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THE CONNECTION BETWEEN CYBERBULLYING AND TEENAGE SUICIDE:

AN HONORS THESIS

by

Sierra Crosby

A Thesis Submitted in Partial Fulfillment
of the Requirements for a Degree with Honors
(Psychology)

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ABSTRACT

The act of bullying within school systems has existed for a very long time; so long that there are decades of research that investigate the negative psychological impacts of bullying. However, currently, bullying has taken on a cyber form thanks to the invention of the internet and all the social media apps that follow. Young adolescents are using social media apps like Facebook, Twitter, Tumblr, and Instagram to keep in constant contact with each other, but bullies have used this tool as another way to harass their victims and send cruel and threatening messages to their victims. Within the last fifteen years, cyberbullying has gained increased coverage in the news, especially when teenagers end their own lives following excessive bullying online and by text messages. In response, research has been conducted on cyberbullying and suicide, and legislation has been developed to regulate and establish consequences for cyberbullying. This thesis provides a systematic literature review of research that has been done on cyberbullying and suicide. It begins by defining cyberbullying and presenting some nationally publicized cases in which cyberbullying appeared to play a role in the victims' suicide. Next, characteristics of the bullies, as well as their motivations, are considered. Research on the relations between cyberbullying and suicide are then reviewed, with a discussion of limitations of these studies. Finally, a discussion of how the media have reported incidents of cyberbullying and suicide is provided, followed by a consideration of some of the school and legal policies concerning cyberbullying. With this thesis, I hope to bring more awareness of the issue of cyberbullying and inspire further scientific research as well as legal action and changes within schools.

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INTRODUCTION

Human beings have always been social creatures who need to form bonds and relationships with other human beings to help establish security and a sense of identity. The emergence of electronic communication has provided yet another tool to support people connecting with one another quickly and easily. However, this platform may be used by humans not only to build each other up, but also to tear each other down. In the modern digital age, cyberbullying, which involves electronically posting messages and images that are meant to harm someone, is especially used to ostracize anyone perceived as vulnerable. Unfortunately, some people fail to realize the consequence of cyberbullying until something very serious happens, including suicidal behavior.

One of the aspects of psychology is to study how actions and emotions influence human beings. This thesis will not only define cyberbullying, but also compare the progression of computers, internet, and social media apps to the rise of cyberbullying that has become prominently featured in the media, especially when some victims of cyberbullying have ended their lives, apparently to escape this harassment. Furthermore, this thesis will examine the characteristics and motivations of cyberbullies and review research that has been conducted within the twenty-first century. In addition to the review of research on cyberbullying, this thesis considers legal issues related to cyberbullying and what remains to be done about this problem.

What Is Cyberbullying?

Cyberbullying is often defined as “willful and repeated harm inflicted through the use of computers, cell phones, and other electronic devices [...it] involves sending

harassing or threatening messages (via text message or email), posing derogatory comments about someone on a Web site (such as Facebook or MySpace), or physically threatening or intimidating someone in a variety of online settings” (Hinduja & Patchin, 2010, p. 208). Like traditional bullying, cyberbullying is repeated behavior that is meant to harm the victim. But unlike traditional bullying, the platform through which the harm is caused is by technology. Cyberbullying is rather new, given the invention and proliferation of computers, internet, cell phones, and social media apps within the last twenty years. Unlike traditional bullies where the victims see their aggressors in the school hallways, on the playground, or in the cafeteria, cyberbullies are typically anonymous. Within cyberbullying there are two types: Cyberthreats and Cyberstalking. Cyberthreats involve “information posted online that agitates a person or a group of people to inflict violence against a targeted victim” (Breguet, 2007, p. 8). In addition, these threats may pressure victims to harm themselves. The threats can be direct (“I’m going to kill you”) and/or indirect (“What is the point of living? The world would be better off without you?”). Cyberstalking is the same thing as in-person stalking but it is done through online means. This involves repeatedly sending threatening emails to harass or scare the victim.

A common place for cyberbullying to take place is on online chat rooms. There are a few key terms when it comes to online bullying in chat rooms. “Flaming” is when cyberbullies send rude messages directed at their victim (Breguet, 2007). “Outing” is sharing someone’s embarrassing secrets or images. What often occurs is that bullies will engage with the victim and gain that person’s trust so that the victim will reveal private information and then the bully will turn around and share the private information for

everyone to see online. “Trolling” is when cyberbullies post deliberate false information in the hopes of getting innocent people to respond and contribute to harassing the targeted victim. Cyberbullying can occur through emailing as well such as hacking into the victim’s email account, posing as that person, and getting the victim into trouble for sending inappropriate messages. Sometimes, cyberbullies know their victims and sometimes they will go after people they have never met in person.

Many people consider cyberbullying to be more harmful compared to traditional bullying because teenagers who experience bullying only on school grounds can escape and feel safer when they are back home (Hindjura & Patchin, 2010; Mirsky & Omar, 2015). However, since much of bullying these days occurs online, and teenagers rarely turn off their phones, they continue to be bullied within their own home (Breguet, 2007). It is harder to escape from cyberbullying, because it basically can be a 24-hour-a-day/7-days-a-week experience. In addition, victims may review the comments/pictures repeatedly, and essentially be re-victimized. Another issue is that the audience can be unlimited. A negative post can be shared, and shared again. So, there can be no end to the embarrassment and humiliation of the victim. This kind of harassment has only been made possible due to the invention and progression of technology.

PATTERNS IN USE OF TECHNOLOGY OVER TIME

Computers have been around for many decades. The very first computers were big enough to take whole rooms. At first, the computer was born out of necessity to solve a serious number crunching crisis, not for entertaining people or communicating with others (Zimmerman, 2017). The first computer was not invented until the 1940s. Over time, the technology of computers improved to the point where smaller computers were produced for average people to use. By the 1970s, many personal computers hit the market including the well-known Apple products by Steve Jobs that continue to be on the market to this day. In 1981, the first IBM personal computer, 'Acorn,' was introduced. It used the Microsoft's MS-DOS operating system, which had an Intel chip, two floppy disks and an optional color monitor. Big brand technology stores such as Sears & Roebuck and Computerland sold the machines, making a computer available through outside distributors for the first time. During this time, the term PC was popularized. Wi-Fi was not introduced until 1999, and at that point in time, access to electronic communication began to increase substantially.

Computers and the internet came before social media. The very first social media site was Six Degrees in 1997. It allowed users to upload a profile and make friends with other people online. The first blogging sites became popular in 1999 (Hendricks, 2013). Throughout the early twenty-first century, social media apps were constantly being developed and becoming popular rapidly as seen in Figure 1.

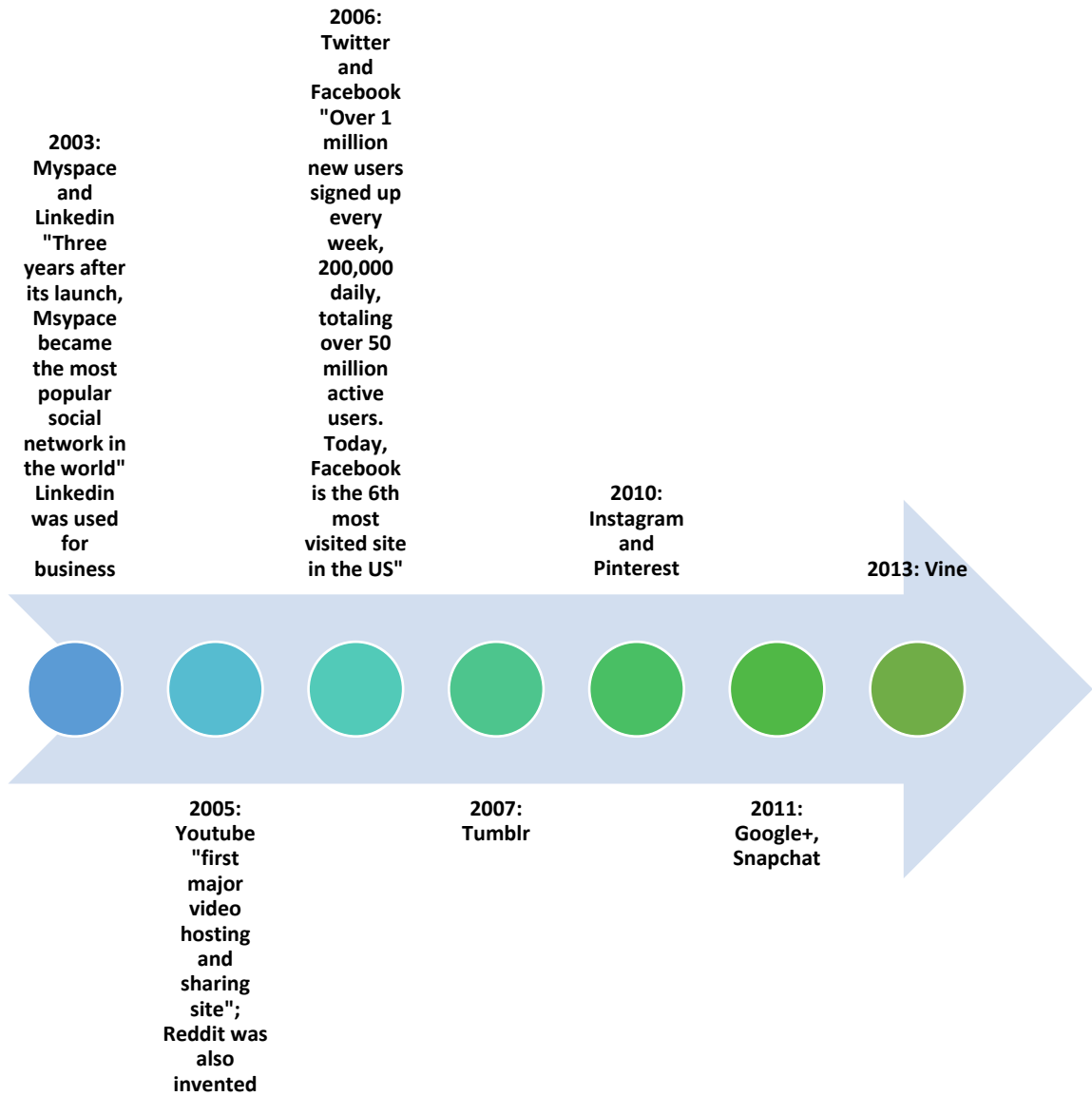
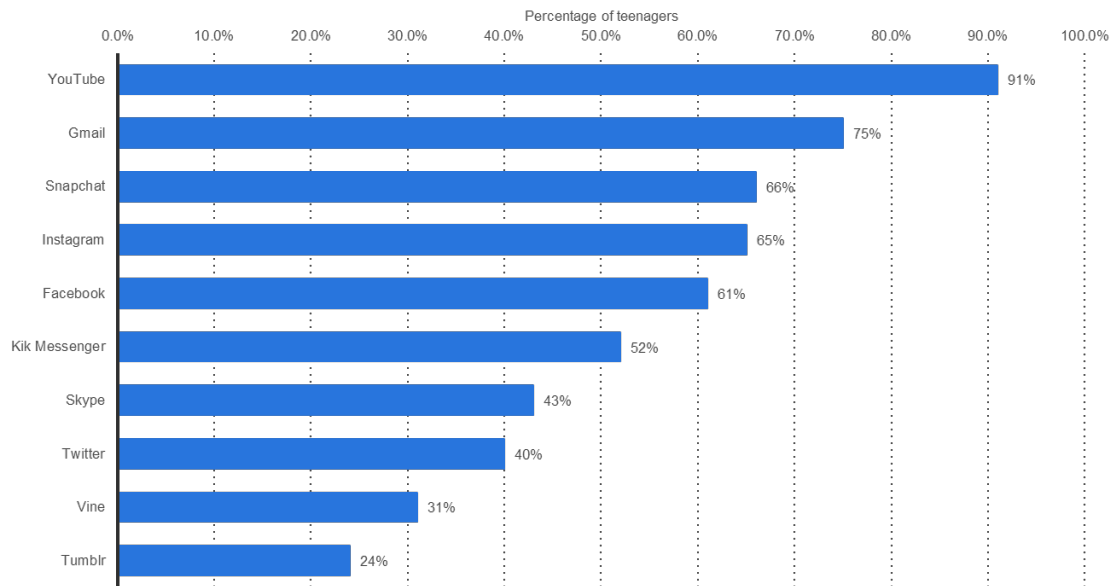


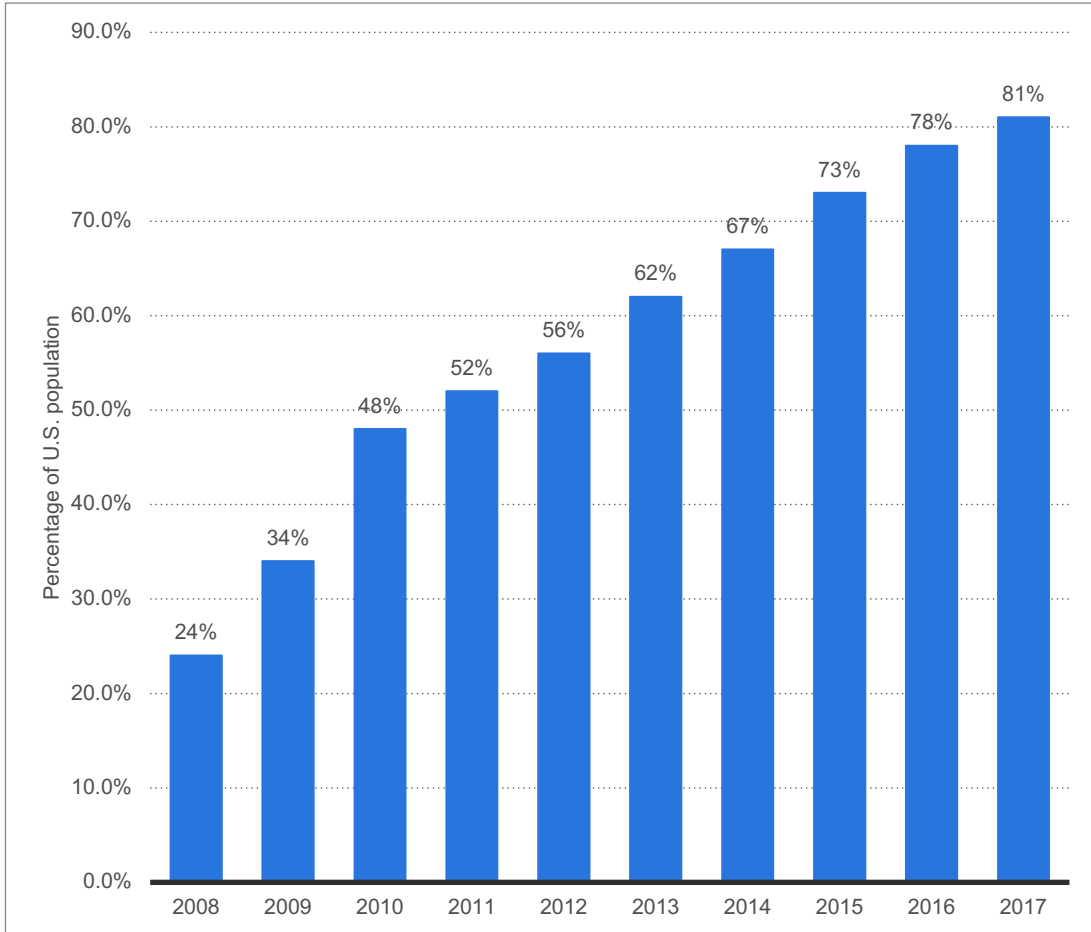
Figure 1. Social Media App Timeline

Figure 2. “Reach of leading social media and networking sites used by teenagers in the United States as of June 2016” (Statista)



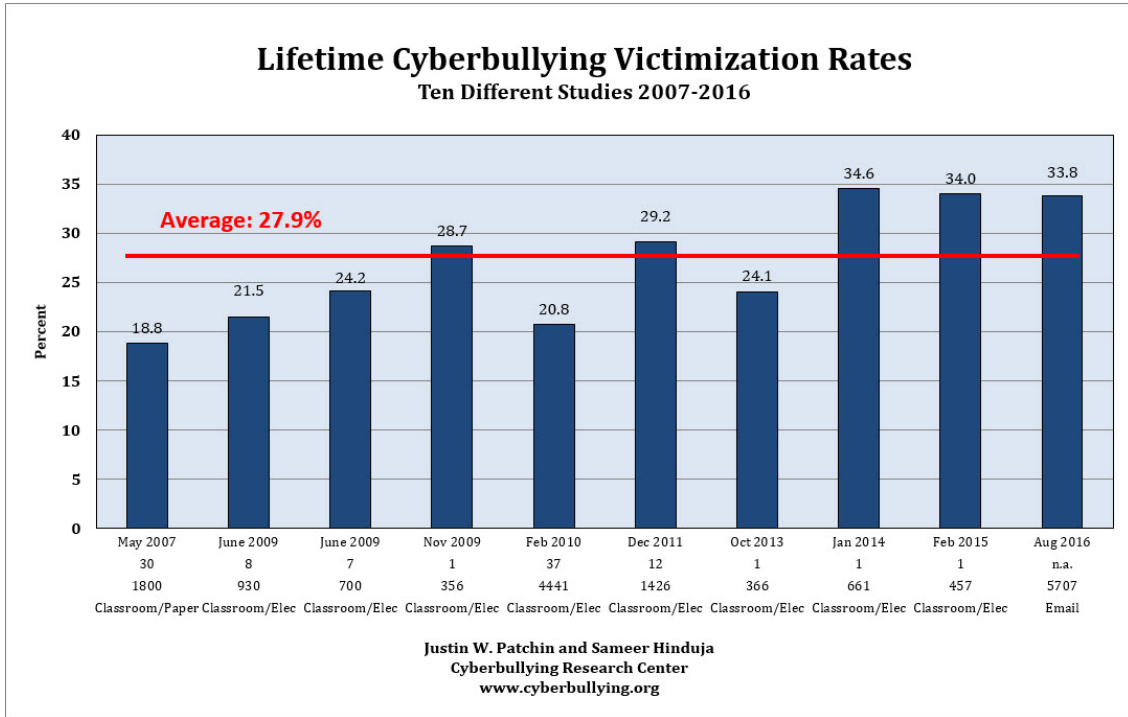
As shown in the bar graph above, in the year 2016, all kinds of social media sites were highly used by teens in the U.S., where almost everyone has access to computer and networking technology. According to this chart, 91% of American teenagers use YouTube and they still use a form of email (Gmail). Snapchat (66%), Instagram (65%), and Facebook (61%) are also popular among American teens.

Figure 3. “Percentage of U.S. population with a social media profile from 2008 to 2017”



Over time within the twenty first century (see Figure 3), the percentage of social media users has increased as more social media apps were created. Cyberbullying has also been on the rise at the same time as seen in Figure 4.

Figure 4. Lifetime Cyberbullying Victimization Rates



Based on the available data, it appears that cyberbullying has slightly increased over time, similar to the increase in use of social media. While there is a connection, the technology itself is not the problem. The technology provides the tools. The person who uses the technology determines whether it is beneficial or harmful.

NATIONALLY PUBLICISED CASES OF CYBERBULLYING ASSOCIATED WITH SUICIDE

In recent years, there have been numerous cases within the adolescent population in which it appears that cyberbullying contributed to suicide. Many more suicide attempts occur than completed suicides. While there are many incidents of cyberbullicide, only a handful have garnered national media attention, such as these next six cases, which appear to illustrate certain patterns and commonalities.

Ryan Halligan (2003)

Ryan was thirteen years old and described as an intelligent boy who was sweet and fragile. He was constantly bullied in school and online because of his learning disability and was taunted online for being “gay,” although he really was not. One time when Ryan fought off a bully, he became friends with one of his bullies. Then the bully used Ryan’s trust to hear about his struggles with learning and exploited their conversations by spreading lies about how Ryan was gay (NoBullying). Another major online bullying incident was this: “Ryan Patrick Halligan had deliberately saved transcripts of online exchanges in which Ashley, a popular girl whom Ryan had a crush on, pretended to like him. Later at school, she told him that he was a “loser.” According to several reports, she had once been his friend and defended him when the bullying first started; when she became more popular in middle school, she left him behind. He found out she only pretended to like him for the purpose of gaining personal information about him. She copied and pasted their private exchanges into other IMs among his schoolmates to embarrass and humiliate him. [...] After the girl had called him a loser, Ryan Patrick Halligan said, ‘It’s girls like you who make me want to kill myself’”

(NoBullying). Instead of coming to his parents or the school for help he looked up ways on how to kill himself. On October 7, 2003, Ryan hung himself. No criminal charges were filed, although Ryan's father spoke to Ryan's bullies in person.

Megan Meier (2006)

The case of Megan Meier was one of the earliest instances of cyberbullying being associated with suicide. At the time that Megan committed suicide at age 13 in 2006, the Internet already existed for quite some time, but social media platforms were relatively new. At that time, MySpace was popular and it was that social media site that Megan used. She suffered from attention deficit disorder, depression, and weight issues. On MySpace she received a friend request from a teenage boy named "Josh Evans" who told her she was pretty, and she was smitten. They had communicated for months before the relationship took a turn for the worse. "Josh Evans" told Megan that he heard from people that she was not nice to her own friends, so he did not want to be friends with her anymore. The next day he sent hateful messages to her and started posting them publicly on Megan's MySpace page. There were others who had joined the hate party as well (NoBullying). The hateful messages continued for months.

Megan's parents were active parents who had access to her account and closely monitored her whenever she was online. When they saw the hateful messages on MySpace, Megan's mother Tina told her to log off MySpace, but she never did and instead continued to read the hurtful messages. The last message sent to Megan by "Josh Evans" was "Everybody in O'Fallon knows how you are. You are a bad person and everybody hates you. Have a shitty rest of your life. The world would be a better place without you" (NoBullying). On October 17, 2006, Megan hung herself in the closet, and

she died the next day. When her parents tried contacting “Josh Evans”, the account had been deleted.

The interesting twist of the story was that Megan’s parents were informed by a neighbor that Josh Evans never existed. It was a fake account allegedly created by Lori Drew, the mother of Sarah, Megan’s ex-friend and Ashley Grills, a former employee of Lori Drew. They created the account to obtain information on Megan (Zetter, 2008). All three were aware of the existence of the fake account and participated in the messages, but Grills said that “it was her idea, not Drew’s to create a fake MySpace account to befriend Megan” (Zetter, 2008) to exploit information from her. Since there were no laws against cyberbullying at the time, Drew was only charged with “one count of conspiracy and three counts of unauthorized computer access for allegedly violating the MySpace terms of service to inflict psychological harm on Megan” (Zetter, 2008). In the end, no criminal charges were filed and everyone accused was acquitted.

Tyler Clementi (2010)

Tyler was only eighteen and had just started his first year of college when he decided to end his life by jumping off a bridge and drowned in the Hudson River on September 22, 2010. He was a shy loner who was gay. He was not very sociable compared to his roommate Dharun Ravi. They never talked much. One day, Tyler asked Ravi if he could have the room to himself because he was having a male friend over. Ravi went across the hall to Molly Wei’s room and saw what was happening through a streaming video from his webcam. The video was of Tyler and his friend kissing. Ravi immediately tweeted about it to his friends and it spread all over campus and beyond.

Ravi invaded Tyler's privacy by recording his intimate homosexual encounter and sharing it with the entire campus. Not long after this, Tyler decided to end his life.

Ravi and Wei were arrested but then Wei's charges were dropped after she agreed to testify against Ravi. He was the one who had to appear in court. He was convicted of bias intimidation, witness tampering, invasion of privacy, and hindering arrest (NoBullying). Since this was classified as a hate crime, he could have served ten years in prison, but his judge gave him a different sentence, which ended up being prison for 30 days along with three years of probation. He also got 300 hours of community service and had to pay a \$10,000 fine (Bazelon, 2012). There is debate over whether his punishment wasn't harsh enough or if there should even have been a punishment for this incident. Ravi gave a couple of interviews answering the question "What were you thinking?" and his response was he got too caught up in his own ego and what he thought was funny (Bazelon, 2012).

Amanda Todd (2012)

On October 10, 2012, fifteen-year-old Amanda Todd hung herself in her home after years of online and traditional bullying. It was the online bullying that started it all. Her daily struggle was not known until she posted a video on YouTube, telling her story through a series of flashcards. She was from British Columbia, and her story received international attention. On the video she posted, Amanda explained how she was contacted by a stranger on Facebook, who flattered her and convinced her to flash her breasts on her webcam. When she did, the stranger posted her naked picture everywhere online. The result was that "Her reputation was ruined, she had no friends, she was beaten up by some classmates, she tried drinking bleach but was saved at the last minute.

Months later, Amanda Todd took her own life” (NoBullying). Even though she switched schools several times, she experienced a lot of cyberbullying. Because of what happened to her, she suffered from depression and used drugs, alcohol, and self-harm to dull the pain she suffered due to being cyberbullied (NoBullying). After her death, her video got more than 17 million views and people continued to post negative comments about her. Shockingly, the hate campaign continued after Amanda Todd died. People ridiculed her suicide and made fun of the entire story, saying she deserved what had happened to her (NoBullying).

There were no arrests made until the year of 2014, when the authorities arrested a thirty-five-year-old man from the Netherlands. Through IP addresses, they found him. It was a breakthrough in the Amanda Todd case. The guy they arrested was charged with child pornography, internet luring, criminal harassment, and extortion (BBC, 2014). According to Dutch authorities, Amanda Todd was not his only victim. He was suspected to have gone after many underage age girls online, and he seduced them to perform sexual acts for him and then later use it as blackmail against them (BBC, 2014).

Rebecca Sedwick (2013)

Rebecca Sedwick was only twelve years old when she took her own life by jumping off an abandoned concrete plant building on September 8, 2013. On the surface, she appeared to be a well-adjusted girl. However, she was suffering from cutting herself and depression and most people did not have a clue on how severe the bullying was until they investigated her social media profiles after her death. Rebecca was bullied by a large group of bullies but only a fourteen-year-old and twelve-year-old girl were charged with aggravated stalking. The fourteen-year-old girl made a Facebook post that said, “Yes IK I

bullied REBECCA and she killed herself but IDGAF” (CNN, 2013). The reason for the bullying? Apparently, “the girl was upset that Rebecca had once dated her current boyfriend and began bullying and harassing her more than a year ago when they were both students at a Florida middle school” (CNN, 2013). After the two girls were charged, a month later the charges were dropped due to lack of evidence of stalking and bullying. When the case file was reexamined by the director for Embrace Civility in the Digital Age, she concluded “the Sedwick case is yet another example of law enforcement and the media being quick to make a judgment that bullying caused a suicide when other factors might have been at work” (CNN, 2014). Any evidence of bullying that existed on the social media pages was deleted sometime after Rebecca committed suicide.

Analysis

Here are these people who have never met in real life and yet had shared similar experiences and chose the same end. All of them had families who loved them and cared for them. These victims were going through emotional and/or mental problems, some their whole lives and some because of the online harassment. For the earliest cases like Megan Meier and Ryan Halligan, it was unlikely that criminal charges would have been filed because there were no laws against cyberbullying at that time. It was cases like these that inspired legislation against cyberbullying, which resulted in some of the later cases having criminal charges filed. Today, cyberbullying is taken more seriously than in 2003 or 2006. As for the cyberbullies themselves, there was a range. If one were to pool all the cyberbullying cases, the most common cyberbullies are teenagers. However, grownups can be cyberbullies too, who either do not think or care about the possible consequences of their actions or sexual predators going after adolescent or prepubescent girls, as in the

Amanda Todd case. Some have done these horrible acts to bring deliberate harm to the victim and some have done them out of lack of understanding of how hurtful words can be.

CHARACTERISTICS OF CYBERBULLIES

Anyone can be a cyberbully no matter what age, gender, race, or class, although most are pre-teens and teenagers. Even though both males and females can be cyberbullies, some studies have consistently shown that females are more likely than males to be cyberbullies (e.g., Gorzig & Olafsson, 2013; Zezulka & Seigfried-Spellar, 2016). However, there are still mixed results on who cyberbullies the most. For example, Li (2006) reported that males were more likely than females to be cyberbullies. Other studies (e.g., Hinduja & Patchin, 2008; Slonje & Smith, 2008; Ybarra & Mitchell, 2004) have reported no gender differences in cyberbullying behavior. In general, females tend to thrive on strong social relationships, so female bullies typically use relational aggression, spreading rumors and malicious gossip about their target to hurt their victim. It is easier these days to spread vicious rumors by internet and text messages where everyone from the school and outside of school can see them.

In a recent study, Wong and colleagues (Wong, Cheung, Chirsty, & Xiao, 2018) investigated whether gender mattered in the act of cyberbullying someone. Through their survey study of university students that were recruited by posters, they found that there were statistically significant gender differences in cyberbullying perpetration and cyberbullying victimization, but no difference in perceived online self-control and disinhibition (Wong et al., 2018). They found that male students were more likely to engage in cyberbullying perpetration (i.e. sending threatening messages, videos, and/or images, spreading rumors and gossip) as well as be victims compared to the female university students. However, the female university students were still greatly influenced

by the perception of online disinhibition, which is the feeling of lacking restraint when online in comparison to communicating with others in person.

Aside from gender demographics of cyberbully perpetrators, there are a few common characteristics of cyberbullies that several studies have found: aggression, low self-esteem, low inhibition, and a need for power. There are studies (e.g., Gorzig & Olafsson, 2013; Law et al., 2012; Zezulka & Seigfried-Spellar, 2016) that show that the characteristics of traditional bullies and cyberbullies overlap; aggression being one of the qualities. However, there are slight key differences in the characteristics: “[...] bullying others through electronic means provides the perpetrator with the possibility of staying anonymous, which may increase their power differential over the victim as well as decrease the perception of possible retaliation. Furthermore, the belief that they will not be detected may decrease the bully’s inhibition, while possible feelings of remorse will be reduced due to the lack of feedback from the victims’ emotional responses” (Gorzig & Olafsson, 2013, p. 11). Bullies like to be in control; thus, there is a power dynamic involved between a bully and victim where the bully can overpower the victim. Cyberbullies thrive on the anonymity of the cyber world and how they can access their victims twenty-four/seven. In one of the studies that explored the characteristics of cyberbullies, Gorzig and Olafsson (2013) found that those who spent more time engaging in risky online behaviors and had high beliefs in their internet abilities and online persona were more likely to bully online.

In another study, Zezulka and Seigfried-Spellar (2016) examined the characteristics of cyberbullies and internet trolls. They found that those who have engaged in more cyberbullying behavior displayed low internal moral values, low

agreeableness, and high neuroticism. Engaging in cyberbullying behavior was also correlated with low conscientiousness and low self-esteem (Zezulka & Seigfried-Spellar, 2016). Although there is still much research that needs to be done on the gender aspect of who cyberbullies the most, given that the existing research has mixed results, consistent characteristics of cyberbullies include high aggression, low morals, lack of self-control, and a high sense of power.

MOTIVATIONS OF CYBERBULLIES

Researchers have investigated not only the characteristics of cyberbullies but also their motivations for hurting vulnerable people. The stories that have been heavily covered in the news cause many people to wonder why anyone would resort to cyberbullying to hurt someone. Many of the news cases that made the headlines do shed light into various reasons why, but researchers have taken an empirical approach to investigate the motives. One study (Law et al., 2012) investigated the motivations of cyberbullies, more specifically on proactive and reactive online aggression. Proactive aggression is when one uses aggression to obtain a goal or resource, whereas reactive aggression is when someone reacts to a provocation; a retaliation. Law and colleagues administered surveys and interviews to see which kind of online aggression teenagers used the most. According to the results, teenagers were prone to use both proactive and reactive aggression: “Specifically, adolescents differentiated themselves as individuals who participated in specific forms of online aggression (i.e. sending mean messages, developing hostile websites, or posting embarrassing pictures), rather than as individuals who played a particular role in online aggression (i.e. bully, victim, perpetrator). One explanation is that in an online venue, victims can feel much more comfortable and capable of retaliating to aggressive acts. For example, if an individual said something mean to another online, and the initial “target” responded aggressively in return, both individuals have essentially engaged in aggressive behavior and have also been the victim of such behavior” (Law et al., 2012, p. 669).

In addition, Varjas and colleagues (2013) conducted an exploratory study using interviews and surveys to investigate high school students' perceptions of why people cyberbully others. What was found was that there were two kinds of motivations: internal and external. Internal motivations for cyberbullying mostly included redirecting feelings, revenge, making themselves feel better, jealousy, boredom, and seeking approval, whereas external motivations mostly consisted of targeting victims that had a characteristic that made them appear "different" or vulnerable, thinking there would be no consequences, and not wanting to be confrontational since they might be afraid of facing the person in real life (Varjas et al., 2013).

This feeds into the vicious cycle of online aggression where there are students who have a goal to hurt someone either for fun or to encourage others to join in the harassment and then other students retaliate because they feel hurt and feel the need to defend themselves. For example, with Megan Meier, her ex-friend wanted to get back at her so the fake boy account was created, though actually by the friend's mother. The motive of the main bully in Rebecca Sedwick's case involved jealousy and revenge. In Tyler Clementi's case, Ravi invaded Clementi's privacy and made that social media post because he thought it was funny. He never realized the consequences until it was too late; nobody did. Despite how many stories make the headlines, the only way to understand how much of an impact cyberbullying has on people is to investigate this issue scientifically.

RESEARCH ON THE RELATION OF CYBERBULLYING AND SUICIDE

Due to the greater awareness of cyberbullying, researchers have been increasingly interested in investigating the effects of cyberbullying. Within the past twenty years, numerous scientific articles on cyberbullying have been published. Many studies have focused on the psychological impacts of cyberbullying, including the very concerning observations of connections between cyberbullying and suicidal ideation. Suicidal ideation is when people think about killing themselves and how to do it. When researchers examine the psychological effects of cyberbullying, not only suicide but also other factors such as depression, anxiety, and stress are investigated. The mediating factors between cyberbullying and suicidal thinking have been studied as well. Furthermore, researchers have investigated how the connection between cyberbullying and suicide is covered in the media and in research articles. This section will analyze and discuss the main topics that have been researched within cyberbullying.

Cyberbullying and Depression

When a cyberbully attacks his/her victim, the intentional harm is perpetrated to cause the victim to feel sad, ashamed, and worthless. With their self-esteem diminishing, their victims often feel depressed. There have been studies that have established an association between traditional bullying and depression; however, only recently have people considered that cyberbullying may be related to teenage depression in this social media age. Even though many of the articles tended to focus on the association between cyberbullying and suicide ideation, there are a few studies that have considered depression (and other kinds of psychological stress) because of cyberbullying. What has

been established through these studies so far is that bullying through online means leads to depression, anxiety, stress, vulnerability, and feelings of helplessness. During adolescence, victims of cyberbullying suffer more long term sociological and psychological problems than victims of traditional bullying. Sociological problems mostly include having trouble making friends and forming positive relationships with other people. Some victims carry those same symptoms of sociological, psychological, and mental issues into adulthood (Mirsky & Omar, 2015). Adolescence is a crucial time in a person's life where the individual develops self-esteem and a sense of identity. That can be compromised when adolescents are bombarded with negative text messages and comments online directed at them around the clock. Cyberbullying victims are more likely to experience physiological symptoms such as frequent headaches, recurrent abdominal pain, and difficulty sleeping. They are also more apt to experience symptoms of anxiety, depression, and suicidal ideation compared with peers who were not victimized (Selkie et al., 2016).

When it comes to measuring the rate of depression amongst cyberbully victims, researchers have considered certain demographics that can influence who is more likely to report being cyberbullied or experiencing psychological stress. These demographics include age, gender, ethnicity and SES. One study found that after experiencing cyberbullying, females reported having more psychological distress (35.3%) compared to the males (17.1%) (Sampasa-Kanyinga & Hamilton, 2015). The fact that females tend to feel the effects of cyberbullying and depression greater than males is supported by another study by Bauman et al. (2013): "For females, cyber victimization was strongly related to depression, which in turn was associated with suicide attempts. Females are

more prone to internalizing negative experiences, and males to externalizing (Rosenfeld, 2000). Females also scored higher on measures of the imaginary audience that is considered an expression of adolescent egocentrism” (Bauman et al., 2013, p.346). Even though females were more likely to report depression, this could at least partially be explained by the fact that society discourages males from talking about their emotional problems.

Cyberbullying and Suicidal Thinking and Behavior

Suicide is a very serious problem that many adolescents face. Teenagers often go through many hardships that may diminish their self-worth and make them believe that they don't deserve to live. In the United States, suicide is the second leading cause of death among adolescents as of 2016. While homicide deaths among teens have decreased from 10.4 deaths per 100,000 to 6.6 deaths per 100,000, suicide deaths have increased from 8.0 deaths per 100,000 to 8.7 deaths per 100,000 (Vanorman & Jarosz, 2016). Moreover, depression is strongly correlated with an increased risk for suicidal thinking and behavior (Mirsky & Omar, 2015). Because of major cases like those of Amanda Todd, Tyler Clementi, and Megan Meier, who committed suicide after being bullied online, many people are starting to think that cyberbullying might cause suicide, but it is not that simple.

Of course, to say that cyberbullying *causes* suicide among teens is grossly incorrect. Recently, however, evidence had been obtained that supports the relation between the two. The link between traditional bullying and suicidal ideation was established previously in research, but only within the twenty-first century have scientists began to research the relation of suicide to cyberbullying. One study that surveyed

students about whether they were ever cyberbullied and whether they had suicidal ideation and/or attempts found that 19.7% of females and 20.9% of male respondents were seriously thinking about attempting suicide, while 17% of females and 20.2% of male respondents attempted suicide. Cyberbullying prevalence rates ranged from 9.1% to 23.1% for offending, and victimization rates ranged from 5.7% to 18.3% (Hinduja & Patchin, 2010). In another study done in 2014, it was found that school bullying and cyberbullying is 27.4% prevalent and those who report either one are at higher risk for reporting two straight weeks of sadness, suicidal ideation and attempts, and trying to get treatment for their suicidal tendencies (Messias, Kindrick & Castro, 2014).

Aside from examining how cyberbullying and suicide are related to each other, there are a few studies that have explored the relation between depression and suicide-related outcomes to the increase in social media use and screen time. A study done in 2018 by Twenge and colleagues found that teenagers who spent more time on social media apps, especially on their cell phones, had an increase in mental health problems including depression and suicidal ideation compared to those who spent time on non-screen activities (Twenge et al., 2018). Another study that examined the relation between increase in screen time and psychological problems had a similar finding where they examined adolescents' well-being from 1991-2016, specifically focusing on the time when smartphones first came out in 2007. What was observed through surveys was that after the introduction of smartphones, there was a significant decrease in psychological well-being among 8th, 10th, and 12th graders (Twenge et al., 2017). As stated previously, technology itself is not the problem with today's youth; however, technology still plays a

part in why and how teenagers are experiencing an increased risk for psychological problems.

Factors that May Mediate the Association between Cyberbullying and Suicidal Thinking and Behavior

To say that cyberbullying alone is associated with the risk of suicidal thinking and behavior is too simple. Cyberbullying on its own is not the only factor that can influence suicidal thinking and behavior. As several studies have shown, there can be other factors that can mediate the association between cyberbullying and suicide. In one study, it was found that depression was a mediator between cyberbullying and suicidal behavior, the rates depending on gender (Bauman et al., 2013). Many studies have shown that females are more likely to report having depression and feeling suicidal compared to males. In a study done in 2015, cyberbullying was measured as a mediating factor between the use of social media sites, psychological stress and suicidal ideation, and the results showed that using social media sites is associated with increased risk of being a victim of cyberbullying and with having mental health problems. However, the extent to which cyberbullying victimization serves as a mediator for mental health issues varies (Sampasa-Kanyinga & Hamilton, 2015).

The Role of the Media in Covering Cyberbullying

Aside from survey studies done on cyberbullying and suicide, researchers have conducted peer-literature review studies examining how the subject was covered in the news and mass media. Even though there is no feedback from the students themselves, these kinds of articles offer insight into the modern social media problem. It is important to see how the mass populace has reacted to something as serious as death by impromptu

cyberbullying. One study examined how suicide was being represented in the cyberbullying/suicide cases that were featured prominently in the news. The major themes that were discovered by examining these news articles were “(a) *attribution of blame for suicide* as a causal chain, from victim action to bullying online and offline suicide; (b) *attribution of blame for bullying* shifting among targets, but setting primarily on schools, (c) the sense that *cyberbullying is bullying amplified*; and (d) publicized suicides function as *cautionary tales* or alarms that prompt action” (Young et al., 2017, p. 1087). Many news stories appeared to place the blame on someone or something, whether it be the bullies themselves, the school institutions, the technology, or the parents.

Another study has also examined how news stories both in print and on television have reported cyberbullying and suicide, where they talked about news stories attributing blame as well. Their first hypothesis was that TV stories were more likely to be provoked by individual cyberbullying incidents than print stories and the hypothesis was supported: 59.2% of TV stories were episodic and only 22.3% of print stories were. (Milosevic, 2015). When it came to placing responsibility on the technology itself, the study found that 9.1% of stories by print were more likely to blame technological devices for the cyberbullying compared to 5.1% of stories presented on TV. Interestingly, 32% of TV stories and 20% of print stories blamed the parents. The issue of placing blame on the school institutions was almost equally covered by the print (21.1%) and television (20%) (Milosevic, 2015).

Limitations in the Research on Cyberbullying and Psychological Adjustment

Although research on the associations of traditional bullying with negative outcomes has been conducted for several decades, research on the relations of cyberbullying to negative outcomes is more limited and has been conducted only within the past decade. Nevertheless, cyberbullying has clearly been shown to be a serious problem and has garnered the attention of parents, schools, teenagers, courtrooms, and psychological researchers. Much has been gained and accomplished in the research field. However, the research on cyberbullying is limited by many factors. One example involves the research methods used to collect data. All the research that has been done on cyberbullying and suicide is by surveys and peer literature reviews. Even though much information can be gained by these methods, there are still limitations. For instance, there can be biased responses in surveys, despite surveys often being anonymous. It is a common problem in research studies, since many human beings have biases, despite the encouragement to be as honest as possible in survey studies. It may be that students under-report being perpetrators or victims of cyberbullying because they are embarrassed, feel guilty, or worry about having their electronics taken away from them.

Another limitation is the demographics of gender and race. As it was stated in the characteristics section, which gender cyberbullies the most is met with mixed results. Also, there needs to be more focus on racial demographics in future research. It could show systematic racism continuing to exist by cyber means within schools. Since there has only been ten years of research on cyberbullying and the effects of it, there is still much groundwork to be covered in terms of the populations' demographics.

Furthermore, surveys only help with establishing a correlation between cyberbullying and suicide, and do not allow researchers to draw conclusions about causation. However, obviously, using an experimental method to determine whether cyberbullying causes suicide would be completely unethical. It would go against ethical standards to randomly select high school students, separate them into two groups, have Group 1 be the Control Group and Group 2 be cyberbullied over a period to determine whether they experience increased psychological trauma.

Another problem with this research is the inconsistency of definitions that contribute to variation in prevalence rates. Even though statistics can be reliable, no study will report the same prevalence rates of cyberbullying as one peer-review literature study has shown (Selkie et al., 2016). Since there is a variance in how cyberbullying is defined, it is not surprising that the estimated prevalence rates of cyberbullying perpetration and victimization vary around the world (Selkie et al., 2016). There is a slight disagreement over how cyberbullying should be officially defined because it is hard to say if cyberbullying is excessively aggressive compared to traditional bullying due to the lack of vocal tone and facial expressions that are important in socio-emotional skills (Selkie et al., 2016). Yet, despite a lack of social cues, studies and suicide news stories demonstrate how hurtful words alone can be. Aggression can be expressed in many ways whether it be by fists, by mouth, or in this case by keyboard.

Despite all the research articles that were analyzed above, not one longitudinal study was found. There needs to be more research on adolescent cognitive and emotional functioning as they experience cyberbullying for extended times. The possible next step for cyberbullying research is to take a random sample of middle school and high school

students and have them do cyberbullying victimization and mental health surveys over the course of several years; not just within a few days, a month, or even a few months. Because of the scientific research and the widely-publicized stories in the news regarding possible links between cyberbullying and suicide, changes are being made, both in school policies and within the legal system.

CYBERBULLYING LEGISLATION AND SCHOOL POLICIES

An important question to ask, especially when a cyberbullying incident ends in a suicide, is whether any legal action can be taken. That answer is complicated and seems to depend on the location and the time the cyberbullying/suicide incidents took place. For example, with the suicides of Meghan Meier in 2006 and Ryan Halligan in 2003, no one was charged with the crime of cyberbullying. There were no specific laws that said cyberbullying was illegal, as cyberbullying was relatively new at the time. And, even when laws regarding cyberbullying are in place, they can be difficult to enforce. For example, the charges against Rebecca Sedwick's bullies were dropped in 2013 due to insufficient evidence. Legal action varies by school and/or state. In the U.S., laws against bullying itself were not established until the 1990s. During that time, researchers began to study bullying and its psychological effects. As of today, no federal policy exists against bullying. However, there are federal laws regarding harassment, especially under the civil rights and anti-discrimination laws that exist to protect certain groups of individuals who have experienced harassment and discrimination. These groups include religious minorities, women, LGBT individuals, ethnic and racial minorities, and these are the groups that are more likely to be the victims of bullying. Schools are obligated by law to address bullying, and this is enforced by the Department of Justice and the Department of Education.

When schools fail to respond to the harassment of students appropriately, they are violating many civil rights laws that are enforced by the Department of Justice and Education. These laws include: Title IV and Title VI of the Civil Rights Act of 1964,

Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, Titles II and III of the Americans with Disabilities Act, Individuals with Disabilities Education Act (IDEA). Title IV and Title VI of the Civil Rights Act of 1964 forbids discrimination based on race, color, and national origin in programs that receive federal financial assistance. Title IX of the Education Amendments of 1972 is a law that prohibits discrimination based on sex in any education program that is federally funded, and the objective of this law is to avoid using federal money to support sex discrimination. Section 504 of the Rehabilitation Act of 1973 forbids discrimination against people with disabilities in federally funded education programs. This set the stage for the Americans with Disabilities Act and it protects children and adults. Titles II and III of the Americans with Disabilities Act, were revised in 2010 and these titles focus on accommodations for people with disabilities such as effective ways of communication, building ramps and elevators to make going into buildings easier, and providing service dogs. The Individuals with Disabilities Education Act (IDEA) became a law in 1990. The goal of this law is to provide children with disabilities the same educational opportunities as children with no disabilities. This law also provides assistance tailored to what the individual disabled child needs.

Every state handles bullying and now cyberbullying differently. Criminal and school sanctions, school policy, and off-campus policies in each state vary. In criminal sanctions, there are states that have many criminal laws that might apply to bullying behaviors, depending on how severe the act that is. For example, assault statutes might apply if one person is physically hurting another. In addition, all states have laws against harassment and stalking (Cyberbullying). Bullying laws allow schools to punish their

students appropriately when bullying happens (cyberbullying included). When it comes to school policy, “every state except Montana, the bullying law mandates schools to have a formal policy to help with identification of the behavior and discuss the possible formal and/or informal disciplinary responses that can follow” (Cyberbullying). Off-Campus is when “federal case law allows schools to discipline students for off-campus behavior that results in a substantial disruption of the learning environment at school” (Cyberbullying).

Maine Legislation

In Maine, there are no criminal sanctions for cyberbullying specifically. However, according to a news article that was published by the Bangor Daily News in 2013, there has been a push for harsher penalties with cyberbullying. Many people in Maine recognize the severity of cyberbullying and how the anonymity of technology allows bullies to avoid feeling the consequences of their actions (Mattens & Robbins, 2013). Also, because of a few bullying/suicide incidents that have happened in this state, Mainers have been pushing for cyberbullying to be considered a serious crime by the judicial system: “Maine’s LD 1233, ‘An Act Regarding Cyberbullying,’ would make cyberbullying a Class E crime that could lead to a fine of up to \$1,000 and up to 6 months of jail time” (Mattens & Robbins, 2013). For repeat offenders, it would be a “Class C crime with a fine of up to \$5,000 and up to five years of jail time” (Mattens & Robbins, 2013).

Even though there currently are no criminal statutes associated with cyberbullying, all schools in Maine have school policies and sanctions against cyberbullying. In 2012, a law was passed called “An Act to Prohibit Cyberbullying.” This

law defines cyberbullying and requires schools in Maine to include a policy that establishes that cyberbullying or hazing either on or off school property, by anyone associated with the public school (i.e. student, staff, group, or organization) is not allowed (An Act to Prohibit Cyberbullying) and to implement penalties when students violate the policy such as suspension or expulsion. Another Maine law that includes cyberbullying is Title 20-A: Education, Part 3: Elementary and Secondary Education, Chapter 223: Health, Nutrition and Safety, Subchapter 6: Safety. This is under Maine Revised Statutes; revised in 2011. The Maine Legislature “finds bullying and cyberbullying [to] have a negative effect on the school environment and student learning and well-being” (Title 20-A:Education). This law requires something called “Alternative discipline,” which is “disciplinary action other than suspension or expulsion from school that is designed to correct and address the root causes of a student's specific misbehavior while retaining the student in class or school, or restorative school practices to repair the harm done to relationships and persons from the student's misbehavior” (Title 20-A: Education). Suspension and/or expulsion is one way to deal with cyberbullying, but this law talks about preventive measures that teach the students the consequences of their actions and how serious they are. Alternative discipline according to this law includes mental health and health counseling, talking with the students involved in the incident and their parents, reflective activities, mediation, anger management, and community service.

Examples of School Policies

Most middle and high schools provide computers/laptops to their students. So, within the school’s student handbook typically a section is included regarding how

students should properly use their computers and the Internet. These computers are to be used only for educational purposes. Within the school student handbook from the Orono High School, students receive suspension or have computer rights taken away and additional discipline (that may include legal action) if a student is caught not using the privileges appropriately. According to the handbook, using social media inappropriately is against school policy and students will be punished for it if caught (Orono High School, 2017-2018).

As it is federally required for public schools to have a no bullying policy within their rules, there is a bullying section within the Orono High School handbook, and cyberbullying is included as prohibited behavior. This school has followed the “An Act to Prohibit Cyberbullying” and Title 20-A: Education, Part 3: Elementary and Secondary Education, Chapter 223: Health, Nutrition and Safety, Subchapter 6: Safety laws. Cyberbullying is defined within the handbook that includes a list of cyberbullying behaviors. The handbook encourages students to report bullying and provides a plan of investigation of bullying incidents and disciplinary actions that do include alternative discipline such as counseling, meeting with the parents, and talking with the school staff.

Similarly, Lewiston Middle School includes bullying within its handbook and says that there will be punishment including suspension and expulsion. However, the handbook does not include the definition of cyberbullying, a list of inappropriate behaviors, or a detailed plan of investigation and discipline like the Orono High School handbook. Sadly, in 2017, a student from Lewiston Middle School named Anie Graham took her own life following months of being bullied in school and online. Anie’s parents had tried to get help for their daughter but “school counselors and mental health

professionals didn't take Anie's problems and threats [against her] seriously enough” (WGME, 2017). According to the school, there wasn't enough evidence to move the investigation forward. After the suicide, Anie's father met with the school to talk about more aggressive action to be done when students consider suicide.

Analysis and Reflection

The laws that were created and revised in Maine to include cyberbullying in the already existing laws against traditional bullying as well as detailed plans of what to do when cyberbullying takes place is a good step in the right direction of addressing this problem. However, there is still much more that could be done. Maine has no off-campus policy and since cyberbullying can happen off school grounds, this makes it difficult for the schools to discipline their students or to catch them. Even though there are laws in Maine that address cyberbullying and talk of punishment or “alternative discipline,” much more could be done to address the problem legally. For starters, the bullying laws in Maine do not address situations where the victim kills him/herself. And since there are no criminal sanctions yet in Maine, what can be done legally if something like this happens? Should there be a harsher punishment than expulsion for the cyberbullying perpetrator? Suicide is not mentioned at all in the laws or in student handbooks. Even though it is a very sensitive issue, avoiding the topic of suicide will not make the problem disappear. Breaking down the taboo of discussing suicide could be the next step for schools, and it could give students the courage to speak up about their depression and suicidal ideation. Furthermore, every school should include a detailed plan on how to handle cyberbullying, such as the case at Orono High School. Perhaps the Lewiston Middle School did not take Anie Graham's bullying case seriously because the school

didn't have a detailed plan of alternative discipline and investigation like Orono High School does. That is a problem that can hopefully be addressed as more media attention is shined on this twenty-first century problem.

CONCLUSION

The purpose of this paper was not to place blame on the technology, on the schools, or even the cyberbullies themselves. Also, saying that cyberbullying is a leading cause of teenage suicide is not the purpose either, though clearly there is a relationship between cyberbullying and increased risk for suicide. Even though cyberbullying has gained attention in the media and schools are responding, there is still much work that needs to be done with the issue of cyberbullying and potential suicide. Education is important, and to contribute, I have prepared a fact sheet about cyberbullying and suicide, as well as some advice for parents (see Appendix A).

APPENDIX A:
EMPIRICAL FACT SHEET ON CYBERBULLYING AND SUICIDE

- Anyone can be a cyberbully no matter what age, gender or race.
- Cyberbullying is more threatening compared to traditional bullying because victims are exposed to it 24/7, even within their own homes due to modern technologies like a cell phone and/or a laptop.
- As the usage of social media has increased from 24% in 2008 to 81% in 2017, so have the rates for cyberbullying among U.S. teens increased from 18.8% in 2007 to 33.8% in 2016 (Cyberbullying.org and Statista).
- Even though there is a lack of consensus of the prevalence rates of cyberbullying, it is estimated that the prevalence rate is between 4% and 72% (Selkie et al., 2016).
- Victimization rates have ranged between 20-40% (Aboujaoude et al., 2015).
- Several studies have found that females being more likely to be cyberbullies compared to males (Gorzig & Olafsson, 2013; Zetzulka & Seigfried-Spellar, 2016). However, results are mixed regarding which gender is prone to cyberbully, with some studies (e.g., Wong et al., 2018; Li, 2006) finding males are more likely to cyberbully, and other studies (e.g., Hinduja & Patchin, 2008; Slonje & Smith, 2008; Ybarra & Mitchell, 2004) finding no differences.
- Female high schoolers are more likely to report being a victim of cyberbullying and experience depression and suicidal thoughts compared to male high schoolers (Messias, Kindrick & Castro, 2014).

- Suicide is the second leading cause of death amongst teens in the U.S. (Vanorman & Jarosz, 2016).
- Cyberbullying does not *cause* suicide; however, cyberbullying is associated with psychological problems such as depression, stress, anxiety, and vulnerability. People with depression are more likely to have suicidal thoughts compared to those who are not depressed (Mirsky & Omar 2015).
- Those who experience cyberbullying may also experience physiological symptoms such as headaches, abdominal pain, and difficulty sleeping (Selkie et al., 2016).

Advice for Parents

- Educate yourself about what cyberbullying is and the problems that surround it so that you will be able to understand the digital atmosphere that your kids are surrounded by on a 24/7 basis.
- Many kids don't report being victims of cyberbullying because they are afraid of parents taking away their cell phones and Internet privileges. Have honest, open talks with your children about cyberbullying and online safety.
- If your child is experiencing stress, helplessness, anxiety, and/or depression for long periods of time, seek mental health help as soon as possible.
- Be watching for any red flags of emotional and cognitive behavioral changes in your children no matter how small.
- There are Suicide Hotlines available if your child is experiencing suicidal ideation and/or attempted suicide.
 - Suicide Hotlines:

- Crisis Text Line: Text CONNECT to 471741 to reach a Crisis Counselor
- National Suicide Prevention Lifeline: 1-800-273-8255
- LGBTQ Suicide Hotline (the Trevor Lifeline): 1-866-488-7386
- Teen Suicide Hotline: 1-800-USA-KIDS (872-5437)

REFERENCES

- Aboujaoude, E., Savage, M.W., Starcevic, V., Salame, W.O. (2015) Cyberbullying: Review of an old problem gone viral. *Journal of Adolescent Health*, 57, 10-18. <http://dx.doi.org/10.1016/j.jadohealth.2015.04.011>
- Almasy, S., Segal, K., Couwels, J. (2013, October 16). Sheriff: Taunting post leads to arrests in Rebecca Sedwick bullying death. *CNN*. Retrieved from <https://www.cnn.com/2013/10/15/justice/rebecca-sedwick-bullying-death-arrests/index.html>
- Bauman, S., Toomey, R. B., & Walker, J. L. (2013) Associations among bullying, cyberbullying, and suicide in high school students. *Journal of Adolescence*, 36(2), 341-350. <http://dx.doi.org/10.1016/j.adolescence.2012.12.001>
- Bazelon, E. (2012, May 21). The Merciful End to the Trial of Dharun Ravi. *Slate*. Retrieved from http://www.slate.com/articles/news_and_politics/crime/2012/05/dharun_ravi_received_a_light_sentence_for_spying_on_tyler_clementi.html
- Breguet, T. (2007). *Cyberbullying*. New York: Rosen Publishing Group.
- BBC. (2014, April 18). Man charged in Netherlands in Amanda Todd suicide case. *BBC News*. Retrieved from <http://www.bbc.com/news/world-europe-27076991>
- Edison Research. (2017). [Data illustrated in a bar graph showing the growth of social media usage over time] *Percentage of U.S. population with a social media profile from 2008 to 2017*. Retrieved from <https://www-statista-com.prxy4.ursus.maine.edu/statistics/273476/percentage-of-us-population-with-a-social-network-profile/>
- Görzig, A. & Ólafsson, K. (2013) What makes a bully a cyberbully? Unravelling the characteristics of cyberbullies across twenty-five European countries. *Journal of Children and Media*, 7:1, 9-27. <https://doi.org/10.1080/17482798.2012.739756>
- Hendricks, D. (2013, May 8) Complete History of Social Media: Then and Now. *Small Business Trends*. Retrieved from <https://smallbiztrends.com/2013/05/the-complete-history-of-social-media-infographic.html>
- Hinduja, S. & Patchin, J. W. (2010) Bullying, cyberbullying, and suicide. *Archives of Suicide Research*, 14(3), 206-221. <http://dx.doi.org/10.1080/13811118.2010.494133>
- Law, D. M., Shapka, J. D., Domene, J. F., Gagné, M. H. (2012) Are cyberbullies really bullies? An investigation of reactive and proactive online aggression, *Computers in Human Behavior*, 28, 664-672. <http://dx.doi.org/10.1016/j.chb.2011.11.013>

- Maine Legislature. (2011) *Title 20-A: Education, Part 3: Elementary and secondary education, Chapter 223: Health, nutrition and safety, Subchapter 6: Safety laws*. Retrieved from <http://www.mainelegislature.org/legis/statutes/20-a/title20-Asec6554.html>
- Messias, E., Kindrick, K., Castro, J. (2014) School bullying, cyberbullying, or both: Correlates of teen suicidality in the 2011 CDC youth risk behavior survey. *Comprehensive Psychiatry*, 55, 1063-1068. <http://dx.doi.org/10.1016/j.comppsy.2014.02.005>
- Milosevic, T. (2015) Cyberbullying in US mainstream media. *Journal of Children and Media*, 9(4), 492-509. <http://dx.doi.org/10.1080/17482798.2015.1089300>
- Mirsky, E. L., Omar, H. A. (2015) Cyberbullying in adolescents: The prevalence of mental disorders and suicidal behavior. *International Journal of Child and Adolescent Health*, 8(1), 37-39. https://uknowledge.uky.edu/pediatrics_facpub/170
- National Cyber Security Alliance. (2016). [Data in bar graph form on the popularity of social media sites] *Reach of leading social media and networking sites used by teenagers in the United States as of June 2016*. Retrieved from <https://www-statista-com.prxy4.ursus.maine.edu/statistics/234444/most-popular-websites-for-teenagers-in-the-us/>
- NoBullying.com. (2015, August 06). *The Story of Rebecca Ann Sedwick*. Retrieved from <https://nobullying.com/rebecca-ann-sedwick/>
- NoBullying.com. (2017, March 27). *The Top Six Unforgettable CyberBullying Cases Ever*. Retrieved from <https://nobullying.com/six-unforgettable-cyber-bullying-cases/>
- Orono High School Student Handbook*. Maine: Orono High School, 2017-2018. Print.
- Patchin, J.W. (2016) [Bar graph summarizing cyberbullying rates over time] *Lifetime Cyberbullying Victimization Rates*. Retrieved from <https://cyberbullying.org/summary-of-our-cyberbullying-research>
- Sampasa-Kanyinga, H., Hamilton, H. A. (2015) Social networking sites and mental health problems in adolescents: The mediating role of cyberbullying victimization. *European Psychiatry*, 30(8), 1021-1027. <http://dx.doi.org/10.1016/j.eurpsy.2015.09.11>
- Selkie, E. M., Fales, J. L., Moreno, M. A. (2016) Cyberbullying prevalence among US middle and high school-aged adolescents: A systematic review and quality assessment. *Journal of Adolescent Health*, 58(2), 125-133. <http://dx.doi.org/10.1016/j.jadohealth.2015.09.026>

- Twenge, J.M., Joiner, T.E., Rogers, M.L., Martin, G.N. (2018) Increases in depressive symptoms, suicide-related outcomes, and suicide rates among U.S. adolescents after 2010 and links to increased new media screen time. *Clinical Psychological Science*, 6(1), 3-17. <http://dx.doi.org/10.1177/2167702617723376>
- Twenge, J.M., Martin, G.N., Campbell, W.K. (2017) Decreases in psychological well-being among American adolescents after 2012 and links to screen time during the rise of smartphone technology. *American Psychological Association*, 1-16. <http://dx.doi.org/10.1037/emo0000403>
- U.S. Department of Health and Human Services. (2014, March 31). *Federal Laws*. Retrieved from <https://www.stopbullying.gov/laws/federal/index.html>
- Vanorman, A., Jarosz, B. (2016, June 9) *Suicide replaces homicide as second-leading cause of death among U.S. teenagers*. Retrieved from <https://www.prb.org/suicide-replaces-homicide-second-leading-cause-death-among-us-teens/>
- Varjas, K., Talley, J., Meyers, J., Parris, L., Cutts, H. (2013). High school students' perceptions of motivations for cyberbullying: An exploratory study. *Western Journal of Emergency Medicine*, 11(3), 269-273. http://escholarship.org/uc/uciem_westjem
- Wallace, Kelly. (2014, April 21) Police file raises questions about bullying in Rebecca Sedwick's suicide." *CNN*. Retrieved from <https://www.cnn.com/2014/04/18/living/rebecca-sedwick-bullying-suicide-follow-parents/index.html>
- WGME. (2017, May 25) Lewiston family distraught after teen daughter's suicide. *WGME*. Retrieved from <http://wgme.com/news/local/lewiston-family-distraught-after-teen-daughters-suicide>
- Wong, R. Y.M., Cheung, C. M.K., Xiao, B. (2018) Does gender matter in cyberbullying perpetration? An empirical investigation. *Computers in Human Behavior*, 79, 247-257. <https://doi.org/10.1016/j.chb.2017.10.022>
- Young, R., Subramanian, R., Miles, S., Hinnant, A., Andsager, J. L. (2017) Social representation of cyberbullying and adolescent suicide: A mixed-method analysis of news stories. *Health Communication*, 32(9), 1082-1092. <http://dx.doi.org/10.1080/10410236.2016.1214214>
- Zetter, K. (2008, November 11) Government's Star Witness Stumbles: MySpace Hoax was her Idea, Not Drew's. *Wired*. Retrieved from <https://www.wired.com/2008/11/lori-drew-pla-3/>
- Zezulka, L. A., Seigfried-Spellar, K. C. (2016) Differentiating cyberbullies and internet trolls by personality characteristics and self-esteem. *Digital Forensics, Security and Law*, 11(3), 7-26. <https://doi.org/10.15394/jdfsl.2016.1415>

Zimmerman, K.A. (2017, September 6). History of Computers: A Brief Timeline. *Live Science Contributor*. Retrieved from <https://www.livescience.com/20718-computer-history.html>

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