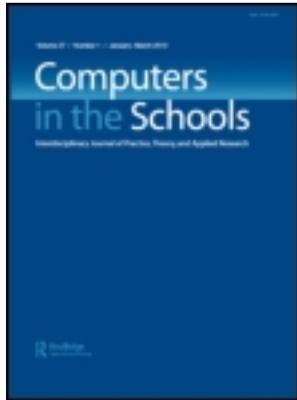


This article was downloaded by: []

On: 01 November 2011, At: 21:22

Publisher: Routledge

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



Computers in the Schools

Publication details, including instructions for authors and subscription information:

<http://www.tandfonline.com/loi/wcis20>

Cyber Worlds: New Playgrounds for Bullying

Lauren Mark^a & Katherine T. Ratliffe^a

^a Department of Educational Psychology, University of Hawaii, Honolulu, Hawaii, USA

Available online: 14 Jun 2011

To cite this article: Lauren Mark & Katherine T. Ratliffe (2011): Cyber Worlds: New Playgrounds for Bullying, *Computers in the Schools*, 28:2, 92-116

To link to this article: <http://dx.doi.org/10.1080/07380569.2011.575753>

PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: <http://www.tandfonline.com/page/terms-and-conditions>

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae, and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand, or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

Cyber Worlds: New Playgrounds for Bullying

LAUREN MARK and KATHERINE T. RATLIFFE

Department of Educational Psychology, University of Hawaii, Honolulu, Hawaii, USA

The experiences of 247 middle school children around cyberbullying were examined through in-class questionnaires. Their use of different media, their experiences with cyberbullying, and the relationships among school type, gender, and grade level were analyzed. Of the students in this sample 33% of female and 20% of male students reported being a cybervictim or a bully. Social networking sites and cell phones were the media most often used. Interesting results included a nonlinear relationship between Internet use and cyberbullying and the increase in cyberbullying throughout middle school. Also, students perceived that neither teachers nor parents were prepared to assist them with cyberbullying problems.

KEYWORDS *cyberbullying, bullying, middle school, cyber victimization, digital technology*

CYBER WORLDS: NEW PLAYGROUNDS FOR BULLYING

Cyberbullying, bullying via electronic media, is a growing problem in middle and high schools across the United States (Beran & Li, 2005; Brydolf, 2007). *Cyberbullying* is defined as the intentional act of online/digital intimidation, embarrassment, or harassment. Face-to-face bullying has long been a problem in schools (Olweus, 1993). With the recent ubiquity of access to digital technology, cyberbullying is a novel threat to students, and introduces new elements to this seemingly age-old practice. Face-to-face bullying, also known as traditional or schoolyard bullying, and cyberbullying have often been associated, suggesting that these two social problems are compounded (Beran & Li, 2005; Juvonen & Gross, 2008; Ybarra & Mitchell, 2004).

According to a 2007 Pew Internet and American Life Project survey, 93% of teens are online once or more times a week, and 60% of those own their

Address correspondence to Katherine T. Ratliffe, Department of Educational Psychology, University of Hawaii, 1776 University Ave., Wist 214, Honolulu, HI 96822. E-mail: ratliffe@hawaii.edu

own cellular phones (Lenhart, Madden, Macgill, & Smith, 2007). Teenagers rely on these digital tools to communicate and maintain their social circles; however, they can also be misused to torment and harass, or *cyberbully* others (Belsey, 2008; Leander, 2007; Stover, 2006; Strom & Strom, 2005; Subrahmanyam & Greenfield, 2008). Consequences of cyberbullying can include poor academic performance, school dropout, physical violence, and suicide, and it is a method of bullying that is frequently hidden from adults (Willard, 2006a). Studies have suggested that although it may occur less frequently than face-to-face bullying, up to 70% of students in the United States have experienced cyberbullying (Juvonen & Gross, 2008; Wang, Ionnotti, & Nansel, 2009). Wang et al. (2009) found that boys are more likely to be cyber bullies, and girls are more likely to be victims. This paper will look at the incidence of cyberbullying, the media used, and the experiences of students in three Hawaii middle schools.

COMPARING TRADITIONAL BULLYING AND CYBERBULLYING

Traditional, or face-to-face bullying, is defined as deliberate and repeated acts of physical or mental harm, intimidation, or mistreatment of someone of a weaker stature or lower status (Boulton, Trueman, & Murray, 2008; Coffee, 2005; Hawker & Boulton, 2000; Olweus, 1993; Pellegrini, 2002). It is one of the oldest and most prevalent problems in schools (Nansel et al., 2001; Olweus, 1996; Webb, 2006). Bullying can be manifest as direct acts of physical violence, or as indirect acts involving relational or social aggression such as social exclusion, isolation, spreading rumors, or manipulation (Pellegrini, 2002).

Cyberbullying, a newer form of relational bullying using digital technology, primarily involves name-calling, threats, spreading rumors, sharing another person's private information, social isolation, and exclusion. It may be more subtle and covert, and can be perpetrated faster and in more environments than traditional forms of bullying (Beran & Li, 2005).

Face-to-face bullying peaks in middle school when students feel less secure in their new environments and dominant roles are established among peers (Milsom & Gallo, 2006). Some studies showed that these incidents tend to decrease through the middle grades (Goddard, 2008; Pellegrini, 2002), where others demonstrated that bullying stays relatively constant throughout middle school (Kim, Boyce, Koh, & Leventhal, 2009). Boys are involved more in overt physical bullying, but girls tend to use relational bullying more than boys (Casey-Cannon, Hayward, & Gowen, 2001; Goddard, 2008; Nansel et al., 2001; Seals & Young, 2003; Webb, 2006).

While cyberbullying has the same potential as face-to-face bullying to frighten and harm others mentally or emotionally, it can be done without any physical contact or knowledge of the cyberbully's identity (Willard, 2006a).

While in face-to-face bullying there is a clear power differential, usually where the stronger bully torments the weaker victim, in cyberbullying the power lies in anonymity (Brydolf, 2007; Keith & Martin, 2005; Strom & Strom, 2005; Winter & Leneway, 2008). Under the cover of anonymity, bullies may act more aggressively than they would in face-to-face situations (Kirby, 2008). People are more likely to become cyberbullies and engage in unethical online behavior when (a) they believe they will not get caught, (b) they do not think that they are causing perceptible harm to the victim, (c) other people are doing it even though it is considered wrong or unethical, and (d) it is viewed as retaliation (Willard, 2002).

Students believe their parents and school faculty are often unaware of traditional bullying incidents (Foster & Marin, 1996; Pellegrini, 2002). In one study only 51% of teachers and 63.4% of parents reported knowing about bullying incidents, while 71.8% of students reported being aware of these incidents (Olweus, 1993). Even when adults are aware of bullying, some believe that it is a “rite-of-passage” or is a naturally occurring event in adolescence (Pellegrini, 2002). Parents and teachers may unintentionally contribute to the bullying by ignoring it or viewing it as a problem that students should solve on their own.

The same may be true in cyberbullying cases. Many adults are unaware of cyberbullying occurring among adolescent students or turn a blind eye to these issues (Beran & Li, 2005; Keith & Martin, 2005; Li, 2005; Willard, 2005). In addition, studies have shown that 90% of students do not tell their parents or other adults that they are being cyberbullied (Juvonen & Gross, 2008; Willard, 2002). Oftentimes, victims are more afraid of losing their computer or phone privileges than they are worried about emotional harm or harassment from cyberbullies (Strom & Strom, 2005). Because many adults are unaware of, or ignore cyberbullying incidents, and because children refuse to tell anyone about cyberbullying, this social problem is at risk for perpetuation and escalation in schools.

Another difference between face-to-face bullying and cyberbullying is that cyberbullies target their victims not only at school, but in their homes and any place where technology is accessible (Shariff & Hoff, 2007; Stover, 2006; Strom & Strom, 2005). With much of cyberbullying occurring outside of school grounds, jurisdictional laws make disciplining cyberbullies difficult. School authorities have had a difficult time supervising online activities, knowing when to involve law enforcement, and distinguishing first amendment rights of freedom of expression from harassment (Shariff & Hoff, 2007; Willard, 2007).

Strom and Strom (2005) found that cyberbullies feel less regret, sympathy, or concern toward their victims than face-to-face bullies. This lack of concern or empathy could be due to the impersonal nature of digital communication, which can leave cyberbullies both more brazen, and less aware of the extent of emotional or psychological damage they may have caused

the victim (Strom & Strom, 2005; Winter & Leneway, 2008). Consequently, while cyberbullies feel stronger and more powerful, cybervictims can often feel more alone and helpless (Winter & Leneway, 2008).

In the last few years, media coverage highlighting stories of teen suicide as a result of cyber harassment is creating an increased concern about the cyberbullying phenomenon (Dretzin, 2008; Keen, 2008; Tresniowski, 2008). As a result, many states have introduced and passed specific legislation to enhance Internet safety (Keen, 2008).

Cyberbullying is particularly difficult for parents and teachers to monitor because it can occur via various types of technology. These can include (a) cellular phones (e.g., phone calls, text messages, photo-mail, etc.), (b) Internet chat rooms, (c) e-mail, (d) Instant Messenger (IM), (e) online blogs (Web journals), (f) massive multiplayer online role-playing games (MMORPG), (g) social networking Web sites (e.g., MySpace and Facebook), and (h) video broadcasting Web sites (e.g., YouTube) (Willard, 2006a, 2006b).

Bullying in Hawaii and the United States

Hawaiian adolescents are at less risk for physical fights in or out of school than other adolescents across the United States, according to the results of the 2007 Hawaii Youth Risk Behavior Survey (Saka, 2008). However, almost 45% of adolescents in Hawaii public schools reported that they had been "hurt by having mean things said to them (things that hurt their feelings) while on school property," and almost 24% reported that they had been hurt by "having mean things said to them on the Internet or e-mail" in the 12 months prior to taking the survey. This increased to almost 32% in the 2009 survey (Hawaii Youth Behavior Survey, 2009). Many (54.8% in 2007, 51.2% in 2009) Hawaiian respondents strongly agreed or agreed that harassment or bullying by other students was a problem at their schools (Hawaii Youth Behavior Survey, 2009; Saka, 2008).

Theoretical Framework

Erikson (1968) characterized adolescence as a time of identity formation versus role diffusion. Adolescent identity is often viewed in relationship to peers, and negative social status is more stable than positive status in adolescence (Brown, 2005). Adolescents who are not socially accepted often have difficulty improving their social standing (Brown, 2005; Rubin, Bukowski, & Parker, 1998). Bullying can be seen as one way to improve or maintain one's own standing through being aggressive to others with lower status. Cyberbullying, where the bully is often anonymous, may be a way for those with less status to try to assert their own power and attempt to improve their social standing. In cyberbullying, the power differential is

often related to anonymity rather than size or strength. The impersonal nature of communication technologies allows anonymity, but may also increase the danger of this type of bullying by isolating victims.

The social presence theory argues that people form functional and healthy relationships because of the social and physical presence of others. It originally focused on differences between telephone and face-to-face interactions. However, it was one of the first developed theories on communication media and human interaction, and it highly influenced computer-mediated communication research (Johnson & Keil, 2002; Short, Williams, & Christie, 1976; Tu, 2000). According to this theory, social presence can be rated on a continuum, where face-to-face interactions have the most social presence, and written, text-based communication, the least. The more contact a person has with others, the more intimacy, immediacy, warmth, and interpersonal rapport will increase. The decreased social presence in digital communications can not only make ordinary communications difficult because of the lack of immediate feedback, but for adolescents engaged in cyberbullying it can be more harmful because perpetrators cannot accurately assess victims' reactions. For example, communications not intended as aggressive or hurtful can be perceived that way by the receiver.

The purpose of this study was to assess the extent of cyberbullying in Hawaii middle schools, the media used, the awareness students had of cyberbullying in their peer group, and relationships between technology use, grade level, and gender. Middle school, rather than high school, students were selected because face-to-face bullying levels tend to peak in middle school and decrease before high school (Milsom & Gallo, 2006; Pellegrini, 2002). This study examined whether the same inferences could be made about cyberbullying.

METHOD

Participants

Three of the five middle schools that were approached agreed to participate. Three teachers from School A volunteered to distribute surveys to eight 6th-through 8th-grade classes. Two teachers from School B and one from School C distributed surveys to all students in their classes. A total of 265 students (70% female) completed the surveys. These convenient samples were based on the cooperation of school administrators, teacher participation, the willingness of the students, and the obtaining of parental written consent.

Settings

School A is classified as an urban public middle school, School B is a public charter school, and School C is an all-girls private school. The total student population at School A was about 700 students, with 71% of Asian/Pacific

Island descent and middle to high SES (socio-economic status) (National Center for Educational Statistics, 2007). School B had 160 students in 6th through 8th grades, with a range of ethnicities, SES, and academic abilities representing the demographic pattern of the state of Hawaii (Curriculum Research & Development Group, 2009). School C had a student population of 230 middle school students; 82% were of Asian/Pacific Island descent with middle to high SES (Private Schools Report, 2005).

Instrumentation

A 35-item survey was constructed, based on two student questionnaires created by Beran and Li (2005) and Li (2005). Their questionnaires contained 26 and 15 items, respectively, that queried Canadian middle school students about their personal cyberbullying experiences. Beran and Li believed that a close relationship existed between cyberbullying and other forms of bullying, and therefore used Olweus' (1993, 1996) frequently cited definition of traditional bullying as a basis for their questionnaire. Questions focused primarily on the consequences and after-effects of cyberbullying, such as how students felt as a result of these incidents. Li (2005) created a second survey that focused on the nature and extent of adolescents' experiences of cyberbullying, such as what technology was used and the frequency of these events.

Questions were rephrased from both Beran and Li's (2005) and Li's (2005) surveys that focused on the general extent and characteristics of cyberbullying, to construct a 35-item questionnaire. In addition to demographic information such as age, sex, and grade, the survey contained four distinct sections that gathered information on (a) general technology use, (b) experiences of cyber victims, (c) experiences of cyber bullies, and (d) cyberbullying awareness (See Appendix for the full survey). Questions encouraged in-depth responses regarding participants' opinions and experiences regarding cyberbullying. Students were also asked to describe a cyberbullying experience.

No psychometric data addressing Beran and Li's (2005) and Li's (2005) surveys were available. Ease of use of the 35-item survey was evaluated by first piloting it with 15 graduate students, and then four middle school students. These participants agreed that the items were representative of, and relevant to, the topic of cyberbullying, providing content-related evidence of validity, and they did not recommend any changes. The questions were multiple choice or fill-in-the-blank, and elicited descriptive information. To minimize over or under representations of cyberbullying events, a concise definition of cyberbullying, based on Willard's (2006a) definition, was printed on every page, and teachers were asked to review this with students before administering the survey.

Procedures

Surveys were given to contact teachers at the three schools to distribute. They were asked to give specific directions to their students and clarify misunderstandings of the definition of cyberbullying. Of the 1,090 students in the three schools, 427 received consent forms, and 265 returned the signed consent forms and completed the surveys, a 62% return rate. Of the 265 students who completed surveys, 91 were from School A, 94 from School B, and 80 from School C. The survey took an average of 30 minutes to complete.

Data Analysis

The Kruskal–Wallis, a nonparametric ANOVA test, was used to examine differences in continuous frequencies among the categorical dependent variables of the frequency of technology use (how often students reported going online or using a cell phone), grade level (6th, 7th, or 8th grade), type of school (public, charter, or private), and gender, and independent variables of whether students were cyber victims or cyber bullies. The Kruskal–Wallis test was appropriate because the data did not follow a normal distribution, thus not fitting the general assumption of normality in a one-way ANOVA. The relationship between cyber victims and cyber bullies was investigated using Pearson chi-square analysis. A Spearman rank analysis was used to test correlations between frequency of Internet use and participation in cyberbullying. In addition, the types of technology used by the students were compared. This study also included descriptions of the extent of awareness of school anti-bullying strategies, students' personal accounts of cyberbullying, the outcomes of these incidents, and preventative actions taken in schools.

RESULTS

Technology Access

Of the 265 survey participants, 96% (255) reported having home access to computers with an Internet connection. Of those students, 33% (89) went online daily. Eighty-eight percent (234) reported owning a cell phone, and 43% (114) of those used their cell phones daily. More than half (54%) of cyber victims reported using the Internet every day. A Kruskal–Wallis analysis revealed a significant difference between frequencies of cyberbullying incidents and Internet use as reported by cyber victims ($\chi^2_{(4)} = 18.14^{**}$, $p < .01$) and cyber bullies ($\chi^2_{(4)} = 10.61^*$, $p = .03$). Using a Spearman rank analysis, a significant correlation was found between the frequencies of

Internet use and victimization ($r = .25^{**}$, $df = 262$, $p < .01$), as well as bullying ($r = .18^*$, $df = 262$, $p < .01$). These results suggest that more Internet access leads to a greater potential for a student to become a cyber victim, bully, or both. The relationship between technology access and cyberbullying was not linear. More than half of the cyber victims (54%) and bullies (56%) used the Internet daily, as opposed to nonvictims (28%) and nonbullies (32%) who used the Internet daily. No significant differences were found between cyberbullying and the frequency of cell phone use as reported by cyber victims ($\chi^2_{(4)} = 7.21$, $p = .13$) and cyber bullies ($\chi^2_{(4)} = 4.83$, $p = .31$).

The Extent of Cyberbullying

Forty-seven of the 185 females (25%) reported having been a cyber victim, and 14 (8%), a cyber bully within the last school year. Of the 80 males, 12 (15%) reported being a cyber victim, and 4 (5%), a cyber bully. A Kruskal–Wallis test revealed no statistically significant differences in the frequency of cyberbullying incidents between genders as reported by either cyber victims ($\chi^2_{(1)} = 3.16$, $p = .08$), or cyber bullies ($\chi^2_{(1)} = 0.59$, $p = .44$). However, the data revealed that, in general, females were more likely to be involved in cyberbullying altercations, with 33% of all females and only 20% of males reporting being a victim or bully (See Table 1).

A Kruskal–Wallis test demonstrated significant differences between school type (public, private, and public charter) and the frequency of cyberbullying incidents reported by victims ($\chi^2_{(2)} = 17.66^{**}$, $p < .01$), and bullies ($\chi^2_{(2)} = 8.94^*$, $p = .01$) (See Table 2). Post hoc pairwise comparisons were done to determine where these differences occurred. Comparing the charter school and private school, the private school had more frequent victimization ($D = -24.02^*$, $p < .05$). The public school had more frequent victimization ($D = 33.92^{**}$, $p < .01$) than the charter school in the pairwise comparison. There was no significant difference between the public and private schools ($p = .25$). When comparing the charter school and private school, and the private and public schools, there were no significant differences in frequency of bullying ($p = .09$ and $p = .24$, respectively). The charter and

TABLE 1 Cyber Victims of Bullying by Gender

	Cyber victims		Cyber bullies		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Female (185) (70%)	47	25	14	8	61	33%
Male (80) (30%)	12	15	4	5	16	20%

TABLE 2 Frequency of Victims, Bullies, and Cyberbullying Incidents by School

School	<i>n</i>	Victims		Victim-reported incidents		Bullies		Bully-reported incidents	
		(<i>n</i>)	%		%	(<i>n</i>)	%		%
Public	91	30	51	140	54	11	61	29	55
Private	80	21	35.5	87	34	6	33	23	43
Charter	94	8	13.5	32	12	1	6	1	2
Total	265	59	100	259	100	18	100	53	100

public schools differed significantly ($D = 14.69^{**}$, $p < .01$), with the public school experiencing more bullying incidents.

Evidence revealed no significant difference between the frequency of cyber victimization and grade level ($\chi^2_{(2)} = 5.43$, $p = .07$). However, a significant difference was present between grade level and the frequency of incidents reported by cyber bullies ($\chi^2_{(2)} = 8.61^*$, $p = .01$). Cyberbullying generally increased throughout each grade of middle school (See Table 3). When post hoc analyses were performed, the only pairwise comparison found significant was between the 6th and 8th grades ($D = -14.40^*$, $p = .01$), with the 8th grade having more bullying incidents.

Eleven females (6% of 185) and three males (4% of 80) reported being both cyber victims and cyber bullies. A Pearson chi-square analysis revealed a significant association between these variables ($\chi^2_{(1)} = 34.39^{**}$, $p < .01$), suggesting that many students who reported being cyberbullying victims may also have been involved in separate incidents as the bully.

Types of Technology Used in Cyberbullying Incidents

Bullies in cyberspace use many different forms of digital technology to victimize their peers. Several types of technology are used more frequently than others.

MYSPACE. As shown in Table 4, MySpace tied with cell phones as the most prevalent type of technology used to cyberbully. Seven cyber victims reported receiving hurtful messages on their MySpace pages, and two of

TABLE 3 Frequency of Cyberbullying by Grade Level

Grade	Victims		Incidents		Bullies		Incidents	
	(<i>n</i>)	%						
6th	12	20	44	17	1	5	1	2
7th	20	34	90	35	5	28	22	41
8th	27	46	125	48	12	67	30	57
Total	59	100	259	100	18	100	53	100

TABLE 4 Types of Technology Used the Most to Cyberbully

	Victim Reports		Bully Reports	
	(<i>n</i>)	%	(<i>n</i>)	%
MySpace	18	29	7	39
Cell phones	18	29	5	28
Instant Messenger (IM)	8	13	3	17
Online games (MMORPG)	7	11	0	0
E-mail	5	8	2	11
Chat rooms	4	6	1	5
YouTube.com	2	3	0	0
Internet Web sites	1	1	0	0

those victims reported that those comments made them feel physically unsafe both in and out of school. One male student described his incident.

I was on MySpace and it must have been a student from [my school] because they said they were KKK just as we started reading about KKK in school. I logged off but I felt like I just couldn't be alone anymore. I felt constantly unsafe, constantly being watched.

Today, digital devices can capture compromising situations in photographs and videos that can be easily uploaded onto MySpace. One female student described how a girl and her boyfriend were coerced into kissing in front of a camera, and then without their consent, the photos were posted on MySpace along with inappropriate comments.

CELL PHONE. Several students reported receiving hurtful voice messages involving threats and vulgar language. A male student who was bullied via cell phone reported his experience. "First I got a text message that said 'F*** you!' Then I got another one that said, 'I know where you live.' A third message came and it said, 'I will find you.'"

OTHER CYBERBULLYING VENUES. YouTube, a popular video broadcasting Web site, has become a new site for people to upload embarrassing and sometimes violent video clips. Three participants reported viewing a YouTube video of a violent fight among female students from different schools. Massive multiplayer online role-playing games (MMORPG) have also emerged as new venues to post cruel and hostile comments. Several video gamers reported online incidents that included repetitive threats and derogatory name-calling.

Characteristics of Cyberbullying

Of the 59 cyber victims, 48% (28) reported never knowing the identity of their cyber bully, exemplifying the anonymity of the cyber bully. Of the 18

cyber bullies, 50% (9) reported bullying one or more students who did not attend their school, 44% (8) reported cyberbullying one or more students they knew from their school, and two respondents specifically indicated that they had cyberbullied a friend. Overall, the most common incidents reported by bullies were female-to-female cyberbullying altercations (56%, 10).

VICTIMS' REACTIONS. Almost half of the cyber victims (49%, 29) reported being angry as a result of the cyberbullying. Other emotions reported by cyber victims were sadness (44%, 26), embarrassment (34%, 20), feeling afraid (20%, 12), confusion (5%, 3), and annoyance (3%, 2). Seven students (12%) reported that they believed their grades dropped due to their involvement in cyberbullying incidents during the school year.

REASONS FOR CYBERBULLYING. The most common reason a student decided to cyberbully was retaliation for someone doing or saying something mean in person or online (72%, 13). Four cyber bullies (22%) did it because they thought it was funny, three (17%) did not realize it would cause harm, three (17%) did not know why they did it, and one said he was trying to fit in.

HOW THE CYBERBULLYING ENDED. Nearly half of the victims (48%, 28) reported that the cyberbullying situations ended on their own without intervention from parents, teachers, or friends. Ten victims (17%) reported that the bullying had not ended at the time of taking the survey. Of the rest, seven victims (12%) had friends intervene, six (10%) had parents help them, and only one victim reported that a teacher assisted. The most common reason why bullies ended a cyberbullying incident was because they realized it was wrong (44%, 8), four reported that it got boring (22%), three (17%) said that it ended when a parent or teacher intervened, and four (22%) reported that they were able to resolve it with the victims.

Cyberbullying Awareness

Overall, students believed that their parents were not as aware of cyberbullying situations as their teachers. Of the students who believed that their teachers were aware of cyberbullying, 83% believed that teachers would stop the incidents immediately (65). In contrast, 80% did not think that their parents would stop cyberbullying incidents if they knew about them (100). Although students thought educators were more aware of cyberbullying and would intervene faster than their parents, more victims reported that a parent helped them end these situations.

DISCUSSION

Several issues arose during this investigation that may assist in thinking about cyberbullying and its consequences. In this section, concerns related to the potential harmfulness of online bullying to adolescents, the extent

of cyberbullying in middle schools, and the effects of changing technology and technology access on cyberbullying will be discussed. Implications for teachers and parents, limitations of the study, and ideas for future research will conclude the section.

Cyberbullying's Potential for Harm

ANONYMITY. Over half (52%) of victims in this study reported not knowing their bullies. These results are similar to those found by other researchers (Li, 2007), and are higher than others (Juvonen & Gross, 2008; Smith et al., 2008). This discrepancy may be due to differences in populations studied. For example, Juvonen and Gross drew their sample directly from Internet users, while in other analyses, students completed surveys in school. Their respondents were also older than those in the present study, and may have had a greater sophistication in Internet use, or were less vulnerable to online aggression. Although Juvonen and Gross (2008) proposed that anonymity was not a strong factor in cyberbullying, the results of this study, and those of other researchers demonstrate that the anonymous nature of online communication can promote greater aggression (Willard, 2006a; Ybarra & Mitchell, 2004a).

DECREASED SOCIAL PRESENCE AND THE DEVELOPMENT OF EMPATHY. Victims' perceptions of cyberbullying can be distorted as a result of decreased social presence. For example, one survey respondent felt that she was victimized when her request to be a friend was ignored by someone on MySpace. Yet, another student was involved in a more serious incident involving derogatory flaming, and expressed that it did not interfere with her life. The decrease in social presence, even more than anonymity, can lower a bully's empathic feelings and may allow him or her to objectify a victim and become more aggressive.

Victim's perceptions can be very different from those of the perpetrator. The law recognizes this in the case of sexual harassment; it is the victim's perception that decides whether an interaction constitutes sexual harassment (Kaplin, 2000). The interpretations of cyberbullying experiences by victims and bullies may be related to how well they understand how to relate to people online, as well as the strength of their support systems at home and at school. Other researchers have found that strong family and school support systems decrease the potential for an adolescent to become a cyber victim or bully (Wang et al., 2009). Helping students develop online empathy may decrease online bullying.

KEEPING STUDENTS SAFE. Although many students viewed cyberbullying as a serious problem, they were unsure about what parents and teachers could do to keep them safe. Many students believed their parents incapable of helping them in a cyberbullying conflict. They also expressed that their

teachers did not have knowledge to intervene. These issues conflate to decrease students' perceptions of help around cyberbullying. Cyberbullying experts have suggested that parents and educators need to work together to educate and protect students (Belsey, 2008; Willard, 2002).

Cyberbullying in Middle Schools

Overall, results indicated that cyberbullying is an existing social problem among middle school students in Hawaii, with nearly one out of three females (33%) and one out of five males (20%) in the current sample reporting that they were victims of cyberbullying at least once during the previous school year.

GRADE LEVEL CHANGES IN INCIDENCE. The difference in frequencies of involvement in cyberbullying between grade levels contradicted prior research and literature on face-to-face bullying. In traditional bullying, incidents tend to peak at the beginning of middle school and decrease before high school (Pellegrini, 2002). In this study, cyberbullying steadily increased over the course of middle school in a linear pattern, with no apparent sign of a peak or decrease. One possible explanation for this increase is that older students may have more access to electronic equipment at home and at school. This fits other findings that students may increase their skills in using electronic devices with time, and be allowed greater autonomy as they get older (Froese–Germain, 2008; Lenhart et al., 2007). The positive trend suggests that cyberbullying might continue to increase into high school, where technology use and access may be greater than in middle school.

GENDER DIFFERENCES. Females were involved in cyberbullying incidents at a higher percentage than males in this study. Similarly, the Pew Internet survey reported that nationally 38% of girls are cyberbullied, compared to 26% of boys (Lenhart et al., 2007). Other studies also found that girls are more likely than boys to become cyber victims (Wang et al., 2009). This is not surprising considering that cyberbullying is relational, a type of aggression that has been shown to be more common in girls (Pellegrini, 2002). Adolescent females, more so than males, may place high priority on fitting in and socializing (Casey–Cannon et al., 2001). Because of this need for peer acceptance and the maintenance of social relationships, many girls use the Internet to stay connected with friends, putting themselves at a higher risk of perpetrating or being a victim of online aggression (Brydolf, 2007; Leander, 2007).

DIFFERENCES AMONG SCHOOL TYPES. Results showed that the public school had the highest frequency of cyberbullying, the private all-girls school had the second highest, and cyberbullying occurred the least at the public charter school. A larger school population with a greater student-to-teacher ratio and potentially less adult supervision, like the public school, could provide

a climate for more adolescent aggression. Student demographics could also have accounted for differences in cyberbullying frequency. Students from the public and private schools came from middle to high SES backgrounds and may have had more access to computers, cell phones, and other digital devices than students in the public charter school whose families had a greater range of incomes. In addition, the private school was composed entirely of girls, and research has shown that females tend to participate in online aggression more frequently than boys (Lenhart et al., 2007; Wang et al., 2009). This may account for this school's higher frequency of cyberbullying than the public charter school.

It is possible that community-building in small charter schools leads to better relationships among students (Strike, 2008). A final explanation for the differences in frequency of cyberbullying among schools could be the students' exposure to technology and online safety strategies. The only school with a technology curriculum geared toward teaching Internet safety was the public charter school. Students took a mandatory technology course in 8th grade, where they learned computer guidelines, rules, and safety strategies.

Access to Technology and New Technologies

Results of this study demonstrated that increased access to the Internet increases cyberbullying. However, the increase in Internet use related to cyberbullying was not linear; students who used the Internet daily became involved in cyberbullying much more frequently than those who used it weekly, biweekly, or monthly. Daily exposure to digital media may change the ways in which computer-savvy adolescents relate to one another online.

SOCIAL NETWORKS. Since 2003, MySpace, Facebook, and other social networking Web sites have become popular means of online communication (Brydolf, 2007), providing new forums for relational conflict. The current study found that online social networking provided the most common means of cyberbullying. These social networks were originally geared for older teens and young adults. However, because there is no way of confirming an online user's age and identity, children under the age of 13 often frequent them.

MMORPGs. Online video games were not considered in the original development of this study, yet emerged as a popular means of cyberbullying. MMORPGs, such as *World of Warcraft* and *Final Fantasy* can involve numerous people playing a game concurrently, either as opponents or as teammates, allowing players to communicate with one another (Subrahmanyam & Greenfield, 2008). Older players may not monitor their language, attitudes, or behavior online and may be unaware of the age range

of other players and how their actions could negatively affect young players. Parents should be advised to adequately monitor their children's participation in these games.

Implications for Educators and Parents

Educators and parents need to work closely together to identify and address the issues around cyberbullying. Being informed of the most current technological trends, such as computer monitoring systems, and simply keeping an open dialogue with children about cyberbullying and computer safety issues are important preventative steps (Belsey, 2008).

Some implications for schools and parents follow:

1. The study demonstrated that students did not believe that their parents or teachers were equipped to help them solve their cyberbullying problems. Schools should take the lead to educate parents and teachers about the extent of the problem, the potential for serious outcomes, legal implications, and specific strategies to keep children safe, such as:
 - Parents should have access to information about standard strategies for online safety of children such as using monitoring software on home computers, keeping the home computer in a public area of the home, teaching children appropriate digital behavior, and talking with children regularly about their online activities.
 - Parents should be informed of the potential dangers of texting, social networking, and MMORPGs so they can determine how to optimize safety for their children.
 - Parents should be provided information about children's reluctance to report cyberbullying if the consequences might include losing access to cell phones, computers, or the Internet, and to develop alternate means of ensuring children's safety such as limits on technology use, digital safeguards, and closer monitoring.
2. The study found that almost 100% of respondents had home access to online technology, and a large number were being cyberbullied. It is important that schools educate children to be ethical and safe online users of technology. For example:
 - Schools should have clear computer and anti-bullying (including cyberbullying) policies to guide educators and students, including guidelines for how incidents should be reported, how victims will be supported, and consequences for perpetrators.
 - Since girls have a higher incidence of being involved in cyberbullying, they should be specifically targeted for programs to decrease relational conflicts.

3. Dividing up school and home is difficult when cyber communications cross both environments. Schools and parents should work together to ensure that children are safe using the Internet at home and school.
 - Regular communication should be initiated and sustained to ensure that all students, parents, and teachers are aware of current data regarding the incidence of this problem in the school community
 - All school community members should take responsibility to work to minimize cyberbullying, and should be able to report incidences of cyberbullying without stigma.

LIMITATIONS

The convenience samples from the three participating schools may not be representative of all schools of those types. The schools differed in SES, student ethnicity, and school size, as well as the gender of student populations. Therefore, it would be difficult to generalize the results and conclusions of this study to other schools or districts. Due to the unequal distribution of males and females, external evidence of validity was limited.

Another limitation was the use of a self-report survey. Although a definition of cyberbullying was provided in order to limit misrepresentation of incidents, students may have interpreted the definition differently. Some students involved in cyberbullying incidents may have underreported incidents due to embarrassment. It is with caution that one should interpret the results of this study.

FUTURE RESEARCH

Research is needed to further determine the role of anonymity in cyberbullying: Is there a decrease in the perception of aggression in digital media when cyberbullying is anonymous? It may also be beneficial to understand whether and what kinds of technology curricula are effective in deterring cyberbullying. Whether students benefit from cyber ethics courses to increase their awareness of cyberbullying and encourage positive and proactive ways to deal with Internet safety issues is also a fertile area for study. It is also important to study the concept of online empathy, if it can be taught in classes, and what implications online empathy could have on decreasing online aggression.

Further investigation is necessary to understand the relationship between frequency of Internet use and cyberbullying. It is not entirely clear as to how the increased exposure to communication technologies influences whether or not someone is cyberbullied. Further analysis of this relationship using a regression model might be useful to predict cyberbullying or

victimization based on frequency of Internet use and other variables such as age, grade, or gender. Ongoing research on emerging and changing communication media, such as MMORPGs, could provide new insights into the relationships between cyber aggressors and cyber victims, and the responsibilities of each. MMORPGs, like all other digital media, are evolving at a fast pace. Online gaming communities differ from game to game, and have their own unique characteristics related to online aggression that have yet to be studied.

Research on the relationships between cyber bullies and victims, and between cyberbullying and face-to-face bullying may help to clarify the associations found in this and other studies. The relationships among family, social support systems, and perceptions of social presence in a virtual world should be investigated.

Because of the steady increase in cyberbullying throughout middle school, it would be important to study cyberbullying in high school settings to provide further insight into the magnitude and characteristics of the problem among a wider range of adolescents. It is also important to further understand the extent of parent and educator awareness of cyberbullying, and their self-efficacies for addressing the problem. Students can and do hide their Internet activities from adults. Parents' and educators' comfort in online worlds such as MMORPGs and social networking sites, as well as the effectiveness of strategies to help adults identify and monitor problems with Internet use are all fruitful avenues for research.

REFERENCES

- Belsey, B. (2008). Are you aware of, or are you supporting someone who is the victim of cyberbullying? In *What Can Be Done?* Retrieved from <http://www.cyberbullying.org>
- Beran, T., & Li, Q. (2005). Cyber-Harassment: A study of a new method for an old behavior. *Journal of Educational Computing Research*, 32(3), 265–277.
- Boulton, M. J., Trueman, M., & Murray, L. (2008). Associations between peer victimization, fear of future victimization and disrupted concentration on class work among junior school pupils. *British Journal of Educational Psychology*, 78, 473–489.
- Brown, B. B. (2005). Adolescents' relationships with peers. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of Adolescent Psychology* (2nd ed., pp. 363–394). Hoboken, NJ: Wiley.
- Brydolf, C. (2007). Minding MySpace: Balancing the benefits and risks of students' online social networks. *Education Digest*, 73(2), 4–8.
- Casey-Cannon, S., Hayward, C., & Gowen, K. (2001). Middle-school girls' reports of peer victimization: Concerns, consequences, and implications. *Professional School Counseling*, 5, 138–147.

- Coffee, A. W. (2005). *The influences of personal and environmental factors on teacher preference for intervention in student altercations*. Unpublished Dissertation, University of Hawaii at Manoa, Honolulu, HI.
- Curriculum Research & Development Group. (2009). University Laboratory School. Retrieved from <http://www.hawaii.edu/crdg/uls/>
- Dretzin, R. (2008). Growing up online. In *FRONTLINE & Ark Media LLC (Producer)*. USA: WGBH Educational Foundation.
- Erikson, E. (1968). *Identity, youth and crisis*. New York, NY: Norton.
- Foster, V., & Marin, J. (1996). *Who's walking with me? Dealing with violence in schools*. Unpublished manuscript. University of Texas at El Paso.
- Froese–Germain, B. (2008). Bullying gets digital shot-in-the-arm. *Education Canada*, 48(4), 44–47.
- Goddard, C. (2008). H8 @ skul: Cyber world bullying. *Educational Digest*, 73(7), 4–9.
- Hawaii Youth Behavior Survey. (2009). Hawaii Youth Behavior Survey Results. Retrieved from Hawaii State Board of Education: www.boe.k12.hi.us/.../Item%207%20-%202007%20and%202009%20results.pdf
- Hawker, D. S., & Boulton, M. J. (2000). Twenty years' research on peer victimization and psychosocial maladjustment: A meta-analytic review of cross-sectional studies. *Journal of Child Psychology and Psychiatry*, 41, 441–455.
- Johnson, R. D., & Keil, M. (2002, December). *Internet-enabled audio communication: A richer medium for students' feedback?* Paper presented at the International Conference on Informatics Education Research (ICIER) in Barcelona, Spain.
- Juvonen, J., & Gross, E. F. (2008). Extending the school grounds: Bullying experiences in cyberspace. *Journal of School Health*, 78, 496–505.
- Kaplin, W. A. (2000). A typology and critique of Title IX Sexual Harassment Law after Gebser and Davis. *Journal of College and University Law*, 26(4), 615–643.
- Keen, A. (March 9, 2008). Commentary: Where are limits in age of anonymous bullies? *The Honolulu Advertiser*. Retrieved from <http://the.honoluluadvertiser.com/article/2008/Mar/09/op/hawaii803090328.html>
- Keith, S., & Martin, M. E. (2005). Cyberbullying: Creating a culture of respect in a cyber-world. *Reclaiming Children and Youth: The Journal of Strength-Based Interventions*, 13(4), 224–229.
- Kim, Y. S., Boyce, W. T., Koh, Y. J., & Leventhal, B. L. (2009). Time trends, trajectories, and demographic predictors of bullying: A prospective study in Korean adolescents. *Journal of Adolescent Health*, 45, 360–367.
- Kirby, E. (2008). Eliminate bullying—A legal imperative. *A Legal Memorandum*, 8(2), 1–6.
- Leander, K. M. (2007). “You won’t be needing your laptops today”: Wired bodies in the wireless classroom. In M. Knobel & C. Lankshear (Eds.), *A new literacies sampler (New literacies and digital epistemologies)* (Vol. 29, pp. 25–48). New York, NY: Peter Lang.
- Lenhart, A., Madden, M., Macgill, A. R., & Smith, A. (2007). *Teens and social media*. Retrieved from Pew Internet and American Life Project: http://pewinternet.org/PPF/r/230/report_display.asp

- Li, Q. (2005). *Cyberbullying in schools: Nature and extent of Canadian adolescents' experience*. Paper presented at the American Educational Research Association Conference (AERA), Montreal, Canada.
- Li, Q. (2007). Bullying in the new playground: Research into cyberbullying and cyber victimisation. *Australasian Journal of Educational Technology*, 23(4), 435–454.
- Milsom, A., & Gallo, L. L. (2006). Bullying in middle schools: Prevention and intervention. *Middle School Journal*, 37(3), 12–19.
- Nansel, T. R., Overpeck, M., Pilla, R. S., Ruan, W. J., Simons–Morton, B., & Scheidt, P. (2001). Bullying behaviors among U.S. youth: Prevalence and association with psychosocial adjustment. *The Journal of the American Medical Association*, 285(16), 2094–2100.
- National Center for Educational Statistics. (2007). Retrieved from <http://nces.ed.gov/>
- Olweus, D. (1993). *Bullying at school: What we know and what we can do*. Cambridge, MA: Blackwell.
- Olweus, D. (1996). Bully/victim problems at school: Facts and effective intervention. *Reclaiming Children and Youth: Journal of Emotional and Behavioral Problems*, 5(1), 15–22.
- Pellegrini, A. D. (2002). Bullying, victimization, and sexual harassment during the transition to middle school. *Educational Psychologist*, 37(3), 151–163.
- Private Schools Report. (2005). Sacred Hearts Academy. Retrieved from <http://schools.privateschoolsreport.com/Hawaii/Honolulu/SacredHeartsAcademy.html/>
- Rubin, K. H., Bukowski, W., & Parker, J. G. (1998). Peer interactions, relationships, and groups. In W. Damon (Ed.), *Handbook of Child Psychology* (5th ed. pp. 619–700). New York, NY: Wiley.
- Saka, S. (2008). Results of the 2007 Hawaii Youth Risk Behavior Surveys and Cross-Year Comparison. Retrieved from hawaii.gov/health/about/reports/2007-YRBS-Results.pdf
- Seals, D., & Young, J. (2003). Bullying and victimization: Prevalence and relationship to gender, grade level, ethnicity, self-esteem, and depression. *Adolescence*, 38, 735–747.
- Shariff, S., & Hoff, D. L. (2007). Cyberbullying: Clarifying legal boundaries for school supervision in cyberspace. *International Journal of Cyber Criminology*, 1(1), 76–118.
- Short, J. A., Williams, E., & Christie, B. (1976). *The social psychology of telecommunications*. New York, NY: Wiley.
- Smith, P. K., Mahdavy, J., Carvalho, M., Fisher, S., Russell, S., & Tippett, N. (2008). Cyberbullying: Its nature and impact in secondary school pupils. *Journal of Child Psychology and Psychiatry*, 49(4), 376–389.
- Stover, D. (2006). Treating cyberbullying as a school violence. *Education Digest*, 72(4), 40–42.
- Strike, K. A. (2008). Small schools: Size or community? *American Journal of Education*, 114(3), 169–190.
- Strom, P. S., & Strom, R. D. (2005). When teens turn cyberbullies. *Education Digest: Essential Readings Condensed for Quick Review*, 71(4), 35–41.
- Subrahmanyam, K., & Greenfield, P. (2008). Online communication and adolescent relationships. *The Future of Children*, 18(1), 119–146.
- Tresniowski, A. (2008, December 15). A cyberbully convicted. *People*, pp. 73–74.

- Tu, C. H. (2000). *Strategies to increase interaction in online social learning environments*. Paper presented at the Society for Information Technology and Teacher Education International Conference, San Diego, CA.
- Wang, J., Ionnotti, R. J., & Nansel, T. R. (2009). School bullying among adolescents in the United States: Physical, verbal, relational, and cyber. *Journal of Adolescent Health, 45*, 368–375.
- Webb, P. (2006). Beliefs & bullying: Factors associated with peer victimization among youth. In *Sociology, Social Work and Criminal Justice*. Beaumont, TX: Prairie View A&M University. (ERIC Document Reproduction Service No. ED 493 749).
- Willard, N. (2002). *Computer ethics, etiquette, and safety for the 21st-century student*. Eugene, OR: ISTE.
- Willard, N. (2005). *Cyberbullying and Cyberthreats*. Paper presented at the Office of Safe and Drug Free Schools National Conference. Retrieved from <http://www.cyberbully.org/documents/>
- Willard, N. (2006a). Cyberbullying and cyberthreats: Responding to the challenge of online social cruelty, threats, and distress. Retrieved from <http://cyberbully.org>
- Willard, N. (2006b). Flame retardant: Cyberbullies torment their victims 24/7: Here's how to stop the abuse. *School Library Journal, 52*(4), 54–56.
- Willard, N. (2007). Educator's guide to cyberbullying and cyberthreats. Retrieved from <http://www.cyberbully.org/cyberbully/docs/cbcteducator.pdf>
- Winter, R. E., & Leneway, R. J. (2008). Cyberbullying—Terror in the classroom: What can be done? Retrieved from <http://www.chaminade.org/cyberbullying.htm>
- Ybarra, M. L., & Mitchell, K. J. (2004). Online aggressor/targets, aggressors, and targets: A comparison of associated youth characteristics. *Journal of Child Psychology and Psychiatry, 45*(7), 1308–1316.
- Ybarra, M. L., & Mitchell, K. J. (2004a). Youth engaging in online harassment: Associations with caregiver-child relationships, Internet use, and personal characteristics. *Journal of Adolescence, 27*(3), 319–336.

APPENDIX Cyberbullying Student Survey

***Directions:** Please read the definition of cyberbullying in the box below and honestly answer the following questions about your experiences with cyberbullying in and out of school in the last school year.

CYBERBULLYING occurs when someone purposely tries to embarrass, hurt, threaten, or intimidate another person using modern technology, like the Internet, e-mail, MySpace, Facebook, chat rooms, Blogs, Instant Messenger, cell phones, etc.

Your School's name

*** PLEASE CHECK ONE:**

-
- | | | | |
|-----------------------|---|---|---|
| 1. Grade Level | <input type="checkbox"/> 6th Grade | <input type="checkbox"/> 7th Grade | <input type="checkbox"/> 8th Grade |
| 2. Gender | <input type="checkbox"/> Male | <input type="checkbox"/> Female | |
-

-
- | | | |
|---|-------------------------------------|------------------------------------|
| 3. Do you have a computer with Internet access at home? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 4. Do you have a cell phone? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 5. Do you text-message or send photos on your cell phone? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
-

-
- | | | | | | |
|---|---------------------------------------|---|---|---|---|
| 6. How many times do you go on the Internet to check your e-mail, visit chat rooms, MySpace, Instant Messenger, etc.? | <input type="checkbox"/> Never | <input type="checkbox"/> 1-3 times/month | <input type="checkbox"/> Once/week | <input type="checkbox"/> Every other day | <input type="checkbox"/> Every day |
| 7. How many times do you use a cell phone to call, text-message your friends, or to take pictures? | <input type="checkbox"/> Never | <input type="checkbox"/> 1-3 times/month | <input type="checkbox"/> Once/week | <input type="checkbox"/> Every other day | <input type="checkbox"/> Every day |
-

-
- | | | |
|--|---|---|
| 8. Have YOU ever been embarrassed, hurt, threatened, or intimidated by someone through the use of modern technology (<i>cyberbullied</i>)?
<i>[Examples. My feelings were hurt because someone took me off of their MySpace "friends list," people said mean things about me online; someone spread rumors about me online; someone online was telling me to do things I did not want to do]</i> | <input type="checkbox"/> YES
↓
(please answer questions 9-16) | <input type="checkbox"/> NO
↓
(skip to question 17) |
|--|---|---|
-

***Questions 9-16: Think about the times when YOU WERE CYBERBULLIED. . .**

-
- | | |
|--|--|
| 9. Estimate how many times YOU were cyberbullied. (write the number of times)→ | : |
| 10. What technology was used when you were cyberbullied? (check all that apply) | <input type="checkbox"/> E-mail <input type="checkbox"/> Blogs
<input type="checkbox"/> Chat room <input type="checkbox"/> Instant Messenger
<input type="checkbox"/> Cell phone <input type="checkbox"/> Other, specify:
<input type="checkbox"/> MySpace . |
-

-
11. What technology was used THE MOST when you were cyberbullied? (check **one**)
12. Who cyberbullied you? (check **all** that apply)
13. The person or people who cyberbullied me was/were: (check **all** that apply)
14. Where were you cyberbullied? (check **all** that apply)
15. How did you feel when you were cyberbullied? (check **all** that apply)
16. How did your cyberbullying situation end? (check **all** that apply)
- E-mail Blogs
 - Chat room Instant Messenger
 - Cell phone Other, specify: _____
 - MySpace _____
 - One student from my school
 - More than one student from my school
 - One student NOT from my school
 - More than one student NOT from my school
 - An adult
 - I don't know who it was
 - Other, specify: _____
 - Male
 - Female
 - In a classroom
 - In the school library
 - At school, but NOT in a classroom or library
 - At home
 - Other, specify: _____
 - I felt angry
 - I felt sad
 - I felt embarrassed
 - I felt afraid
 - I missed school because of it
 - I switched schools because of it
 - My grades went down
 - Other, specify: _____
 - A teacher helped to stop it
 - A parent helped to stop it
 - A friend helped to stop it
 - It stopped on its own
 - It still has not stopped
 - Other, specify: _____
-
-
-

17. Have YOU ever purposely embarrassed, hurt, threatened, or intimidated someone using modern technology (*cyberbullied*)?
- | | |
|--|------------------------------|
| <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| ↓ | ↓ |
| (please answer questions 18–25) | (skip to question 26) |
-

***Questions 18–25: Think about the times when
YOU CYBERBULLIED SOMEONE...**

-
18. Estimate how many times YOU cyberbullied someone. (write the number of times) → :
19. What technology was used when you cyberbullied someone? (check **all** that apply)
20. What technology did you use THE MOST to cyber bully someone? (check **one**)
21. Who did you cyber bully? (check **all** that apply)
22. The person or people you cyberbullied was/were: (check **all** that apply)
23. Where did you cyber bully someone? (check **all** that apply)
24. Why did you cyber bully someone? (check **all** that apply)
-
25. How did the cyberbullying situation end? (check **all** that apply)
-
-

- E-mail Blogs
- Chat room Instant Messenger
- Cell phone Other, specify:
- MySpace .
- E-mail Blogs
- Chat room Instant Messenger
- Cell phone Other, specify:
- MySpace .
- One student from my school
- More than one student from my school
- One person NOT from my school
- More than one person NOT from my school
- An adult
- Other, specify:.
- Male
- Female
- In a classroom
- In the school library
- At school, but NOT in a classroom or library
- At home
- Other, specify: _
- I didn't know it was wrong at the time
- I wanted to fit in with my friends
- I wanted to get back at someone
- I didn't think it would harm anyone
- I thought it was funny
- I don't know why I did it
- Other, specify: _

- A teacher stopped it
- A parent stopped it
- A friend stopped it
- It stopped on its own
- It still has not stopped
- I got in trouble
- I realized it was wrong, so I stopped it
- I got bored/tired of doing it
- Other, specify _

* **CYBERBULLYING AWARENESS**

-
- 26.
- (A) Do you know someone who has been cyberbullied? (check one) **Yes** **No**
- (B) If you answered "**Yes**" to **26A**: when someone you know was being cyberbullied, did you tell adults? **Yes** **No** **N/A**
-

- 27.
- (A) Do your teachers, counselors, principal, or vice principal know that cyberbullying occurs at your school? **Yes** **No** **I don't know**
- (B) If you answered "**Yes**" to **27A**: when adults in your school hear about a cyberbullying incident, do they try to stop it? **Yes** **No** **I don't know**
-

- 28.
- (A) Do your *parents* know that cyberbullying occurs at your school? **Yes** **No** **I don't know**
- (B) If you answered "**Yes**" to **28A**: when your *parents* hear about a cyberbullying incident, do they try to stop it? **Yes** **No** **I don't know**
-

29. If you were being cyberbullied, would you tell your *parents*? **Yes** **No** **I don't know**
30. If you were being cyberbullied, would you tell your *teachers*? **Yes** **No** **I don't know**
31. If you were being cyberbullied, would you tell your *friends*? **Yes** **No** **I don't know**
-

32. What programs does your school have to prevent cyberbullying? (check **all** that apply)
- Anti-bullying policies**
 - Assemblies about bullying/cyberbullying**
 - Student helpline**
 - Class lessons about bullying/cyberbullying**
 - Staff takes bullying seriously**
 - Strict computer and cell phone rules**
 - Support groups**
 - Counseling**
 - I don't know of any prevention programs**
 - Other, specify ..**
-

35. If you have experienced cyberbullying first-hand or if you have witnessed it happening to another person, briefly **describe the event(s) in the space provided or on the back of this page**).

-
- 33 What do your *parents* do to try to protect you from cyberbullying and Internet dangers? (check **all** that apply)
- They use computer software to prevent me from accessing unsafe sites**
 - They monitor my computer use**
 - They monitor my phone use**
 - They monitor my MySpace/Facebook page(s)**
 - They monitor my e-mail**
 - They keep the computer in a family area of the house**
 - They talk to me about online safety**
 - They talk to me about cyberbullying**
 - Other, specify: _**
-

- 34
- (A) Do you know what to do if another student bullies you using a computer or cell phone? **Yes, I know what to do** **No, I don't know what to do**
- (B) If you answered "**Yes**" to **34A**: where did you learn about Internet/cyberbullying safety strategies? (check **all** that apply)
- My parents**
 - My school**
 - By Myself**
 - The Internet**
 - Other, specify: _**
-

**Talk about how the cyberbullying started; Did your teachers or parents help, if so, how?*