



## Review

## Cyberbullying in higher education: A literature review

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## ABSTRACT

With the more pervasive use of technology, the prevalence of cyberbullying has increased. Universities and colleges have implemented more ways to reach students over the Internet and by other electronic means; consequently, it is important to investigate the prevalence of cyberbullying in higher education. This literature review was created to raise awareness of this continuing trend of cyberbullying among college students. Cyberbullying is defined as intent to consistently harass another individual to cause harm via any electronic method, including social media, and includes defamation, public disclosure of private facts, and intentional emotional distress. An exhaustive search of current literature was conducted using a variety of databases including Academic Search Complete, Education Source, E-Journals, ERIC, PsycArticles, Psychology and Behavioral Sciences Collection, and PsycINFO. Google, Google Scholar, and reference lists from key studies were also used to gather relevant studies for inclusion in this review. Articles were used to define cyberbullying, build a historical base of cyberbullying among adolescents, examine factors involved in cyberbullying, describe effects of cyberbullying, and examine this trend among college students. Strategies such as reporting, monitoring online interactions, and legal actions to address cyberbullying in all areas of education were included. Future research should investigate if educational programs lead to decreased cyberbullying, increased rates of reporting, and how cyberbullying may change social media etiquette.

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## 1. Introduction

The Internet can have an impact on users socially and psychologically (Bessière, Pressman, Kiesler, & Kraut, 2010; Kraut et al., 1998, 2002). More individuals are using the Internet for social communication with e-mail, instant messaging, chat rooms, and gaming along with general information retrieval, health resources, and entertainment (Bessière et al., 2010; Kraut et al., 2002). While the use of the Internet has its benefits, there has been much speculation as to whether the Internet may also be harmful to one's social and psychological well-being. The argument has been presented the Internet could cause users to become socially inept and isolated, whereas others believe the increased interaction could improve social relationships (Kraut et al., 1998). Unfortunately, the use of the Internet to perpetrate cyberbullying may present a stronger argument for the detrimental effects of the technology.

Bullying is a major problem in today's society and occurs at many different ages and in many different forms. With the increase in the use of technology, a disturbing trend worldwide is cyberbullying, where individuals can harass others online through emails, text messaging, and social media websites 24 h a day, seven days a week. The anonymity cyberbullying provides gives bullies a sense of power and control that otherwise might not be present if they were face-to-face with their victims. Also, the prevalence of this topic in current news and media can be empowering to an individual because of gained publicity, even if he or she is the only one aware he or she is the bully in question.

The purpose of this literature review was to enhance awareness of the prevalence of cyberbullying in higher education among higher education students, administrators, and faculty. While several studies regarding cyberbullying in higher education exist, further investigation is needed to examine characteristics of cyberbullies, examine causes of cyberbullying, and present recommendations for eliminating the problem, particularly in higher education.

## 2. Methods

A search for published literature was conducted through various databases including Academic Search Complete, Education Source, E-Journals, ERIC, PsycArticles, Psychology and Behavioral Sciences Collection, and PsycINFO. Google, Google Scholar, and reference lists from key studies were also used to find information relevant to this topic. Approximately 100 documents were reviewed, with 54 being used in the final literature review. Articles were limited to primarily peer-reviewed journals, with scholarly works included to provide background and support information about the topic published between 2004 and 2015. The reference lists of key articles were searched to add support for several discussions throughout the paper and obtained by conducting Google searches for their titles. The following key words were searched: cyberbullying and higher education, cyberbullying and universities, cyberbullying and college, cyberbullying and social media, cyberbullying statistics among college students, bullying 1990s, social dominance theory and aggression, social dominance theory and cyberbullying, bullying among college students, and cyberbullying and undergraduates. Several articles detailing the rise in cyberbullying among adolescents were included in the literature review for historical perspectives and to demonstrate patterns of cyberbullying behavior and cyber victimization that follow some adolescents into young adulthood. Articles detailing the current methods of cyberbullying (cell phone, including phone calls, instant and text message, and email messages) were included. Because social media use is pervasive world-wide, it is becoming a more popular venue for cyberbullying to occur, and several articles discussing social media

cyberbullying were included. One newspaper article was included to demonstrate possible legal ramifications of cyberbullying. Articles were included about bullying in the workplace and bullying among children to add definitional and historical context and ranged back as far as the late 90s.

## 3. Bullying and cyberbullying defined

Olweus (1991) defined bullying as a person or persons repeatedly taking negative actions against another person who cannot defend himself or herself. When someone takes these negative actions against another, the effect is to cause some type of injury, either physical or emotional, to the victim (Olweus, 1991; Roland & Idsøe, 2001). Generally, when the bully and victim are not in the physical presence of each other, the negative actions stop. Because of the digital age, bullying has now transcended physical presence, and bullies have unlimited access to their victims.

Most students today are members of a digital generation; therefore, educators must be aware of the cyberbullying crisis and realize it occurs among adolescents and young adults. Willard (2005) defined cyberbullying as posting comments online intending to defame an individual, to disclose publically another's private facts, and to inflict intentional emotional distress on another person. Cyberbullying has also been defined as repeatedly harassing someone using technology with the intent of harming, embarrassing, or damaging the other individual (Beale & Hall, 2007; Beran, Rinaldi, Bickham, & Rich, 2012; Bhat, 2008; Mason, 2008; Patchin & Hinduja, 2006). Cyberbullying can be done via any device used to electronically communicate. Emails, texting, and instant messaging make up the majority of cyberbullying formats (Akbulut & Eristi, 2011; Akbulut, Sahin, & Eristi, 2010; Finn, 2004; MacDonald & Roberts-Pittman, 2010); however, cyberbullying via social networking sites such as Facebook, Twitter, and YouTube appears to be gaining in popularity because of the ability of the masses to witness and/or participate in the attacks (Brack & Caltabiano, 2014; Festl & Quandt, 2013; Lenhart, Madden, Purcell, Zickuhr, & Rainie, 2011; MacDonald & Roberts-Pittman, 2010; Rafferty & Vander Ven, 2014; Whittaker & Kowalski, 2015).

### 3.1. Types of cyberbullying

Li (2007) and Willard (2005) categorized 7 types of cyberbullying: flaming, online harassment, cyberstalking, denigration, masquerading, trickery and outing, and exclusion. Flaming involves sending angry, rude, or vulgar messages via text or email about a person either to that person privately or to an online group. Harassment involves repeatedly sending offensive messages, and cyberstalking moves harassment online, with the offender sending threatening messages to his or her victim. Denigration occurs when the cyberbully sends untrue or hurtful messages about a person to others. Masquerading takes elements of harassment and denigration where the cyberbully pretends to be someone else and sends or posts threatening or harmful information about one person to other people. Trickery and outing occur when the cyberbully tricks an individual into providing embarrassing, private, or sensitive information and posts or sends the information for others to view. Exclusion is deliberately leaving individuals out of an online group, thereby automatically stigmatizing the excluded individuals.

Langos (2012) took the definition of cyberbullying one step further and described two subsets of cyberbullying: a) direct cyberbullying occurs between the cyberbully and the victim only, and b) indirect cyberbullying occurs when the cyberbully posts things about the victim in some type of social format where multiple people have access. In this context, she further noted there are multiple elements of bullying/cyberbullying as repetition, power

differential, and aggression/intention; she explained without these elements, it is difficult to label a single malicious act as bullying/cyberbullying.

#### 4. Historical perspective

Historically, studies regarding cyberbullying have been conducted among young adolescents with fewer studies occurring at the college level. This review is geared toward cyberbullying incidences among college students; however, a historical context cannot be overlooked as cyberbullying first was reported and studied in adolescents.

The percentage of cyberbullying among adolescents is astonishing. Patchin and Hinduja (2006) conducted a study among 384 youths and reported 11% of participants were cyberbullies, approximately 29% were cybervictims, and almost 50% were witnesses to cyberbullying. That same year, however, Li (2007) conducted a study among 461 junior high (Canadian and Chinese) students and discovered 55.6% of males and 54.5% of females knew someone who had been cyberbullied. She went on to report approximately 30% of her respondents had been cyberbullied, and approximately 18% had engaged in cyberbullying.

More alarming than the trend of cyberbullying is the lack of reporting it. Li (2007) noted only 35% of respondents reported being cyberbullied to adults. In 2008, United Press International (UPI) reported 40% of teens had been cyberbullied, but only 10% of victims reported the harassment to their parents. Both of these studies indicated victims felt powerless to end the harassment. Glasner (2010) seemed to support these findings by reporting when teachers ignored the behavior or seemed not to be aware of the issue, they appeared to be condoning the behavior. Moreover, some teachers reported they thought the victims precipitated the cyberbullying. Francisco, Simão, Ferreira, and Martins (2014) reported only 6% of cybervictims reported the incidences to an adult (parent, teacher, etc.). Walker (2014) also reported cybervictims, no matter what their age, need support to end the cyberbullying before the consequences for the victims become fatal. From the research, it appears if adolescents feel powerless to end the harassment no matter what the circumstances, then it is not surprising victims would fail to report cyberbullying acts.

Social media is also becoming a more popular venue for cyberbullying, especially among adolescents. Lenhart et al. (2011) conducted a study among 623 teenagers (12–17) who used social media regularly to determine their perceptions of social media use among teenagers. Eighty-five percent of respondents witnessed negative interactions via social media, with 12% saying it occurred frequently. Not surprisingly, Festl and Quandt (2013) reported 52% of 12–19 year-olds ( $n = 408$ ) had cyberbullied others via social media with another approximately 20% cyberbullying others through Internet chat rooms. All of these studies seem to point to the increasing prevalence of cyberbullying, not only among adolescents but undergraduate students as well.

#### 5. Factors contributing to cyberbullying

##### 5.1. Anonymity

As has previously been discussed, cyberbullying can be done via any device used to electronically communicate. Because of the very nature of cyberbullying, cyberbullies can remain anonymous, and the abuse of victims may last for months or years. The anonymity aspect of cyberbullying may make this form of bullying even more attractive than traditional bullying. While some anonymity means the bully could target someone he or she does not even know, another side of anonymity is the bully can easily create a false

identity which decreases the chance of being caught. This may lead to permanent humiliation because of the infinite nature of the Internet (Wong-lo, Bullock, & Gable, 2011). The anonymity factor also allows the bully to remain hidden while at the same time engaging multiple individuals to view the act (Barlett & Gentile, 2012; Bhat, 2008; Wong-lo et al., 2011), including international audiences (Wong-lo et al., 2011).

Related to anonymity is the disinhibition effect. According to Mason (2008) and Willard (2005), the disinhibition effect may explain bullying/cyberbullying behavior. They reported anonymity breeds reduction in concern for others' perceptions; this is true even when the perpetrator knows the victim. Willard (2005) reported cyberbullies cannot see the victim's immediate reaction which may also contribute to lack of concern for outcomes and reduced inhibitions. Willard (2005) also speculated this reduction in concern for others and lack of inhibition could be related to lack of pre-frontal cortex development, which controls proper response to good and bad actions and behavior. Mason (2008) took this one step further and noted anonymity allows the bully to transform into a social self, discarding the private self, thus disregarding accountability and social norm control. Mason (2008) reported this transformed self can lead to increased aggression, impulsivity, and irrationality online.

##### 5.2. Psychological needs

In one unique study of predictors for cyberbullying, Dilmac's (2009) study of 666 undergraduates reported past engagement in cyberbullying and predicted future engagement in each. The researcher used the Need Scales of the Adjective Check List (ACL) comprised of 15 different adjectives participants used to describe themselves. The researcher conducted three regression analyses and discovered certain personality traits predicted engagement in, exposure to, and future engagement in cyberbullying. For example, intraception (trying to understand others' and self-behavior) and aggression predicted engagement in and future engagement in cyberbullying. Endurance (commitment to any task) predicted exposure to cyberbullying and was a negative predictor of future engagement in cyberbullying.

Furthermore, Dilmac (2009) categorized respondents as non-bully-victims (witnesses of cyberbullying), pure-victims (cyberbullied), pure-bullies (cyberbullied others), and bully-victims (those who both perpetrated and received cyberbullying actions). Pure-bullies reported very high levels of aggression, and other researchers have reported these same findings among adolescents versus college students (Beran & Li, 2005; Willard, 2005). Dilmac (2009) reported pure-bullies need the succorance (need for sympathy/emotional support) cyberbullying provides because most of the reported cyberbullies used social media to denigrate their victims. Dilmac (2009) also found pure-victims reported high levels of intraception, empathy, and nurturance and do not engage in cyberbullying others.

##### 5.3. Social dominance theory

Sidanius and Pratto's (as cited in Walker, Sockman, & Koehn, 2011) Social Dominance Theory (SDT) is the notion people belong to either a dominant group at the top of the social hierarchy or a subordinate group at the bottom of the social hierarchy. Walker et al. (2011) used previous research discussing SDT to propose characteristics of cyberbullies: older individuals tend to dominate over younger individuals; men are more aggressive than women; and arbitrary set groups dominate when they have items or relationships seen as desirable and even undesirable by others. The two major components, gender and arbitrary set groups, along with

social dominance orientation, further define characteristics for being victims or perpetrating cyberbullying. Walker (2014) tested the social dominance theory by conducting a study among 695 undergraduate students. She discovered 9.6% of males and 6.9% of females cyberbullied. No statistically significant difference was found demonstrating males felt the need to exert their dominance through cyberbullying. These results did not lend support for gender dominance as playing a role in cyberbullying activity; however, few studies exist examining the characteristics of this theory as they relate to cyberbullying and should be investigated further.

#### 5.4. Poor interpersonal child/adult relationships

Ybarra and Mitchell (2004) posited parents and/or caregivers may not understand today's technologies; thus, they lack the skills to monitor or cope with cyberbullying, and they indicated this low caregiver involvement leads to a high number of cyberbullying incidences. Poor relationships and interactions among adults and children have been demonstrated to lead to increase incidences of cyberbullying (Willard, 2005; Ybarra & Mitchell, 2004). Ybarra and Mitchell (2004) provided support better communication leads to a decrease in cyberbullying actions and the negative consequences for the victims.

#### 5.5. Other social cues

Rafferty and Vander Ven (2014) identified reasons for cyberbullying as power struggles, trolling, and cyber-sanctioning. Power struggles are attempts to hurt, humiliate, or influence behavior to obtain or re-obtain something or someone perceived as valuable (such as an ex-boyfriend/girlfriend). Trolling is viewed by cyberbullies as entertainment, and individuals engage in this activity to intentionally hurt their victims; simply stated, they cyberbully just to be mean. Cyber-sanctioning is pressuring peers to change their behavior through name-calling, vigilante justice, and informal social control. This activity can reduce crime and deviance. Although it may seem counterintuitive, cyber-sanctioning may be socially acceptable and used for positive results.

Barlett and Gentile (2012) and Boulton, Lloyd, Down, and Marx (2012) found the cyberbully may have interpersonal problems with the victim or was urged to bully by someone else (portraying the cyberbullying as acceptable behavior). Dilmac (2009) reported aggression and neediness as positive predictors of cyberbullying behavior. Akbulut and Eristi (2011) noted counterattacking, revenge, or knowing the cyberbully can hurt or dominate someone else as other possible reasons for bullying. They reported out of 254 students, holding a grudge and revenge made up 52% of why people cyberbullied. All of these studies demonstrate how cyberbullies need attention, no matter what the consequences are to their victims.

### 6. Effects of cyberbullying behavior

While traditional forms of bullying can have negative consequences for its victims, victims generally have a reprieve when they leave the situation (school, work, home, etc.). Unfortunately, cyberbullying has greater negative effects because victims can be bullied no matter where they are, 24 h a day, seven days a week. The ability of cyberbullies to remain anonymous while still terrorizing their victims in the privacy of their homes may mean the perpetrators do not see the negative effects they cause, but the effects are real.

Research has reported victims of cyberbullying experience anger, academic consequences, psychological problems, and may

lead them to become cyberbullies or continue to be victims (Beran et al., 2012; Bhat, 2008; Glasner, 2010; Schenk & Fremouw, 2012; Spears, Slee, Owens, & Johnson, 2009; Wong-lo et al., 2011). Akbulut and Cuhadar (2011) and Schenk and Fremouw (2012) reported victims cried, felt embarrassed, missed school, became depressed, experienced insomnia, and expressed suicidal ideations and/or committed suicide. Spears et al. (2009) also reported some victims feared for their safety and experienced relationship disruptions, some to the point of moving or ending a relationship with a significant other. Hoff and Mitchell (2008) more specifically reported when victims did not know their attackers, fear and anger increased, but they still may not have reported the bullying even when the situation became dangerous. Selkie, Kota, Chan, and Moreno (2015) reported among 265 female college students, being engaged in cyberbullying as bullies, victims, or both led to higher rates of depression and alcohol use. Related to all of these elements is social anxiety, described as occurring when individuals experience difficulty interacting with peers (Pabian & Vandebosch, 2016). Cyberbullying increased social anxiety levels in these individuals (Pabian & Vandebosch, 2016).

### 7. Undergraduates and cyberbullying

Research has indicated when individuals in high school have been cyberbullies or cybervictims, they tend to fall into these same categories in college (Beran et al., 2012; Kraft & Wang, 2010; Selkie et al., 2015; Slonje & Smith, 2008). Beran et al. (2012) conducted a study of 1368 Canadian and American college students and discovered students who were cybervictims in high school were more than three times likely to be cybervictims in college, and cyberbullies in high school were more likely to cyberbully in college. Furthermore, they discovered the methods (cell phones, etc.) by which individuals were cyberbullied or cyberbullied others tended to remain constant from high school to college. These findings appear to support Chapell et al. (2006) who reported students who were victims, bullies, or a combination of both as children tended to repeat the cycle throughout their early school years and into college. Chapell et al. (2006) examined a total of 119 students, and they reported 72% (18 of 25 participants) of cybervictims in college had been cybervictims in high school and elementary school. Fifty-four percent (14 of 26 participants) of cyberbullies in college had cyberbullied in high school and elementary school. Finally, approximately 42% (5 of 12 participants) who reported being cyberbullies and cybervictims in college had been both in high school and elementary school. Participants who reported being cyberbullied in college also reported being cyberbullied in high school (Kraft & Wang, 2010). Students' experiences with cyberbullying as victims or perpetrators was a significant predictor of their experiences with cyberbullying in college (Dilmac, 2009; Kraft & Wang, 2010).

It has also been reported a large number of high school cyberbullies became victims of cyberbullying in college (Ak, Özdemir, & Kuzucu, 2015; Kraft & Wang, 2010; Patchin & Hinduja, 2006). The assumptions have been made victims discovered the strength to take revenge on their attackers (Ak et al., 2015; Kraft & Wang, 2010; Patchin & Hinduja, 2006). These are assumptions only and should be investigated in future studies.

Kraft and Wang (2010) additionally reported a statistically significant finding that participants who visited social media sites more than 14 times per week were more likely to become cyberbullying targets ( $p < 0.001$ ). Similarly, Çelik, Atak, and Erguzen (2012) reported the more time college students spent online, especially using social media venues, the more likely they were to experience cyberbullying.

The results of more recent research reported similar findings to



the aforementioned studies. Selkie et al. (2015) reported students who experienced cyberbullying in some manner as younger adolescents continued to experience cyberbullying in college. This appeared to be an incidental finding among the 265 female undergraduate participants, because the purpose of the study was to determine how females were affected by cyberbullying. This incidental finding still demonstrated the disturbing trend of undergraduates continuing to be affected by cyberbullying.

Even though cyberbullying extends into college, undergraduates tend to hold a less-accepting view of cyberbullying (Boulton et al., 2012). The speculation is students are concerned the serious consequences of cyberbullying need to be addressed. This appears to support the notion attitudes about cyberbullying can be change, as found by Akbulut and Cuhadar (2011). They reported a unique effect of cyberbullying behavior on some of their 55 pre-service information technology students. In this study, participants listened to a lecture about cyberbullying and then self-reported if they had ever been cyberbullied or cyberbullied others. Forty-two participants reported they had been cyberbullied or cyberbullied others; after they heard the lecture about the ramifications of cyberbullying, seven of the participants expressed regret about their previous actions. Doane, Pearson, and Kelley (2014) conducted a study among 375 college undergraduates and determined empathy for cyberbullied victims ultimately led to a decrease in cyberbullying behaviors.

Brack and Caltabiano (2014) revealed interesting findings related to the self-esteem and attitudes of undergraduates who engaged in cyberbullying. They found no significant difference between the self-esteem of those who were cyberbullies or cyberbullied victims, pure-cyberbullies, and pure-victims. They reported even though cyberbullies felt empowered online, they might not always bully someone face-to-face.

Because college students are preparing to enter the workforce, and several studies have indicated a trend of cyberbullying behavior and victimization throughout a person's lifetime, the concern is these young adults are bringing these attitudes into the workplace. Although not discussed in this review, studies have indicated workplace bullying leads to increased levels of depression, absenteeism, and employee turnover (Akhter, 2015; NasrEsfahni & Shahbazi, 2014; Török et al., 2016; Verkuil, Atasayi, & Molendijk, 2015).

## 8. Strategies to resolve cyberbullying

Unfortunately, as some research has suggested, college students do not always tell parents or teachers if they are being cyberbullied (Glasner, 2010; Kraft & Wang, 2010; UPI, 2008). This lack of awareness could lead to continued or increased cyberbullying incidences among college students with devastating results. Kraft and Wang (2010) suggested students would be more likely to report cyberbullying to college officials if a central email account was set up to do so. Several studies suggested educators must be trained on cyberbullying awareness and provide such strategies to parents and students so victims feel supported (Hoff & Mitchell, 2008; Walker et al., 2011; Zalaquett & Chatter, 2014). These increased feelings of support may lead to a reduction in cyberbullying activity (Walker, 2014).

Washington (2014) suggested instructors must take a more active role in monitoring online interactions to prevent cyberbullying among college students. Additionally, Doane et al. (2014) felt if students took the initiative and role-played incidents of cyberbullying, empathy towards victims might be increased, which in turn might lead to a decrease in cyberbullying.

Willard (2005) went so far as to recommend legal action. When elements of cyberbullying included defamation, public disclosure

of private facts, and intentional emotional distress, all defined as cyberbullying, the victims may file civil suits against their attackers. She also noted when violence, coercion, harassment, hate or bias crimes, exchange of unwanted child pornography, sexual exploitation, and invasion of privacy are involved, law enforcement officials should be notified.

Several high-profile cases of suicide post-cyberbullying have made the headlines in the last few years, most notably, that of Rutgers University student Tyler Clementi. The *New York Times* (2012) reported the details of Clementi's death and the legal case against his roommate, Dharun Ravi. Clementi, who was homosexual, was video recorded by Ravi on multiple occasions. Ravi streamed the interactions via Twitter for many witnesses to see. Even though Clementi reported these incidences to Rutgers officials, the torment he had experienced eventually caused him to take his own life. Ravi was arrested and charged with invasion of privacy, intimidation, tampering with evidence, witness tampering, and hindering apprehension and/or prosecution; he served 20 days of a 30-day sentence. This is the only case that could be found where the college victim's tormentor was convicted of any crime.

Already the legal face of cyberbullying is changing. Currently, all 50 states have laws addressing cyberharassment or cyberstalking, defined as traditional harassment or stalking via electronic devices. Thirty-four states have cyberbullying laws defining cyberbullying, have language prohibiting school cyberbullying, and includes penalties for offenders (National Conference of State Legislatures [NCSL], 2015a, NCSL, 2015b).

## 9. Conclusions and recommendations

As has been presented in the literature, cyberbullying continues to be a disturbing trend not only among adolescents but also undergraduate students. This literature review was created to raise awareness of this continuing trend of cyberbullying among college students with higher education students, administrators, and faculty. Ultimately, the literature presented has led the writers of this review to examine areas for future research as discussed below. This review defined cyberbullying as any electronic means to repeatedly harass, intimidate, or embarrass another person; illustrated numerous types of cyberbullying such as flaming, cyberstalking, and denigration; described characteristics or factors contributing to engagement in cyberbullying such as anonymity, aggression, and succorance; and examined possible solutions to cyberbullying such as education and civil and criminal litigation.

Several researchers identified certain personality traits which may lead some individuals to engage in cyberbullying. A possible area for future research would be to discover if those individuals who are involved in cyberbullying as either victims or perpetrators gravitate to a specific profession or vocation. Another area for additional research, particularly among college students, is the continued use of social media as a venue for cyberbullying activity. This literature review discussed its apparent popularity because massive numbers of individuals are able to view or participate in the harassment. Continued studies on the effect social media has on the trend of cyberbullying could be helpful in creating anti-cyberbullying educational programs for parents, educators, and students to mitigate or eliminate the situation. Other studies should be conducted to determine if educational programs on all types of cyberbullying activity lead to a decrease in this disturbing trend, an increase in rates of reporting cyberbullying attacks, and if social media etiquette evolves over time.

Cyberbullying can have negative effects on the victims, which are generally magnified because of the persistent nature of the problem. These physical and psychological effects can cause permanent damage to the victims and may lead them to take their own

lives. Students who are victims or bullies as children tend to continue in these roles in college; however, cyberbullying is not as accepted in the higher education setting, as undergraduates express more empathy for victims. Despite increased awareness and empathy, undergraduates are still less likely to report cyberbullying. Reporting can be encouraged by offering these students a safe, anonymous system and support for reporting offenses. Mentoring, role-playing, and legal action may increase awareness of the severity of cyberbullying and encourage cyberbullies and cyber-victims to end it. Cyberbullying is gaining ground in the legal arena in all 50 states, but continued discussion, research, and awareness is important to continue the effort to reverse or end this trend.

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