

## Cyber Patrol – A Cyber Bullying Solution

**Akash Balachandar, Anusha D Kulkarni, Ashwini N Shetty, Kiran Kumari Patil**

School of C & IT, REVA University, Bangalore, India

*Corresponding Author: balachandar.akash@gmail.com*

DOI: <https://doi.org/10.26438/ijcse/v7si14.137140> | Available online at: [www.ijcseonline.org](http://www.ijcseonline.org)

**Abstract**— Bullying has many forms like invalid criticism, intimidation, false allegations, bantering, humiliation or unnecessary written warnings. In this age of connectivity cyber bullying exists at workspace and even in schools or colleges. We have a simple yet effective solution, which we provide by the means of our platform. Administration or a cautionary oversight is all that’s required at times to prevent an individual from going down the wrong path and in this belief that we provide the concerned parents or some representative peer an automated management system to watch over the day to day communicate by providing remote access. This is a survey of facts and figures, using which we will implement data analysis and analytics techniques to effectively extract useful insights. These insights help us assimilate the depths of the problem domain. Using this information, we will effectively counter cyberbullying in all its various forms.

**Keywords**— Cyberbullying, Automated System, Data Analysis, Data Analytics

### I. INTRODUCTION

The growing influence of technology has produced favourable results as well as adverse consequences. This can be witnessed by the advancement in internet technology, While the internet is playing a pivotal role in sharing information and accumulating knowledge from across the world, it has also given rise to the action of anonymity. This threat is not specific to any age group or ethnicity. Cyberbullying is the new age evil.

According to Olweus, the definition of bullying can be stated as "A person is bullied when he or she is exposed, repeatedly and over time, to negative actions by one or more individuals and he or she has difficulty defending themselves."

With the wide spread popularity of the internet and its application, we see a lot of people engrossed on social networking sites where they tend to share their personal information and are in the public view. This is used by the online tyrant to bully others for the sake of entertainment. Hence, we require an appropriate autonomous management technology in place to monitor and prevent the bullies from negatively affecting other individuals.

Social networking sites like Facebook, Instagram, WhatsApp, Snap Chat along with Email messengers act as a conduit for cyberbullies to target and reach innocent people. Cyberbullying is mostly centred on criticising a person’s race, sexuality, physical appearance etc.

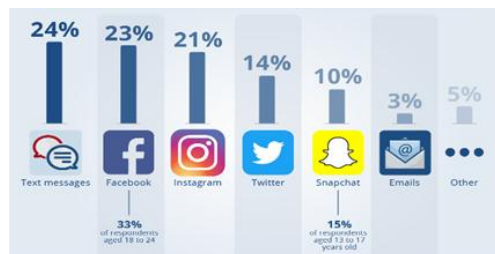


Figure 1. On what communication tools is cyberbullying really occurring.

Bullying is hurting someone from your actions or words. This may include physical or verbal assault, spreading rumours, gossiping, posting curse words or explicit comments online and stalking. Some of the common forms of Cyberbullying are listed below.

- Masquerade:** Involves a person logging in on a social platform with another person’s identity to either bully a victim or ruin the person’s reputation.
- Flaming or bashing:** Involves a heated argument between two people where they criticise each other. Generally, they use explicit language in their posts.
- Trolling:** Involves disagreeing or degrading a person by the means of a post, usually to provoke a fight.
- Cyberstalking and cyberthreats:** Gathering a person’s personal information for invidious intentions and sending threats or violent messages via online chat.
- Harassment:** Pressurising or intimidating someone by sending offensive texts repeatedly for an extended period of time.

•**Flooding**: consists of the bully monopolizing the media so that the victim cannot post a message.

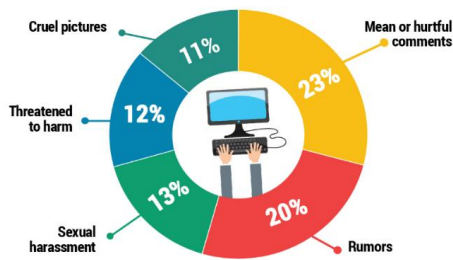


Figure 2. Types of Cyberbullying.

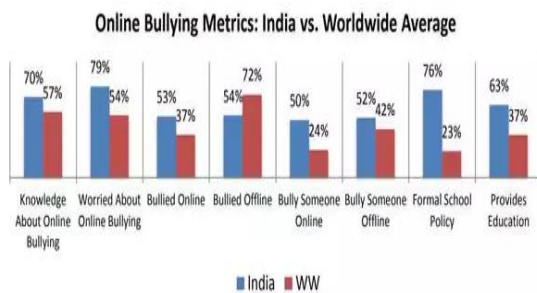


Figure 3. Online Bullying Metrics India vs World.

These difficulties make it necessary to develop an intelligent system which is autonomous in managing the various situations and provide the following facilities

- A platform that is Reliable.
- A platform that is Available.
- The platforms that provides security against cyberbullying without breaking privacy.
- Should be easy to Use for the admin and the user.

### MOTIVATION

According to the study conducted by “Ipsos”, one in three parents have reported about being aware of a kid that is a victim of cyberbullying in their community. The percentage of parents reporting the same has increased significantly since 2011. Even though there are increasing global awareness programs against cyberbullying, there are still about one quarter of adults globally who have not heard of it yet face or have faced cyberbullying at some point in their life.

Cyber bullying is a serious issue that diffuses through social and private lives of people from all walks of life leaving a lasting effect on them. Recent studies show that over half of the teenage group are bullied online and concurrently equivalent numbers have occupied in cyber-bullying. Although cyber-bullying is not noxious as usual conventional bullying, it is still a menace in the society.

### SOCIAL RELEVANCE

Generally, the bullying is done by the seniors or the peer’s that’s right hierarchy plays a key role. Bullying and harassment at work place or in a school environment leads to terrible effect on the mental health and performance of the individual. In India currently, there are no proper laws to observe and protect individuals against individuals so the schools and companies are being forced to adopt new ineffective redundant methods to provide a safe environment for their fellow members.

### II. RELATED WORK

Cyberbullying involves using information to hurt others. Researchers studied that this has a greater impact than traditional bullying. The observations of the study showed that 99% of students using the internet are more prone to cyber bullying. Out of this 14.1% were reported of being bullied often, 56.5% reported that the cyber-bullying lasted 1 to 2 weeks, 18.8% reported it lasting for a month, and 10.1% revealed that it lasted several years. [1]. They also found that a person who uses a lot of internet is more likely prone to cyberbullying. And also, females are more prone to be bullied.

According to Willard there are nine forms of bullying. Flaming is online fights with rude and obscene language. Harassment is where the person gets insulting messages from the cyberbully over the internet. Denigration is posting rumours about a person which may affect his reputation and career. Impersonation is pretending to be a different person in order to get someone in trouble. Outing is sharing private information without their consent. Trickery is tricking people into revealing information about themselves or their friends and sharing it online.

Exclusion is intentionally excluding someone from an online group. Cyberstalking is repeated harassment and denigration to build fear in the victim. Cyber Threats are threats which portrays that the writer is depressed or trying to kill themselves or harm someone else.[2]

Awareness of cyberbullying is the highest in Sweden and Italy with 91% each and lowest in Saudi Arabia with 37%. Italy has seen the greatest increase in awareness of cyberbullying, from 57% aware in 2011 to 91% now. The United States has an awareness of 85%.[3]

### III. METHODOLOGY

The Application Designing is a process of defining the interaction between the users. The programmer will determine and define the conversational personality, the questions that will be asked and the overall interaction, this is actually an extract from the conversation analysis which will

be carried out autonomously once sufficient training data is accumulated. The administrator can modify the training by inducing specific words that are native to the user. To train this system we require specialised conversational dialogues. The admin can monitor the user for any regressive behaviour towards others and vice versa and any corrective action and or measure if needed can be taken.

## SCHEMA

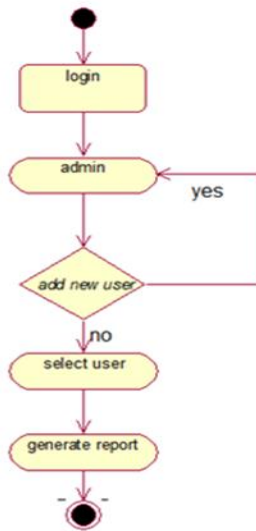


Figure 4. Admin Flow Diagram.

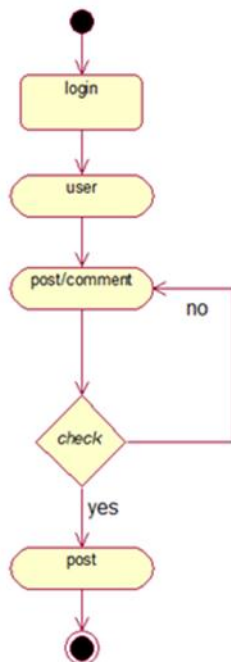


Figure 5. User Flow Diagram.

## OBJECTIVES

The objective of this system is to sight the signs which are indicative of being bullied or bullying others. Promote healthy use of technology, relieve emotional stress from past experiences. Avoid child becoming depressed around people and in activities.

Avoid Publishing something online that is harmful, mean or embarrassing. Protect against posting a hurtful picture or video. Extinguishing the thoughts of threatening to kill themselves or hurt someone else, obstruct being blackmailed into doing something unwelcome or simply pretend to be someone else in order to ruin or undermine someone by posting false information.

The core objective is to extinguish the new age evil that is cyberbullying by spreading awareness and providing a conducive atmosphere for users to share their experience and promote a healthy conversation between the parent and the child about these pressing issues.

## IV. RESULTS AND DISCUSSION

This System provides a convenient, safe, quick insight into the troubles of the user. Using this information coupled with a reliable process can defuse the situation effectively. Real time monitoring and reporting helps correct the errored. This platform helps make the world a safer place for young teens and helps bring the family closer by the inclusive principle this platform is based on.

## V. CONCLUSION AND FUTURE SCOPE

The solution aims to limit the exposure of the individual to various forms of harassment and bullying. This implementation will help individuals understand and also expose harassment if they exist in the organisation.

With the help of the data we can train the system better, perform data analytics to identify and analyse the various patterns in cyberbullying. Automate the system to update the database and also perform other RT reporting Features.

## ACKNOWLEDGMENT

We like to extend the warmest thanks to our guide and mentor Dr. Kiran Kumari Patil, for guiding us on the right path to complete our project. Her constant encouragement, support and feedback has helped us in staying motivated till the end. We are also thankful and fortunate to have a continuous support of all the teachers of C & IT department for approving our project and helping in the successful completion of the same.

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**Authors Profile**

Akash Balachandar, Anusha D Kulkarni, and Ashwini N Shetty are students pursuing a Bachelor of Technology in Computer Science and Engineering and are currently in their final year in REVA University, Bangalore, India..

Dr. Kiran Kumari Patil, Director, Skill Development & University Industry Interaction Center, REVA University, Bangalore, India.

Aforementioned authors have contributed equally.