21st Century Cyberpsychology: Adolescent Cyberbullying

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21ˢᵗ century information technology has developed at a rapid pace making electronic devices more widely affordable. Adolescents in urban and rural communities within the United States have gained utility with their Internet connected devices as social instruments. This paper analyzes a problem concerning the types of interventions on how adolescents are exposed to Internet connected devices and ways misuse of device can lead to cyberbullying behaviors. These behaviors have been the subject in multiple disciplines such as criminal justice, education, or cyberpsychology, and have also been associated with poor mental health outcomes (Paulich et. al., 2021, p. 1).

Requisite understanding for this analytical report considers the Internet as a location, a cyberspace. Due to the proliferation of electronic devices within the past two decades, since 2001, this analysis accepts the word 'device(s)' to imply electronic and Internet connected. The first national cyberbullying crime legislation in the United States (US) was proposed in 2008, following the tragic events that lead 13-year-old Megan Meier, to take her own life (McQuade et. al., 2009, p. 5). The Megan Meier Prevention Act was introduced to Congress in January of 2009, but not passed in the Senate or signed into law by the President (GovTrack.us).

The proposed Act defines criminal cyberbullying as the transmission "in interstate or foreign commerce any communication," using a device with the intent to "cause substantial emotional distress to a person," carrying a maximum sentence of two years imprisonment (GovTrack.us). The act of cyberbullying generally "involves hurting someone else using information communication technologies," suggesting, in all cases, a psychological infliction of

pain (Nixon, 2014, p. 143). Another important concept to define is the "'disinhibition effect,'" which deals with the disembodied nature of cyberspace, enabling perpetrators to disassociate pain induced by communications (Nixon, 2014, p. 143). This insinuates that apathy can not only contribute to, but may also enhance the level of cybervictimization.

Two recently conducted national surveys involving adolescent teens shows a relationship between time spent on their devices and the likelihood to report mental health issues (Twenge, 2019, p. 373). 2011 marked the first time the biannual, Centers for Disease Control and Prevention (CDC) operated Youth Risk Behavior Survey (YRBS) queried responses regarding cyberbullying (Messias, 2014, p. 1064). Two samples from said survey, one from the Midwest the other from Arizona, showed an "association between cyberbullying and teen suicidality," (Messias, 2014, p. 1064). Adolescents are also "more likely to be associated with cyberbullying victimization," if they suffer from some mental health disorder (Zhu et. al., 2021, p. 6).

Cyberbullying takes on many forms, and differ from adolescents to adults. While it is not impossible for adolescent victims of cyberbullying to experience cyberblackmail or doxing[1], for example, it is more likely they experience one or more of the following: cyberstalking, denigration, exclusion, flaming, masquerading, online harassment, or outing/trickery (Stryton, 2015, p. 20). Cyberstalking, involves online information about a target to be perused by a perpetrator. This action may be a precursor of a greater attack. The perpetrator may sleuth for images, home address, the likes/dislikes of their target, or other personal information about a target's friends and family. Basically, anything that can be used to intimidate or embarrass the victim.

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[1] to publicly identify or publish private information about (someone) especially as a form of punishment or revenge. (Merriam Webster)

The idea of denigration has varying degrees of severity. This could be anything from insulting or denigrating messages communicated through devices designed to send a message unfairly criticizing an individual. In 2008, then ninth grader Billy Wolfe was repeatedly victimized by cyberbullies. In Wolfe's case, the cyberbullies were boys from his own class. In one such example, "a Web page on a social networking site called 'Everyone that Hates Billy Wolfe,'" was created. This site included a superimposed image of Billy's face on top of a popular cartoon, and the online audience posted hateful comments all aimed at the high-schooler (McQuade et. al., 2009, p. 6).

Exclusion is simply ostracizing someone unfairly from an online group. Flaming involves "sending angry, rude, vulgar messages about a person to an online group or to that person via email or other text messages" (Styron et. al., 2015, p. 23). Masquerading is understood easier as impersonation. Given the anonymity online it is possible for victims to be unaware that their online bully is someone they know in real life. Take for example the aforementioned Megan Meier, her cyberbully was actually two individuals posing as a teenage boy online. The reality was that the mother of a girl in Megan's peer group, masqueraded as the fictional teenage boy, 'Josh Evans' on MySpace to direct message Megan online, allegedly, to snoop on her own daughter. This cyberbully attack commenced with the help of an accomplice. Over time the conversation of the between the fake profile and Megan's went from friendly to harassing. Megan's final message to 'Josh' before she hung herself, was "' I just don't understand why u acttin like this,'" (McQuade, 2009, p. 5).

In all of the examples above online harassment was the underlining cyberbullying attack. Online harassment requires a perpetrator and target, such that the target is the recipient of repeated unwanted attention by the perpetrator. Finally, outing/trickery—usually occurs when a

cyberbully is known by the victim in real-life. The cyber-victim may initially trust the cyberbully. The perpetrator uses personal information about their target and discloses the personal information via a device. In the year 2003, after a series of cyberbullying attacks, Ryan Halligan, from the State of Vermont, committed suicide when he was 13. It is worth noting that Ryan had interacted with a girl online from his school. She used the information she learned about him online to betray his confidence in real life (McQuade, 2009, p. 5).

Demonstrating the significance of cyberbullying on a broader level demands frequent, representative studies. Each study conducted in the United States and around the world deploys a methodology that examines the responses of the survey participants. In a 2016 study, researchers surveyed both teachers and principals. Researchers collected surveys from participants regarding their perceptions and understanding of cyberbullying. The study found that while respondents were aware of the impact of cyberbullying, many indicated "preservice training," would be necessary to identify and respond to cyberbullying adequately (Styron et. al., 2015, p. 25). Most respondents were only "moderately aware of the extent," to which students carried out cyberbullying attacks. In short, "[t]hey did not know how to manage the problem when it occurred," the study concluded (Styron et. al., 2015, p. 25).

Another study used Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISRMA) methodology to aggregate the results of studies from around the world, pulling its sources from eight different databases. The literature review found that of the 63 aggregate studies consulted, 14 of those investigations were conducted on populations within the US. This makes up 22% of the total representation and placed the US at number one for "most frequently mentioned," followed by Spain and China (Zhu et. al., 2021, p. 4). The review concludes by saying, "research on effective prevention is insufficient and evaluation of policy

tools for cyberbullying intervention is a nascent research field," additionally; it included ideas for future research areas as well as intervention strategies (Zhu et. al., 2021, p. 10). In the closing section of this public health analysis such strategies will be summarized.

At this point in time, there are a plethora of studies conducted on adolescents regarding cyberbullying, both cross-sectional and longitudinal (Hutson, 2017, p. 76). Logistically, cohort or panel studies are the only types of longitudinal studies that can produce relevant data from the perspective of adolescents speaking to cyberbullying (Nixon, 2014, p. 154-155). Which is to say, a retrospective longitudinal study would not appropriately reflect the thoughts or behaviors of participants. At the time of this public health analysis, this writer has not discovered a study on adolescents regarding cyberbullying that involves any form of deception otherwise known as a single- or double-blind study.

A cross-sectional study conducted in 2016 within the US obtained a response rate of 15%, notably lower than comparative studies. In spite of perhaps higher expectations, the final sample size of the study (n=2,670) was still enough for statistical sufficiency. There was an even mix of males and females between the ages of 12 and 17, all of whom participated with parental consent and spoke English as their native language. The study measured *Suicidal Ideation and Suicide Attempt* as well as *Bullying Victimization* (both in school and cyberbullying) as dependent variables. The survey asked participants to respond to a questionnaire sent via email (Hinduja et. al., 2018, p. 336).

Below are a few questions from the survey:

> *"'Cyberbullying affected me at school…I was cyberbullied…Someone posted mean names, comments, or gestures about me with a sexual meaning…Someone threatened to hurt me while online…Someone threatened to hurt me through a cell phone*

text message…Someone posted a mean or hurtful picture online of me…Someone

pretended to be me online and acted in a way that was mean or hurtful to me…"

(Hinduja et. al., 2018, p. 337).

An alarming pattern emerges from the results of adolescent studies like these. Both targets and perpetrators of cyberbullying "were more likely to think about suicide, as well as attempt suicide," relative to those not associated with cyberbullying. Furthermore, those who had been victimized were nearly twice as likely to attempt suicide. Those identified as adolescent cyberbullies are reported 1.5 times more likely to attempt suicide, relative to the participants not associated with cyberbullying (Nixon, 2014, p. 135).

The vast majority of adolescent studies dichotomizes gender, thereby assuming cis gendered roles. One research analysis qualifies low gender disparities in their current study, first citing that "females have a markedly higher incidence rate of suicidal ideation," in this age range compared to males (Hinduja et. al., 2018, p. 339). That finding has to do with suicidal ideation with respect to cyberbullying. The previous finding disagrees slightly with another analysis which claims girls are more likely to be victimized since girl's use online social networking sites (OSNS) is reportedly higher than boys (Nixon, 2014, p. 6). Whereas girls and boys may spend a comparable amount of time online, "social media, may have larger effects on adolescent girls' mental health than on boys'," possibly due to differences in overall online behavior (Twenge, 2017, p. 13). Boys may play online video games, and girls may spend more time engaging with their classmates online (Twenge, 2017, p. 6, 12).

The distinction is nuanced since cyberbullying takes place in both OSNS and in other cyberspaces such as online video games. In the online gaming community, the level of

anonymity is inherently higher, so the disinhibition effect increases, which influence the level of cyberaggression. Flaming, exclusion and the more serious, swatting[2] are all possible forms of cyberbullying. By theory, the dissimilarity between the effects of online activity from video games and OSNS exists, since the cyberspace in gaming communities is more likely to be disjoint from the in-person communities formed around an individual. In cases where cybervictimization takes place via OSNS; for adolescents, the communities are more likely to be unified with the in-person communities formed around the victimized individual when compared to online gaming communities.

It is important to keep in mind that 'cyberbullying' is the characterization of a human behavior (Bottino et. al., 2015, p. 464). It is an extension of 'bullying' which, in its abstract, implements its methods from the set of antagonistic social responses based on maturity, personality type, and mental health (Ahuja et al., 2017, p. 673-675). What the act of 'bullying' is in response to, can be mapped to the consequence of one who has been bullied in the past. Those assertions form the opinion that a cyberbully is potentially the once victim of a cyberbullying attack. In the case of adolescent cyberbullies who also were once cyber-victims; it has been reported that they have poorer relationships with their caregivers when compared to their peers absent of cybervictimization (Nixon, 2014, p. 149). Beyond the association of substance abuse, caregiver disaffection, and increased offline bullying, little is known about the subgroup of cyber-bully/victims. What is known is that cyber-bully/victims are at greater health risk. Subsequently they "may require extra support from health care professionals, educators, and caring adults," to break the cycle of cyberbullying & victimization (Nixon, 2014, p. 149).

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[2] to make a false report of an ongoing serious crime in order to elicit a response from law enforcement (such as the dispatch of a SWAT unit). (Merriam Webster)

        After an individual has had a cyberbullying encounter, they should seek help from the

proper authority. For adolescents, the proper authority can be their caregiver, a school teacher,

counselor or principal. Caregivers should consider consulting healthcare providers to assess the

need for counseling for the adolescent (Hutson, 2017, p. 76). The authority should learn as much

as they can about the series of events leading up to the report, collecting and organizing

information as they conduct their investigation. This includes, messages, images, contacts, and

any offline nexuses between the adolescent and the perpetrator. If the cyberbully is unknown, it

may be indicated to seek the assistance of law enforcement to help with the investigation. It may

be necessary to fully resolve the identity of the cyberbully. Cyberbully incidents can rise to the

level of criminal activity depending on the severity and the identity of the cyberbully; for

example, in the tragic case of Megan Meier, the perpetrator was acquitted on the three felony

counts but convicted on misdemeanor charges (McQuade et. al., 2009, p. 5).

        Children who have made reports to authorities should be taken seriously and may require

medical attention for their emotional distress. While it may seem like name-calling to some

adults, the data supports that these situations are very impactful to a child's mental health.

Caregivers and educators should continually consume literature on this subject and promptly

intervene in cases were cyberbullying is detected (Zhu et. al., 2021, p. 9). Caregivers can play an

important role by monitoring their child's use of devices, even limiting screen-time to a smaller

number of hours weekly (Trolley, 2010, p. 78). Research on coping strategies mentions the

criticality of children feeling supported by their family in incidents involving cyberbullying

(Nixon, 2014, p. 151). The need for more research on coping strategies is echoed in this public

health analysis.

Fully mitigating cyberbullying would keep everyone, including adolescents, accountable in combating cyberbullying. Teaching staff and administration need to be fully aware of ways in which students are communicating on devices, with consideration to how society has functioned virtually with respect to the COVID-19 pandemic (Gabrielli et. al., 2021, p.10). Adolescents should be educated on cyber-etiquette and engage in age-appropriate lessons on the effects of bullying online. Cyberbullying education should be aimed at disproving misperceptions regarding bad online behavior, namely that bad online behavior is not to be normalized or ignored. Instructors should steer children away from retaliation and create conversation around disruption tolerance (Armstrong et. al., 2019, p. 15). These discussions can also express more generally, trust building ideas between adults and children, thereby opening a channel for adolescents to seek help or report bad online behavior in a timely fashion (Nixon, 2014, p. 152).

Up until now, this public health analysis has only mentioned children, caregivers, and schools as members involved in the cyberbullying mitigation or prevention plan. There has been no mention of corporations, or the software engineers involved in developing cyberspaces. Earlier it was mentioned; however, the role that lawmakers have in combating cyberbullying. New laws can hold cyberbullies criminally responsible for the most serious of offences; additionally, lawmakers have the power to regulate tech corporations. In the US the current laws protect corporations from liability since the Communications Decency Act was signed into law in 1996. This law was tested in 1997 during *Zeran V. AOL*, where it was upheld that the corporation America Online (AOL) being the Internet Service Provider (ISP) successfully argued it was a 'distributor' of Internet service opposed to a 'publisher' of Internet content. In another case *Stratton v. Prodigy Services Co.* (1999), the webservice, *Prodigy* claimed to be "family-oriented," losing grounds in a libel lawsuit since it can be reasonably construed from the

company's claim that they monitored the content provided by their service. As a result, *Prodigy* was considered a 'publisher' and not a 'distributor.' It is for this reason that legal experts believe, Internet companies distance themselves from appearing to, or claiming to monitor and police the content posted via their platforms. It simply helps those companies reduce liability (Shariff, 2011, p. 85-86).

To date, "there are no legal precedence to school negligence in supervision cases relating to cyberspace," (Shariff, 2011, p. 93). In one recent study, "[s]ubstantially meaningful relations between OSNS and well-being indicators were observed," suggesting positive outcomes for those with many online friends (Huang et. al., 2021, p. 13). US Congress has focused more on the role of OSNS and how their platforms demonstrate an addictive quality, especially for minors. More studies regarding screen-time specifically related to cyberbullying should be conducted to explore these parameters. Also related to this cyberpsychology review of adolescent cyberbullying is cyberaggression, adiposity (binge-eating), sleep-deprivation, porn addiction, and online-gaming addiction (Nagata et. al., 2021, p. 888).

The health of America's youth with respect to cyberspace is dependent on a priority shift. Lawmakers should carefully consider the findings from national and international studies and pass legislation that would hold criminal cyberbullies responsible for their actions. Lawmakers should also allocate resources to public schools to fund preservice training for school administration and faculty to detect and respond to cyberbullying. Funds for programs that educate children and their caretakers on cyberbullying must also be allocated regularly to ensure that an up to date and consistent message about the devastating impacts of cyberbullying is being delivered.

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