A MODEL TO MANIFEST THE INADEQUACY OF AWARENESS IN CYBER BULLYING AMONG ADOLESCENTS AND TO ACCENT ITS DIRE NEED

L.D.C. Dilshani, A.A.K.R. Athauda, H.I Senadheera M.R.U. Silva, V.R. Dunuwila and S. Thelijjagoda

ISSN: 2772 128X (Online) ISSN: 2792 1492 (Print) SSN: 2792 1492 (Print) SLJESIM VOLUME 1 ISSUE 1 June 2022 sljesim@sab.ac.lk www.sab.ac.lk/sljesim

Received: 03 November, 2021 Revised: 02 March, 2022 Accepted: 30 April, 2022

How to Cite this Article: Dilshani L.D.C., Athauda A.A.K.R., Senadheera H.I., Silva M.R.U., Dunuwila V.R., & Thelijjagoda S., (2022). A model to manifest the inadequacy of awareness in cyber bullying among the adolescents and to accent its dire need, Sri Lanka Journal of Economics, Statistics and Information Management, 1(1), 01-18.

Abstract

Cyber bullying can be identified as the use of electronic communication to bully a person, typically by sending message intimidating or threatening nature. Cyber bullying could be threating to a one's life in different ways. The main concern that surfaced when addressing this issue is that in Sri Lanka this subject does not exist as an issue in the eyes of public that needs addressing. The objective of the study is to introduce a model that can be used to identify the root causes leading towards cyber bullying and to suggest ways to eliminate the debacle. It attempts to understand the effect of technological illiteracy, psychology of the users and the activeness of the legal framework on the crisis of cyber bullying among the adolescents in Sri Lanka. The data was collected through primary and secondary sources for qualitative analysis. Collectively there were 384 participants for the questionnaire representing all the adolescents in the country within the age group of 12-22. Total of fifteen indepth interviews were conducted with volunteered adolescents. 60% of the responders were unaware about the term cyber bullying, but when they were inquired about the experiences they have gone through, they were exposed to cyber bullying. The study was concluded with a model that is introduced to understand the need of awareness among the adolescents by giving them proper technological literacy while understanding the proper ways to use social media and internet in order to minimize the debacle occurring continuously among the users.

Keywords: Adolescents, Cyber bullying, legal framework, psychology, technological illiteracy

INTRODUCTION

Cyberbullying is an action from the digital services. Cyberbullying can occur through social media, SMS, Applications, forums, or gaming. It includes sending, posting, or sharing, harmful, false, or negative information about someone else. This harmful activity includes both content of the victim or the anyone. It was recognized that cyber bullying arises mostly among the school children and the teenagers and that happens because of the misusage of the digital services or the less knowledge on the digital services. This can be harmful in various ways as mentally, emotionally, or physically. Mentally, victims can be feeling upset, embarrassed, stupid, and even angry. Emotionally victims can be feeling ashamed or losing interest in the thigs that they love most. As well as physically, victims can be experiencing symptoms like tired because of the loss of sleep, headaches, and stomach pains. The major effect is because of the cyberbullying most of the victims try to harm themselves or try to suicide because the Cyberbullies try to be spreading harmful lies by posting embarrassing photos of the victim on social media, by sending harmful messages or by creating harmful threats via messenger platforms and they try to threaten the victim. The most cyberbullying occurs in social media like Facebook, Instagram, Snapchat and TikTok. As well as from text messaging and messaging apps, Online chatting over the internet, online forums, chat rooms and message boards, Email and from online gaming(Solms & Niekerk, 2013).

According to a study done in 2016 by the Cyber Bullying research Center, 33.8 percent of students aged 12 to 17 have been victims of cyberbullying at some point in their lives. In comparison, 11.5 percent of students aged 12 to 17 said they had been the victim of cyberbullying at some stage in their lives(Watts et al. 2017).

Therefore, the problem encountered on this topic was based on Sri Lankan context, this subject area is not appearing as a major issue. The main concern when addressing this topic of cyber bullying is that there was no proper understanding in the forms of cyber bullying as well as there was no proper understanding to point out the specific reasons that lead to this. Also, there was no attention given in analyzing the root causes that lead to this dilemma. Hence, in this study, the focus was based on the context of the current practices that exist in terms of cyber bullying and the root causes for the existence of those practices that lead to this dilemma throughout the current Sri Lankan social context. The research addresses this social issue in a new perspective by identifying main three variables. Also, the objective to build up a model was accomplished through this study where at the end the results bring forward a well-built analytical model to identify the root causes.

LITRATURE REVIEW

In general, cyberbullying can be defined as an intentional or repeatedly inflicted harm on any party via the use of electronic media or the internet (UNICEF, 2018). It is known to take various forms of harassment which may include of threats, rumors, harmful or untruthful content or to the extent of impersonating someone which could ultimately lead towards another party, for being affected hurtfully or harmfully(Nocentini et al. 2010). This could also be in the form of stealing one's identity, which is in the representation of catfishing where in people, may be lured into false relationships under unknown circumstances. And this situation is not uncommon in Sri Lanka.

According to certain sources it states that women suffer from harassment through the internet and about 400 cases overall had been reported during the last year which includes blackmail, sale of videos, sharing of obscene photos, editing content, and posting on social media and revenge pornography (Kalender 2018). Also, in a statement the Executive director of Women in Need (WIN) stated "Online harassment is a new form of gender-based violence". It was also added that "This is a growing trend with female aged between 15 to 45 years – from Advanced level or university students to young unmarried and married women being harassed by strangers, former boyfriends or ex-husbands". The sources indicated that majority of its victims retreat to silence due to lack knowledge on how to report or make a complaint while other reasons include fear of losing dignity or exposure of personal content(Fazlullah, 2018).

Another study conducted by few students recognizes cyberbullying in Sri Lanka as a new concept. The objective of these researchers was to study the relationship of cyberbullying in Sri Lanka, cyberbullying behavior, and the intensity of it in terms of demographic variables like gender and age. It was a successful study which led to identifying different types of reactions and behaviors associated with cyberbullying (Fazlullah, 2018).

Since it was identified that cyber bullying takes different phases, unknown to the individual in literal context, they were indirectly getting exposed to cyber bullying while they were using social media. This situation is reportedly higher to notice while conducting the data collection. Even more while going through the social media platforms, it was quite clear that people are unaware of the bullying that they undergo even without their knowledge and awareness. Apart from the above analysis the current practices that exist within the Sri Lankan context were identified in terms of cyber bullying.

Exclusion – This is a form or bullying that is practices in a situation where a particular individual is singled out or ignored. When a person is left out of an online group while all other familiars and the friends are present in that group, that sort of a situation is taken into consideration as a form of bullying called exclusion. When that person is not present within that community, others would start to make fun of that person or make comments on the ways that person could harm to their social status, that would eventually result to lose of social status and self-confidence on that bullied individual. As a result, the victim could lose friends in both in real life as well as in social media. Harassment - harassment sometimes also referred as cyberbullying. When considering the word harassment in deep it includes facts such as spreading rumors about a person online, sending unsolicited e-mails, making defamatory comments

online, sending abusive messages, sharing/sending graphic content knowing that is offensive and many other factors are included in harassment(Heffer et al. 2019). Outing/doxing - outing or doxing can be identified as the act of revealing sensitive or personal information to the public through the internet without any consent from the relevant individual. Usually, people who acquire that kind of information they use the social media, publicly available databases to gain that information. The person who carries out the doxing or outing could have various motives such as shaming, extortion.

Cyberstalking- the use of internet or any other advanced technologies that us being used to stalk a particular person can be described as cyberstalking. This can also be identified as an extension of cyberbullying which is an online abuse. Cyber stalking can come in many forms such as in-person stalking, can take the shape of e-mails which is threatened, sending text messages, and posting comments, attempt to extort sex or explicit photos, send unwanted gifts, tagging the person on posts and other forms. The people who are engaged in cyberstalking activities also happen to be very methodical and purposeful as well(Cyberbullying Research: The Current State, 2009).

Fraping- fraping can be identified as where the bully uses the victim's profile which is based on the internet as an example Facebook to shame the victim Infront of the community, after logging into that account the bully would simply harm the reputation of the victim by sharing unwanted posts, posting abusive comments, uploading disgraceful photos and many other activities that could harm the victim's good image.(UNICEF, 2018)

Masquerading – This could be defined as where people pretend to be someone else on the internet. The bullies would create a fake profile to mislead the victims and gain advantage from them. Scamming money is the most famous act when it comes to masquerading(Nocentini et al., 2010). Furthermore, the bullies would text with the victims and threatening them to reveal the images, messages, personal information and take the fullest advantage from the victims.

Trolling – this is the situation where the people leave abusive or offensive comments or messages on the internet to get the attention, to cause trouble to that specific person or the group or else to upset that specific person so that the victims would react to the trolling activities in a bad manner(Cilliers & Chinyamurindi, 2020).

Flaming - Flaming is an unpleasant online engagement in which participants exchange offensive words. Flaming can happen in places like Internet forums, chat rooms, social networks, and game lobbies, where there is a mix of people from various cultures and ideas. These kinds of activities mainly occur because one person's idea is different from another person(Cyberbullying Research: The Current State, 2009).

The below attached figure, explains the current practices of cyber bullying according to the responses received by the 384 participants.

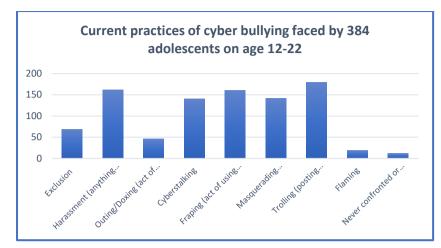


Figure 1: Current Practices of Cyber Bullying

Source: Compiled by the author

Out of the results, trolling or posting inflammatory comments and messages have been recorded as the highest recorded issue faced among the adolescents in Sri Lanka. Then harassment, fraping and masquerading are recorded as highly notified cyber bullying practices in current society.

METHODS

As per the research philosophy, positivist assumptions were used with the claim that the social activities can be understood based on objectives. The study was conducted under the inductive approach where the effort was put to bring forward a new model for the society, to get an understanding on the need of awareness to overcome cyber bullying. The research methodology used was qualitative data analysis. As for the research strategy grounded theory was based along with case study strategy. For the time horizon time series analysis was allocated because the data was gathered over a period on certain intervals. Data was collected through primary and secondary methods. The primary data consist of an open-ended questionnaire and an in-depth interview. Total of 384 responses were received for the questionnaire. All together 15 interviews were conducted with several adolescents around the country through online media. The interviews lasted for around 20 -25 minutes. To gain expert opinion, a special interview of one and half hours was conducted with an expert from Sri Lanka CERT. Past research articles, newspapers, and journal articles done by previous researchers were falling under secondary material. The analysis was done through thematic analysis. At the first stage of the analysis codes were built for the identified variables, then the quotes that were related to the identified codes are categorized. So, with the use of the transcripts the analysis was conducted properly.

RESULTS & DISCUSSION

To gain the results of the conducted study, as explained, the Thematic analysis was used. With the conducted interviews, transcripts were written for the analysis. Initially the analysis was done by identifying the codes for the variables that were identified. Then based on the defined codes, the relevant quotes were highlighted and extracted. The quotes were tallied and checked upon with the respective variables. Then with the relevant quotes extracted themes were defined. The defined themes are discussed further.

Reasons that lead towards cyber bullying

The results obtained through the analysis conducted can be documented under the below criteria. As per the reasons that lead towards the existence of cyber bullying within Sri Lankan context, the following findings were made.

Psychological Trauma

While exploring the reasons that lead towards the current practices, the main cause of action was identified as psychological trauma. Trauma can be defined as a set of experience or events that a particular individual has gone through either as a physical harm or an emotional harm. This situation might have been life threatening. The individual who has gone through any traumatic experience might be mentally unstable and he or she might not be able to handle the emotions.

One interview was conducted with a girl who has completed her ordinary levels who was around the age of 16 years, and she resides in western province. When the interviewee was asked about this issue of psychological trauma, the reply was as follows.

"There are situations where I am even unable to control my emotions because of certain experiences. I have gone through bullying once even though it was indirect, any how I felt so angry and sad. I wanted to get back at the bully who made me go through that experience."

So, this situation becomes a leading factor towards cyber bullying. Not recovering from the experience that was gone through first handedly might be the cause of actions that lead towards cyber bullying.(Hinduja & Patchin, 2011).

Again, there was a response mentioning that another interviewee who is a 13-yearold girl and living in Southern province specifically in Galle, was excluded from her friends because of her introvert nature.

"I was not allowed to join their talks. They excluded me from their chat groups, and I was left out. But I wanted to know what they were doing so; I started to investigate their profiles and gather news" It was proved that because of exclusion, individuals tend to cyber stalk, and eventually this turn out to be a psychological trauma(Hinduja & Patchin, 2011).

To feel powerful

There are certain situations where the individuals want to make sure that they are above others. So, to gain power, they carry on bullying.

"I think that the bully wanted to overpower me. I was better at studies. The one who bullied me through the WhatsApp group shared funny memes about me and stickers. I felt embarrassed and lonely."

The above statement was made by a boy who was in Central province, and he was 17 years old. He further clarified his experience below.

"I think the bully felt powerful in a certain way because he could make me feel soul less"

The above findings were proved with the readings where it was stated that certain individuals keep bullying because of the need to show their power. It can be said that the need to feel powerful, lead individuals to carry cyber bullying(Hinduja & Patchin, 2011).

To make the bully have a good feeling

The same interviewee who was excluded from her friends, mentioned that as per her opinion, the bully might be having a certain happiness or content after victimizing an innocent person.

"Maybe he or she is unhappy being an ordinary person, so to be happy, he or she might share some funny posts and messaged which eventually turn out to be bullying. It might be unknowingly for his or her happiness."

Also, the above statement was proved by the research findings that there are unintentional occasions of cyber bullying where a fun activity turns out to be a disaster (Heffer et al., 2019). There were instances because some individuals were led to be a bully because they see it as fun.

"They might find it funny and entertaining"

This was a statement made of a boy who is 15 years old living in North Central province. To have some fun and have a good feeling they tend to bully another. Trolling and cyber stalking is mostly carried out with the intention of having a good feeling(D & D, 2013).

To Get Recognition

Among the adolescents in current society there is a belief that if they do something that get the attention, and they are considered as a 'cool kid'.

An interviewee who was a 16-year-old boy and living in Western province mentioned his opinion on commenting and sharing posts.

"Commenting on Facebook and sharing memes on WhatsApp is cool. It is a fun activity. There are some classmates who don't share any of those. They don't even chat. They are boring."

This belief among the adolescents has led them to bad things by making fun of innocent individuals through social media. Making mean comments and sharing in human posts to degrade innocent students have made many of the adolescents to be considered as bullies. The research conducted by Fazlullah proved the above statement with their findings. Even though the children don't recognize this commenting and posting unnecessary memes as a mean of bullying, because they were not properly informed, this turns out to be a major reason for the existence of cyber harassment(Fazlullah, 2018).

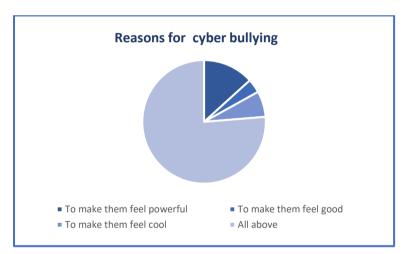


Figure 2: Reasons for the Current Practices

Source: Compiled by the authors

The above chart clearly depicts the responses received from the adolescents who participated in the survey. Majority have responded that cyber bullying is taking place because the bullies have the need to gain power, to have a good feeling as well as to be the cool kid among the community.

With the interviews conducted the responses received by the questionnaire are totally tallying because the adolescents find cyber bullying in different yet crucial perspectives. When focusing majorly on the specific factors, the below findings were proved with primary and secondary data as major reasons for cyber bullying.

Variable justification on reasons that lead towards cyber bullying

Technological illiteracy among the adolescents

Schools have become the main social scenario where the foundation is put forward to establish a well-balanced citizen to the world. When it comes to Sri Lanka it was understood that even though the educational system tends to bring forwards a well-established and forward individual with proper learning, there is a lack of technological knowledge. School students are not allowed to use any of the phones or social media platforms(Olweus, 2016).

An interviewee who is a girl of 15 years residing in the Central province mentioned her opinion on the usage of technological devices.

"I don't have a phone because I am going to school"

Because of this restriction to use technological devices when the students get a chance to use any of those devices and social media, they tend to explore and test the technology. This results in the students to get exposed to cyber bullying unknowingly.

The same interviewee commented as

"I have not used social media and schools never allowed us to use any of the computers and the teachers forbade us from using mobile phones as well."

So, it is understood that the school students are not gaining the proper level of knowledge and awareness that they should receive on the technology. This lack of knowledge on the technological devices and the software will eventually lead them to be harassed through cyber space.

As the number of teenagers who uses internet increases, the rate of risks involved with social media will gradually increase as a result. Since the internet has become a part or a tool of the life it will also have negative results, which affects the normal life of a human being. Harassment, adult content abuse, bullying, interpersonal abuse, and many other negativities will result in the misuse of the internet. This is mainly due to the lack of knowledge in terms of how to use technology for the betterment and avoid its negativity (Al-badi, Mahrouqi, & Ali, 2016).

During the interview a girl of 16 years old who resided in Colombo was asked what she tends to do using social media her response was as follows.

"I use it for entertainment and sometimes to handle my studies. Mostly because of the Covid situation I had to use the devices and social media for my studies. But other than that, I use it watch some videos and search for entertaining items."

The response was so clear and precise that it gave the exact picture, that the users lack proper knowledge on the way the technological devices can be used to gain better advantages to survive in this society. Most of the interviewees responded that they post their personal information online because they think it is necessary. This statement was even more proven by the secondary reading materials. In the paper written by Haddon, it was mentioned about the privacy risk that brings our issues related to posting personal information, which will bring attacks on privacy, hacking and identity theft issues(Solms & Niekerk, 2013).

The researchers show that "many young people post their personal information online typically out of" 31% being the boys and 27% of the girls have admitted that they are posting personal information on the internet (Ortega-ruiz & Núñez, 2012). Even more to prove the above statement, the responses obtained from the questionnaire were analyzed.

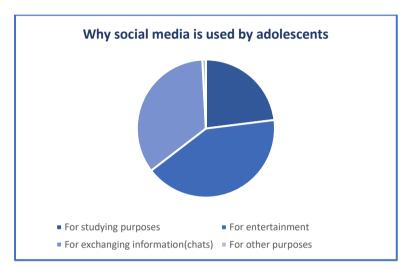


Figure 3: Reasons for Using social media and Online Sources

Source: Compiled by the authors

The above image is an extraction from the questionnaire that was conducted among 384 respondents. When they were asked why they use social media majority have responded that they are using social media for entertainment and for exchanging information. This clearly depicts that the users are technologically unaware of the proper ways that technology can be used.

The same question which was forwarded in the questionnaire was asked from an interviewee who a 16-year-old girl is residing in Southern province and the response given by her was simple.

"I use social media and internet to chat with my friends and to watch YouTube videos."

Only 195 respondents have given the response that they are using the online sources and social media for educational activities on the questionnaire. That shows majority are not using online platforms for education.

Even more to clarify the finding, the reply given by one of the interviewee's who is in the first year of the university and living in Anuradhapura can be used.

"Leaning online is difficult. I get distracted and I surf through other social media platforms."

Apart from the above findings it was clear that mostly the users are getting bullied through Facebook because they post every single information online because they lack knowledge on proper online etiquette. Then the users tend to use You tube as a media to harass people by commenting 'hate comments' on relevant videos of youtubers.

Majority of the interviewees replied that "Some videos on YouTube are stupid and boring. So, I comment on the video saying that it was not good"

But when those comments of those individuals are viewed it is clear that they bring negativity to the other party who receives them. If the current adolescents dislike the content of the youtuber, they tend to post bad and hateful comments that is considered as a form of bullying.

So, it is quite clear that technological illiteracy results in cyber bullying among the adolescents in Sri Lanka.

Psychological instability of the users

When the Psychological context was concerned, there were many facts that were identified to define the current psychological state of the adolescents. There was main four categories identified that will have an impact on the adolescents to be a victim as well as to be a bully (Al-badi et al., 2016). Those four factors were even more proved with the interviews. Majority of the responders touched upon the main four categories along their discussion.

Sensuality

When the adolescents cannot read the other senses, whether they are happy sad, troubled or either desperately asking for help, cyber bullying takes place.

"I think that the person who posted mean comments on my Facebook posts didn't understand that I was undergoing a difficult period. I posted a post which showed my exact emotions, but some made fun of what I felt."

This was a response received from a bullied girl who was 15 years old residing in Gampaha district. Her statement proves that the bully might lack sensuality as well as the victim is damaged mentally which has eventually resulted in a case of cyber harassment(Yildiz & Mustafa, 2020).

Racism

There is a high possibility that an adolescent who dislikes different cultures and skin

colors might bully another individual with the hope that the victim might leave the space. But eventually this is caused because of a psychological state where the adolescent dislikes others with different skin tones(Victoria State Government, 2019).

This finding was proved by the response of an interviewee who was a 19-year-old boy living in Anuradhapura.

"I am dark skinned. I am darker than any of the usual Asians, the people whom I though as my friend's made fun of me because of my skin color."

So, this dislike that arise from one individual will cause a reaction with similar feelings from the victim(Victoria State Government, 2019). The bully might spread the hatred that resides within him towards the victim and the victim might again cause trouble with another individual.

"I wanted to let them feel how I felt through"

This was the reply given by the above interviewee when he was questioned about his feelings during the time of being bullied. It was read that racism mostly arise because of family (Victoria State Government, 2019). When the parents dislike mis cultural backgrounds, they spread those thoughts among children which will eventually bring bullying among each other. When the interview was conducted it was proved that racist bullying takes place either because of appearance, ethnicity, religion, or the way of behavior (Allen, Ryan, Gray, & Waters, 2014)

"I think that we should only be friends with people who are as same as us." When they were inquired about what they meant by 'same as them' was the reply was "People who belong to our culture, who looks like us, who are in our religion"

These were the responses from the same boy who mentioned that he uses social media for entertainment activities only. Because of this mindset majority shares a discrimination on social media platforms among different ethnic groups.

Hate speech

When the adolescents are undergoing a period of emotional transformation, it was realized that hatred that relies within the adolescents turns out to be a violent behavior. Hate speech within the social media and online platforms are considered as a consideration of the psychological state of the users. It was found that 59% of the teens are targeted for cyber bullying through rumors, name calling and abusive actions(Waterford, 2020).

When the definition of hate speech was searched for, a perfect explanation was given on a report made. There, it was mentioned that hate speech can be taken as a humiliation or forwarding hatred towards a group or class of people or a certain individual. Hate speech has become an aggressive behavior of the bullying individuals which will eventually result in mental and psychological damage on the victims(Waterford, 2020).

Mostly in Sri Lankan society, hate speech is common. And even celebrities become exposed to hate comments. One interviewee who was a 17-year-old girl in Gampaha district responded on this topic of hate comments as follows.

"I once posted an image and some people whom I thought to be friends started mentioning bad things on that post, that left me shocked, and I deleted that post immediately and didn't log on to my account for few days."

This proved the findings that hate speech leaves traits of emotional transformation.

Unawareness on the activeness of the Legal Framework

When the analysis was conducted to highlight the effect of the legal framework on cyber bullying, it was realized that currently within Sri Lanka the law is not directly applicable as punishable. There is no amendment or act introduced to punish or imprison the cyber bullies.

But there are bodies that can support in bringing possible solutions to the victims who have undergone cyber bullying and the interviewee who is an official from SLCERT gave a reply that confirms the findings.

"In Sri Lanka there is no specific law defines to punish the cyber bullies, but an act is forwarded to the parliament to bring justice for those who were bullied and to punish the bullies. Still, it was not accepted but within next year it will come into action. Apart from that Sri Lanka CERT and CID along with state ministry of child and women protection has taken the initiative to conduct sessions to raise awareness among Sri Lankan adolescents."

Sri Lankan police department is having a comprehensive training for officers in charge to train them to handle cyber bullying situations in western province. It is also stated that currently Sri Lanka is groping in the dark, as it is certainly a new area. And the current laws and regulations that are already in place are inadequate to tackle the day-to-day crimes that are different to another emerging due to technological advancements(Fazlullah, 2018).

"The female parliamentarians of Sri Lanka had requested a parliamentary committee to specially focus on this aspect and investigate it in the long run so that it leads to highlighting of laws and regulations to curb harassment on the internet."

The expert from SLCERT confirmed the findings made from the newspaper articles, with his statement about the parliamentary committee.

The model built on identified reasons

From the study that was conducted along with the questionnaire and interviews, the results obtained were put together as one model to understand the effect of cyber bullying. the factors raised forward by the respondents and the identified factors are collected to bring forward one simple model.

In the results of this research, it is evident that psychological trauma caused because of sensuality, hatred, and racism makes an effect towards the rate of cyber bullying. The interviewees mentioned that they believe that cyber bullying is taking place because of a psychological instability.

Based on the psychological states of the victim, the anger, sadness and need of stalking arises in the mean of victim's mindset whereas those emotions result in becoming a cyber bully in future. Also, the technological illiteracy was identified as one of the variables that directly involve towards the level of cyber bullying. As per the technological illiteracy, the school system in Sri Lanka and posting personal information without proper knowledge result in cyber bullying. Other than that, the inactiveness of legal framework is addressed and proved by the SLCERT official along with the newspaper articles.

With that it was possible to identify that the legal framework is also resulting towards the level of cyber bullying. With the findings the conceptual model was built and the below attached image gives the idea on the conceptualization model that was built.

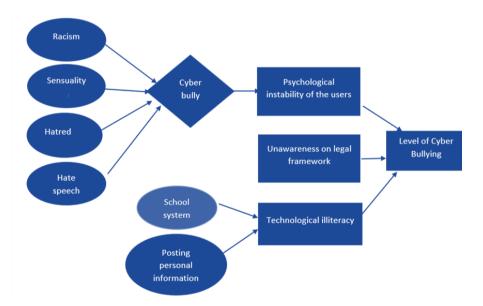


Figure 1: The Conceptual Model Built on Reasons That Lead Towards Cyber Bullying

Source: Compiled by the author

The main variables that were identified as root causes for cyber bullying were psychological instability of the users, unawareness on legal framework and the technological illiteracy. They are the independent variables of the study while the dependent variable is the level of cyber bullying. the dependent and independent variables are denoted through rectangles. The oval shaped factors are the sub variables which leads a cyber bully to be psychologically instable. The cyber bully is the person who cause the action and he is denoted through the diamond shape. It shows that the cyber bullying is undergoing the four sub variables of racism, sensuality, hatred and hate speech. Then again, another two sub variables are identified under technological illiteracy. The school system and posting personal information are denoted through ovel shape. They are the identified reasons that directly relate to technological illiteracy which eventually cause cyber bullying.

Identified ways to eliminate the root causes

With consideration to the identified root causes, it was necessary to bring forward ways and steps to eliminate them. Even though it is impossible to get rid of these issues completely, up to a certain extent these root causes can be reduced within the society.

Have close relationship with the family

As the adolescents are experiencing the society, it is much better if they keep close relationships with adults and parents. Whenever they are undergoing a trouble or have difficulties in figuring out the situations discussing with an experienced and grown person will resolve the troubles easily. Also, the close relationship with the family will support handling the emotions that the adolescents are going through. Based on the relationship of the adolescent and the parent, the education, psychology, and physical conditions are dependable.

Mostly those adolescents who have close relationships are having a less chance of getting exposed to cyber bullying. When the interview was conducted one interviewee who was 16 years old, living in Colombo, having a good relationship with parents and who had an idea on cyber bullying, gave her opinion to prove our recommendation

"I am using WhatsApp and Facebook through my mother's account, and she checks the phone regularly. I have introduced all my friends to my mother."

With that statement it was clear that if a child or a teen is having close relationship with adults then the exchange of information and mutual understanding is at a higher rate.

Increase the technological awareness

During this year most of the educational activities were conducted online. So, it is a must that the adolescents are getting proper knowledge on how to use the devices with security. Since the school students were not allowed to use phones and social

media accounts previously conducting awareness sessions to advise them to use the applications properly is a must (Al-badi et al., 2016).

When a device is introduced then the teen or the child should be explained the risks that they might get exposed to and they should be informed that they are been monitored regularly. When using social media, the users should be informed that they should not post personal data on the platforms.

Understand the psychology of the adolescents

The adolescents are in the stage of understanding the social phenomena. So, having a close relationship will allow the teachers and the adults to understand the psychology of the user. Initially there should be proper leadership to understand the associates. The whole school and the class should collaborate with each other to create an understanding interactive environment (Fazlullah, 2018).

Having anti-racist policies to allow education and survival to every human. Spread happiness and positive thoughts among the adolescents. Restrict violent behaviors and have a close supervision on the violent individuals

Have a change in the school system

Since the Sri Lankan school system is used to restrict students from using social media and technological devise, there should be a system change(Yildiz & Mustafa, 2020). Schools should be the first place that allows the students to use technology for betterment, they should be allowed to use devices properly and the students should be encouraged to see the benefits that they can gain through technology.

Also, the sessions should be conducted to raise awareness on risks that they might get exposed to if they are ignorant.

CONCLUSION

As the level of social media is rising high among the current society, there is a high risk of getting exposed to cyber bullying. The factors that lead towards cyber bullying are identified as psychological state, unawareness on the legal framework and the technological illiteracy. Apart from these factors, the sub variables that affect these factors are also identified along this study and the entire findings are concluded with possible and applicable solutions that can be adopted among the society of Sri Lanka. With these findings the adolescents of Sri Lanka and even any country who need proper awareness to use social media and internet properly can be guided. As per the findings, the unawareness of the legal framework, technological illiteracy, and the psychological instability are the most crucial factors that lead the rate of cyber bullying in Sri Lankan community. With proper awareness and sharing of knowledge on these identified factors, the Sri Lankan community can be turned over a new leaf with the hope that the cyber-crime rate will eventually decrease. The information gathered and analyzed can be utilized for the betterment of the adolescents. Those who are in danger can be protected by giving relevant necessary knowledge.

be used within the school framework and put the foundation to start the way towards minimizing this social debacle. With further studies, more variables will be identified as causes that lead towards cyber bullying and methods will be forwarded to mitigate the risk of those root causes

Abbreviations

SLCERT - Sri Lanka Computer Emergency Readiness Team

Acknowledgements

This research was not funded by any organization. Mr. Kanishka Yapa, and Ms. Sumudu Munasinghe are deeply gratified for the immense support they forwarded in completing the data collection and the data analysis.

REFERENCES

- Al-badi, A. H., Mahrouqi, S. al, & Ali, O. (2016). *The Influence of the Internet on Teenagers ' Behaviour in Oman. 2016.* https://doi.org/10.5171/2016.
- Allen, K., Ryan, T., Gray, D. L., & Waters, L. E. (2014). Social Media Use and Social Connectedness in Adolescents : The Positives and Social Media Use and Social Connectedness in Adolescents : The Positives and the Potential Pitfalls. (July). https://doi.org/10.1017/edp.2014.2
- Cilliers, L., & Chinyamurindi, W. (2020). Perceptions of cyber bullying in primary and secondary schools among student teachers in the Eastern Cape Province of South Africa. (August 2019), 1–10. https://doi.org/10.1002/isd2.12131

Cyberbullying research: The current state. (2009). 24(1), 10–15.

- D, J. W. P. P., & D, S. H. P. (2013). Cyberbullying Among Adolescents : Implications for Empirical Research. *Journal of Adolescent Health*, 53(4), 431–432. https://doi.org/10.1016/j.jadohealth.2013.07.030
- Fazlullah. (2018, May 12). Groping in the dark. *Sunday Times*. Retrieved from https://www.sundaytimes.lk/210307/news/sri-lanka-groping-in-the-dark-onhow-to-deal-with-cyber-bullies-434821.html
- Heffer, T., Good, M., Daly, O., Macdonell, E., & Willoughby, T. (2019). The Longitudinal Association Between Social-Media Use and Depressive Symptoms Among Adolescents and Young Adults : An Empirical Reply to Twenge et al. (2018). https://doi.org/10.1177/2167702618812727
- Hinduja, S., & Patchin, J. W. (2011). Preventing School Failure : Alternative Education for Children and Youth Cyberbullying : A Review of the Legal Issues Facing Educators Cyberbullying : A Review of the Legal Issues Facing Educators. 4387. https://doi.org/10.1080/1045988X.2011.539433

- Kalender, M. K., Technology, I., Keser, H., & Technology, I. (2018). World Journal on Educational Technology : Current Issues. 10(4), 25–36.
- Nocentini, A., Calmaestra, J., Schultze-krumbholz, A., & Ortega-ruiz, R. (2010). *Cyberbullying: Labels, Behaviours and Definition in Three European Countries.* (September 2014). https://doi.org/10.1375/ajgc.20.2.129
- Olweus, D. (2016). *Cyberbullying : An overrated phenomenon ? Invited expert discussion paper Cyberbullying : An overrated phenomenon ?* (December). https://doi.org/10.1080/17405629.2012.682358
- Ortega-ruiz, R., & Núñez, J. C. (2012). SECCIÓN ESPECIAL : Bullying y Cyberbullying Bullying and cyberbullying : Research and intervention at school. 24, 603–607.
- Solms, R. von, & Niekerk, J. van. (2013). From information security to cyber security. *Computers & Security*, 38, 97–102. https://doi.org/10.1016/j.cose.2013.04.004
- UNICEF. (2018). Cyberbullying: What is it and how to stop it. Greenwich.
- Victoria State Givernment. (2019). Racist Bullying. Victoria.
- Waterford. (2020, September 14). What Educators Need to know about Social Media, Online Bullying, and Hate Speech in Schools. *Waterford*, p. 13.
- Watts, L. K., Wagner, J., Velasquez, B., & Behrens, P. I. (2017). Computers in Human Behavior Cyberbullying in higher education : A literature review. *Computers in Human Behavior*, 69, 268–274. https://doi.org/10.1016/j.chb.2016.12.038
- Yildiz, H., & Mustafa, D. (2020). Examination of the Relationship between Cyberbullying and Cyber Victimization. *Journal of Child and Family Studies*, 2905–2915. https://doi.org/10.1007/s10826-020-01768-4