, and trait anger. This study suggests that by reducing the effects of these factors, it is possible to reduce cyberbullying among universities and make sure students can stay safe online. Authorities and other concerns have to be aware of it to make sure that students are safe. It is logical that preventing the cyberbullying problem at its origin is the best way to save students from cyberbullying.

5.2 Implication

5.2.1 Theoretical Implication

Nowadays, cyberbullying is becoming a major problem in universities, and researchers have been rapidly involved in cyberbullying research to find out the factors behind this. Most researchers believe that there are numerous forms and causes of bullying. Therefore, this research contributes to explaining the cyberbullying process. This study applies two crime theories with the intention of creating intervention. These models help to identify the conception of cyberbullying ideas, cyberbullying actions, and the medium that plays an important role in cyberbullying among university students. This research develops a model for identifying major factors that play a role in maximizing cyberbullying. It may be possible to find a solution to this problem by reducing the use of these among university students.

5.2.2 Practical Implication

Many researchers focused on cyberbullying accomplishment has been mostly theoretical foundation (Barlett, 2017). The theoretical foundation may not support their practical implications at the university level, especially in Bangladesh. We identify some points on cyberbullying and develop an integrated

model for it. It will help to identify major media where cyberbullying is increasing and the reasons behind cyberbullying among university students. This model will provide an actionable plan for university authorities, government, policymakers, other concerned internet providers, and socially concerned peer groups to make their plan for working on it. Mainly, this paper will provide a suggestion to university students and other concerns to stay safe online. Besides, it will help to generate courage and create action for one to find a path to break the chain and transform the situation into a solution (Kuo, Wood, & Williams, 2021).

5.3 Limitations and Future Research

Although this study provides an innovative idea and model for cyberbullying among university students, it also has some limitations, such as the small sample size where only 202 students participated from 19 universities in Bangladesh and we conducted this research based on Bangladeshi universities. We took only five variables into account. There might be some other variables that influence university students' perceptions of cyberbullying. We consider only age, gender, and educational qualification in the demographic part. But maybe family background, social status, and economic situation can be affected by cyberbullying among university students. Therefore, future researchers could select more variables and can select the whole world or more countries to conduct the research. This study collects data from respondents via google form other researchers can collect data in some other ways like depth interviews, personal interviews, etc.

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