## **Thoughts on Cyberbullying**

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#### Abstract:

Cyberbullying is a cybertrust issue that does not get much attention until after an incident occurs. It is hard to tie it directly to security or privacy. It is its own threat category, fitting between security, safety, and privacy. It is a social and societal issue, a cowardly action attempting to hide behind a virtual shield. Fortunately, digital forensics can usually unmask this.

**Keywords:** Computer crime | Consumer protection | Human factors | Behavioral sciences | Social networking | Ethics | Privacy

#### Article:

Cyberbullying is a targeted online weapon used by online off enders to inflict psychological and emotional harm to Internet users. According to a Pew Research Center survey from September 2018, 59% of U.S. teens had been bullied or harassed online.<sup>1</sup> Often, the off enders are family, friends, and other persons that the victims know and trust. For example, in cyberbullying incidents where children and young adults are victims, friends or dating partners are seven times more likely than other people to be off enders.<sup>2</sup> In a survey conducted in 28 countries, 51% reported that the off enders in cyberbullying are classmates of cyberbullied children. The proportion was the highest in North America (65%) and the lowest in the Middle East/Africa (39%).<sup>3</sup> In most developed countries, cyberbullying is regarded as an important issue. In the United States, First Lady Melania Trump has made it a focus of her initiatives.

The seriousness of this issue has led to the emergence of new forms of cyberinsurance to protect against cyberbullies. Some insurers, such as American International Group (AIG) and the Arbella Insurance Group, have coverage options for cyberbullying, including coverage for costs incurred after a cyberbullying attack, e.g., legal expenses, temporary relocation expenses, and private tutoring. The Family CyberEdge policy, a new product from AIG, includes coverage for one year of psychiatric services if a family member is victimized by cyberbullying. Lost salary is also covered if the victim loses a job within 60 days.

# GEOGRAPHIC, DEMOGRAPHIC, ECONOMIC, AND SOCIOCULTURAL FACTORS

There are geographic, demographic, economic, and sociocultural variations in the awareness, patterns, and prevalence of cyberbullying. For instance, according to a study conducted in 28 countries by the global market research and consulting firm Ipsos, 75% of adults were aware of cyberbullying. However, the awareness varied from the highest in Sweden and Italy (91% each) and lowest in Saudi Arabia (37%).<sup>3</sup>

In the Ipsos study, 65% of parents reported that they know that this behavior takes place on social-networking sites.<sup>3</sup> This proportion was higher in Latin America and the lowest in the Asia-Pacific region (Table 1).

There are also gender and economic dimensions of cyberbullying. For instance, girls are more likely to be victims of cyberbullying than boys, and poor children are more likely to be victims of cyberbullying than children from wealthier families.<sup>3</sup>

There are also racial differences in terms of the perception of the seriousness of cyberbullying. For instance, in the United States, parents in general regard cyberbullying as among their top concerns related to their children's health and well-being. Among African-American parents specifically, however, cyberbullying was a relatively lower concern when compared to other social issues (Table 1).

Factor	Findings	
Geography	Ipsos' Global Advisor study was conducted in 28 countries. The proportion of parents who reported that their own children or other children they knew were cyberbullied and that the harassing behavior took place on social-networking sites was 76% in Latin America compared to 53% in the Asia-Pacific region. <sup>3</sup>	
Gender	A Pew Research Center survey <sup>1</sup> shows that, in the United States, 39% of girls were reported to be victims of false rumors online compared to 26% of boys; 29% of girls reported that they received unwanted explicit images compared with 20% of boys, and 15% of teen girls had become targets of four or more different forms of cyberbullying compared with 6% of boys. <sup>1</sup> In India, about 90% of cyberstalking victims are women. <sup>12</sup> In the Democratic Republic of Congo, women and LGBT groups are frequently targeted by cyberbullies. <sup>15</sup>	
Economic	According to Ipsos' Global Advisor study, in the United States, 24% of teens from families with annual household income lower than US\$30,000 a year had been the target of physical threats online, as compared with 12% of those with annual household income of US\$75,000 or more. <sup>3</sup>	
Race	According to a national U.S. survey of C.S. Mott Children's Hospital on Children's Health, University of Michigan, bullying and cyberbullying were the most serious concerns parents had about their children's health, followed by Internet safety. For African-American parents, racial inequities and school violence were bigger concerns. <sup>16</sup>	

Table 1. Geographic, demographic, economic, and sociocultural factors linked to cyberbullyingFactorFindings

#### ADDRESSING CYBERBULLYING

So what can be done to protect children from the psychological and emotional harm that results from cyberbullying? Table 2 shows coordinated efforts at various levels.

Fortunately, laws dealing with cyberbullying are evolving. The European Union's (EU's) General Data Protection Regulation (GDPR) has provisions that aim to protect children from cyberbullying and other misuse of information by social-media websites. The preamble to the

GDPR states that children are "less aware of risks, consequences, safeguards, and their rights" related to personal data and often aren't able to take measures to control what is likely to happen with their personal data. The GDPR emphasizes the roles of parents and parental consent. Social networking sites require parental consent before they process children's information.<sup>5</sup> In practice, this could mean that those under 16 years old may need to obtain their parents' permission to use social media.<sup>6</sup> Individual EU member states can also lower the age required for parental consent from 16 years to as low as 13.<sup>7</sup>

Actors	Possible actions	Examples
Regulators	Pass stricter laws that might discourage cyberbullying activities.	In Michigan, a "pattern of repeated harassment" is a felony that carries a penalty of up to five years in prison and a \$5,000 fine. <sup>17</sup> In The Netherlands, cyber offenders who engage in cyberbullying and harassment may face a prison sentence of up to 10 years. In 2018, a Dutch appeals court upheld this maximum prison sentence for a convicted cyberbully. <sup>20</sup>
Law enforcement agencies	Train law enforcement.	In Illinois, police officers assigned to protect schools are required to undergo training focused on cyberbullying. <sup>21</sup>
educational	Educate students about cyberbullying's psychological and legal implications and present to them actual case studies of cyberbullying. <sup>22</sup> Invest in technical solutions, such as monitoring or blocking software to detect cyberbullying activities on school networks. <sup>23</sup>	Seattle Public Schools participated in a pilot program with iCanHelpLine.org where subscribers can discuss issues related to student cyberbullying on social media. iCanHelpline.org works with social media organizations, such as Instagram, Snapchat, and Twitter, to delete content. <sup>18</sup>
Technology companies	Develop advanced technical tools.	Credit report and identity theft protection company Identity Guard uses artificial intelligence to monitor social media feeds and identify behavior that can be considered cyberbullying. It uses IBM Watson to enable natural language processing and natural language classifiers. Complex algorithms identify potential cyberbullying instances and send alerts to parents. These alerts also include screenshots with dates and times of related content that triggered the warnings. Parents are then guided to resources, such as relevant laws and school policies, so that they can respond effectively. <sup>24</sup>
Parents, guardians, and caregivers	Discuss Internet and cell phone etiquette. Talk with children about cyberbullying.	A survey of parents of teenagers found that more than 75% of parents discussed cyberbullying with their children, 86% joined their children's online social network to monitor interactions, and 67% monitored the security settings on their children's social media accounts. <sup>25</sup>
Social arbiters e.g., press, governance watchdog groups, academics, and activists)	Create awareness about cyberbullying. Encourage victims to report abuses.	The nonprofit organization End to Cyberbullying (ETCB) has taken initiatives to raise awareness about cyberbullying. It works with students, educators, and parents. The ETCB has hundreds of volunteers worldwide. <sup>19</sup> The Family Online Safety Institute (FOSI) works with the industry, government, and other nonprofit organizations to address problems related to cyberbullying. FOSI also uses forums, conferences, special events, and YouTube to promote online safety. <sup>18</sup>

Table 2. Measures to address cyberbullying

In the United States, the 50 states, the District of Columbia, and U.S. territories have each taken various regulatory measures to addresses bullying in general and cyberbullying in particular.<sup>8</sup> Some parents of cyberbullying victims have filed lawsuits against alleged bullies or schools for failing to protect their children. In early 2018, a Pennsylvania family sued Sean Davis, a player on the Pittsburgh Steelers football team, for cyberbullying the family's teenage son. The family

accused Davis of posting a video on the social-media platform Snapchat that mocked the teen's work at a Chick-fil-A drive-through.<sup>9</sup>

Many developing countries, on the other hand, lack laws that criminalize cyberbullying. As of 2016, China and Russia had no specific laws against cyberbullying. In Russia, cyberbullying is theoretically covered by conventional laws against violence or murder.<sup>10</sup>

Many other developing countries lack even basic cybercrime laws. According to a November 2016 report of the African Union Commission and the cybersecurity firm Symantec, only 11 countries in Africa had specific laws and provisions in place to deal with cybercrime and electronic evidence. An additional 12 countries had taken at least some legislative measures, albeit limited. In May 2018, Kenya enacted a law that criminalizes cyberbullying.<sup>11</sup> The Democratic Republic of Congo has no laws to protect people against cyberbullying. Prosecution for such offenses is nonexistent.<sup>10</sup> Enactment of laws that criminalize cyberbullying is important to combat this problem.

There are also law-enforcement challenges in addressing these offenses. In India, the unsupportive attitudes of law-enforcement agencies and their unwillingness to help victims have contributed to a low reporting rate of cyberbullying cases.<sup>12</sup> To fight this problem, law enforcement must be better prepared.

Parents and caregivers can also play a key role in helping children deal with cyberbullying. A study found that "authoritative" parents who listen to their children and provide guidance can help reduce the impact of cyberbullying.<sup>13</sup>

Cyberbullies as well as victims may be stigmatized, and victims may also suffer secondary victimization. Note that primary victimization occurs when a person becomes a victim of the act itself. Some mechanisms involved in primary victimization include physical/psychological suffering or financial losses. Secondary victimization takes place due to actions in the victim's social environment. Key mechanisms involved in secondary victimization include stigmatization, social isolation, and intrusive and humiliating questioning. Secondary victimization can also occur when journalists use faulty and insensitive practices in gathering or reporting news or when the criminal justice system takes inappropriate actions. Schools should have multiple avenues for reporting cyberbullying so that victims are not stigmatized.<sup>14</sup>

Cyberbullying can be as destructive as traditional bullying. However, parents often have a low level of awareness of this form of bullying. How people view and respond to this issue is shaped by various geographic, demographic, and racial differences. Constructive and supportive actions of parents can reduce the harm that cyberbullying causes. Organized and systematic responses by governments and law-enforcement agencies and by social arbiters, such as the press, governance watchdog groups, academics, and activists, can also play a role in fighting cyberbullying.

#### References

**1.** M. Anderson, "A majority of teens have experienced some form of cyberbullying", *Pew Research Center*, Sept. 2018, [online] Available: <u>http://www.pewinternet.org/2018/09/27/a-majority-of-teens-have-experienced-some-form-of-cyberbullying/</u>.

**2.** J. White, "How to keep cyberbullies out of your life", *Inc.*, Oct. 2017, [online] Available: <u>https://www.inc.com/john-white/how-to-keep-cyberbullies-out-of-your-life.html</u>.

**3.** M. Newall, "Cyberbullying: A global advisor survey", *Ipsos*, 2018, [online] Available: <u>https://www.ipsos.com/sites/default/files/ct/news/documents/2018-</u>06/cyberbullying\_june2018.pdf.

**4.** Data Protection Directive or General Data Protection Regulation: Which one is for you?, Sept. 2017, [online] Available: https://www.betterinternetforkids.eu/web/portal/practice/awareness/detail?articleId=2258465.

**5.** *Can personal data about children be collected?*, [online] Available: <u>https://ec.europa.eu/info/law/law-topic/data-protection/reform/rights-citizens/how-my-personal-data-protected/can-personal-data-about-children-be-collected\_en.</u>

**6.** V. Verdoodt, *Children's access to social media and the GDPR – 'Please mom can I go on Facebook?'*, Aug. 2016, [online] Available: <u>https://www.law.kuleuven.be/citip/blog/childrens-access-to-social-media-and-the-gdpr-please-mom-can-i-go-on-facebook/</u>.

7. J. Průša, *Beware of encouraging pupils to use social networks and messengers*, Sept. 2018, [online] Available: <u>https://en.blog.nic.cz/2018/09/27/beware-of-encouraging-pupils-to-use-social-networks-and-messengers/</u>.

**8.** "Laws & Policies", Jan. 2018, [online] Available: <u>https://www.stopbullying.gov/laws/index.html</u>.

**9.** "Family sues Steelers' Sean Davis alleging cyberbullying", *USA Today*, Feb. 2018, [online] Available: <u>https://www.usatoday.com/story/sports/nfl/steelers/2018/02/27/sean-davis-pittsburgh-steelers-cyberbullying-lawsuit/377666002/</u>.

**10.** N. Kshetri, "Cybercrime and cybersecurity in India: Causes consequences and implications for the future", *Crime Law Social Change*, vol. 66, no. 3, pp. 313-338, 2016.

**11.** A. Schwarz, "Kenya signs bill criminalising fake news", *Mail & Guardian*, May 2018, [online] Available: <u>https://mg.co.za/article/2018-05-16-kenya-signs-bill-criminalising-fake-news</u>.

**12.** P. K. Roy, "Why online harassment goes unpunished in India", *BBC News*, July 2015, [online] Available: <u>https://www.bbc.com/news/world-asia-india-33532706</u>.

**13.** A. Baird, "Best defenses against cyber bullies", *Scientific American*, Aug. 2010, [online] Available: <u>https://www.scientificamerican.com/article/best-defenses-cyber-bullies/</u>.

**14.** P. K. Smith, F. Thompson, "The best way to stop bullying: Get the cool kids to stick up for the victims", *Washington Post*, Aug. 2014, [online] Available: <u>https://www.washingtonpost.com/posteverything/wp/2014/08/08/the-best-way-to-stop-bullying-in-schools/?utm\_term=.bb405af86c8c</u>.

**15.** K. Lyons, T. Phillips, S. Walker, J. Henley, P. Farrel, M. Carpentier, "Online abuse: How different countries deal with it", *The Guardian*, Apr. 2016, [online] Available: <a href="https://www.theguardian.com/technology/2016/apr/12/online-abuse-how-harrassment-revenge-pornography-different-countries-deal-with-it">https://www.theguardian.com/technology/2016/apr/12/online-abuse-how-harrassment-revenge-pornography-different-countries-deal-with-it</a>.

**16.** Bullying and cyberbullying top parents' list of worries new report reveals, Aug. 2017, [online] Available: <u>https://www.news-medical.net/news/20170821/Bullying-and-cyberbullying-top-parents-list-of-worries-new-report-reveals.aspx</u>.

**17.** L. Devito, "Cyberbullying is now a crime in Michigan punishable by jail time", *Detroit MetroTimes*, Dec. 2018, [online] Available: <u>https://www.metrotimes.com/news-hits/archives/2018/12/28/cyberbullying-is-now-a-crime-in-michigan-punishable-by-jail-time</u>.

**18.** *District partners to stop bullying on social media*, Sept. 2017, [online] Available: <u>https://www.seattleschools.org/district/calendars/news/what\_s\_new/district\_partners\_to\_stop\_bu</u> <u>llying\_on\_social\_media</u>.

**19.** E. Kaough, "Combatting cyberbullying: Government NGO and the private sector", [online] Available:

https://www.gov.il/BlobFolder/reports/cyberbullying\_brief/en/cyberbullying%20brief%2001.13.pdf.

**20.** "Dutch court upholds maximum sentence for cyberbully", *660 News*, Dec. 2018, [online] Available: <u>https://www.660citynews.com/2018/12/14/dutch-court-upholds-maximum-sentence-for-cyberbully</u>.

**21.** "Illinois school resource officers to undergo training", *NBC Universal*, Aug. 2018, [online] Available: <u>https://www.nbcchicago.com/investigations/Illinois-School-Resource-Officers-to-Undergo-Training-491310131.html</u>.

**22.** M. Clifford, "15 strategies educators can use to stop cyberbullying", *informED*, Oct. 2012, [online] Available: <u>https://www.opencolleges.edu.au/informed/features/15-strategies-educators-can-use-to-stop-cyberbullying/</u>.

**23.** C. Page, "Striking back at the cyberbullies", *BBC News*, Apr. 2006, [online] Available: <u>http://news.bbc.co.uk/2/hi/uk/4912766.stm</u>.

**24.** T. Meier, *AI technology helps protect teens from cyberbullying*, Feb. 2018, [online] Available: <u>https://www.ibm.com/blogs/client-voices/ai-technology-protect-teens-cyberbullying/</u>.

**25.** *Cyberbullying a big worry for parents: Survey*, July 2011, [online] Available: <u>https://consumer.healthday.com/health-technology-information-18/misc-computer-health-news-150/cyberbullying-a-big-worry-for-parents-survey-654818.html</u>.