ABSTRACT

The term “Cyberimmersion” refers to the central role that the Internet and electronic communications now play in the lives of individuals born after 1980 in the First World. Cyberimmersion has transformed everything about bullying and harassment between youth in the First World. It has also transformed the information landscape, although confusion about the scope and nature of this transformation is common. User-generated content has opened the door to a vast “spillage” of information, both damaging and promising. Younger users evidence a high comfort level with technology but many remain naïve in the areas of electronic security, privacy, and information exposure. This report details research findings from the Massachusetts Aggression Reduction Center on the frequency and nature of online interactions between college students, some of which encompass bullying and harassing behaviors and others of which deal with information sharing and exposure.

WHERE’S THE INFORMATION?

Information was once subject to the limitations of paper reproduction and physical distribution, editing or content control, reader interest, or all three. Important sources of information were generally produced only by professionals. These restrictions served to confine the amount and type of information, to ensure that the most widely-disseminated information (e.g., through newspapers) met basic quality controls, and to limit the wide dissemination of spontaneous, emotional writing.

That was then. Today, the explosion of user-generated content — that is, content created and published online by any willing individual, with no qualification requirements, and subject to no editing or editorial control — has changed the social, political, and emotional landscape in which the First World exists. Two major elements of this change greatly
affect colleges and universities and the students they serve. The first is that user-generated content has given birth to an enormous amount of destructive cyberbullying or cyberharassment; and the second is information exposure, a seemingly bizarre phenomenon whereby individuals freely and deliberately disseminate confidential or personally damaging information (including incriminating facts) to the widest possible audience, apparently without concern for any consequences.

CYBERBULLYING

Bullying\(^2\) in K–12 Schools

Much data exists to confirm the growth and consequences of traditional (“schoolyard”) peer abuse (euphemistically referred to as “bullying”). The Massachusetts Aggression Reduction Center at Bridgewater State College was founded in 2004 and at that time I focused on bullying prevention among children, without much regard to what was happening concurrently online. While always in existence, bullying behaviors have increased in frequency and in severity in the past few decades (Olweus 1993). The 2005 Youth Risk Behavior Survey in Massachusetts found that 24 percent of Massachusetts teenagers reported being bullied at school in the year before the survey. One-fourth of Massachusetts schools in a December 2006 survey conducted by the Massachusetts Aggression Reduction Center (MARC) characterized the bullying in their school as “serious” or “extremely serious” (Englander 2007). The problem does not seem to be improving. In that same survey, 54 percent of Massachusetts schools indicated that bullying had become more of a problem “in the last few years” (Englander 2007). After querying educators recently about how often they estimate that bullying “really” happens, most estimated the frequency at an event every few hours. Figure 1 displays those findings.
Figure 1. Query to Educators: How often does bullying actually occur, in your best estimation?

Cyberbullying in K–12 Education

Around the winter of 2005–2006, online bullying incidents in middle and high schools in Massachusetts (and nationwide) began to ring an increasingly insistent bell in MARC’s field work in education. Our research began to focus increasingly on how bullying was migrating into the online world. We decided to begin studying freshman in College — ideal subjects, as they are only very recently removed from High School, where their online tribulations are presumably still fresh in their minds, yet most are 18 years of age and thus parental consent is not required.

The participants in the 2006–2007 MARC Bullying & Cyberbullying Survey consisted of 283 undergraduate college students (75 males and 208 females) from Bridgewater State College, a medium-sized publicly-funded College in Southeastern Massachusetts. A considerable portion of the participants had completed high school in the last 6 months to 3 years. Almost half (41%) were 17–19 years old; 38% were 19–21 years old; 16% were 21–23 years old; and 5% of participants were 25 years and older. The participants were recruited for this survey via the College’s Psychology Subject Pool. Students participate in the Pool as subjects in return for course credit and at times as a requirement for a course (although all participation is of course voluntary). The 63-item questionnaire was completed electronically.

The survey asked questions about experiences in high school and about some of the social problems high school students sometimes go through, specifically, about the students’ perception of the seriousness of bullying and cyberbullying problems in their high school and if they themselves had been a cyberbully or a victim while still in high school. In addition, it questioned if cyberbullying appeared to be an issue in college and again queried about both victimization and perpetration. When students admitted to cyberbullying behavior, they were queried about the motives and circumstances of the behavior, which yielded important information about why teens cyberbully and their perceptions in general about the seriousness of the behavior.

Cyberbullying—the abuse of choice of the Cyberimmersion Generation—is the perfect bullying crime. It is very hurtful, yet (generally) does not kill its victims; it is extremely simple and easy; it does not require significant planning or thought; it similarly does not require self-confidence or social finesse; and the perpetrator is extremely unlikely to be caught or disciplined. The victim is always accessible (e.g., you can blog about someone online without their physical presence), and the generation gap ensures likewise that the oversight of adults will be sporadic or absent. Technological advances designed to prevent cyberbullying are often easily circumvented (e.g., school computer system
filters) and adults are so often out of touch that they may be unaware of the frequency of cyberbullying or the types that exist—never mind being unaware of how to control or reduce it.

**Risk Factors for Cyberbullying**

Little research exists that can inform the study of cyberbullying risks. Some experts have postulated that risks for cyberbullying include less education about electronic communications, risks, and values; being less able to rely on parents for guidance about the Internet; and being less attentive to—or not receiving—Internet safety messages (Willard 2006). Only 8 percent of schools have any education for children about Internet safety or bullying, even though experts agree that education in this area is the key to safety (Devaney 2007). Anecdotal evidence suggests that being a victim of offline bullying may increase the probability of becoming an online cyberbully (Englander 2007). Schools in Massachusetts have reported that many offline bullies operate online as well (Englander 2007); suggesting that risk factors for cyberbullying may include the risk factors for traditional bullying.

At the time of this writing, cyberbullying occurs primarily through webpages, online social networking websites, and instant messaging via the Internet and cellphones. The 2007 MARC cyberbullying study found that despite the high numbers of online abuse victims, instant messaging and talking on cell phones were only slightly less popular as preferred communication strategies to speaking face-to-face. Thus the Immersion Generation sees digital communication as indispensable, regardless of its misuses by peers. And they are correct; it is fact no longer dispensable, and has not been so for quite a long time.

The rapid evolution of technology and the way it is used renders any specific type of cyberbullying definition (e.g., “sending abusive emails”) obsolete by publication date. Indeed, it is perfectly possible and even likely that in the short months intervening between this writing and its publication, new technologies may well have spurred new types of cyberbullying.

A characteristic that makes cyberbullying particularly insidious is that derogatory statements or threats and humiliating pictures or videos of a person can instantaneously be sent to hundreds of viewers with the click of a button. This can exploit the natural developmental tendency of adolescents to feel constantly watched or “on stage” (often referred to as “imaginary audience”). Bad as it is to be cornered by a schoolyard bully, in an isolated corner of the schoolyard there isn’t a vast audience to witness your humiliation. Thus the problems associated with schoolyard bullying may be magnified in cases of cyberbullying (Englander, 2006). Anecdotal cases support that possibility (e.g., the Ryan Halligan case (Halligan 2003)), but the real research remains to be done.
We knew from a few national studies that cyberbullying had emerged as one result of the increasingly online social life in which modern teens and children engage. Teens reported having received threatening messages, having had private emails or messages forwarded without their consent; having had an embarrassing picture of themselves posted online without their consent; or having had rumors spread about them online (Pew Internet & American Life Project 2007). A few frequency estimates suggest that cyberbullying may become — or may already be — the dominant form of bullying behavior among children. A recent telephone study of 886 U.S. Internet users age 12 to 17 (conducted October to November, 2006) found that one-third (32 percent) of all teenagers who use the Internet say they have been targeted for cyberbullying online (Pew Internet & American Life Project 2007). MARC research in 2006 and again in 2007 found that of a sample of several hundred freshman, 40% reported having been “harassed, bullied, stalked, or threatened via instant messaging” (Englander 2006). Twenty percent (in 2006) and 24% (in 2007) of students admitted to being a cyberbully themselves. These numbers were in the same ballpark as the 2006 poll of 1,000 children conducted by Fight Crime: Invest in Kids, which found cyberbullying frequencies of about 33 percent - similar to those found by Pew and MARC (Pew Internet & American Life Project 2007). These numbers suggest that cyberbullying (with about 35–40 percent admitting victimization) may be more common than traditional bullying (with about 20–24 percent admitting victimization).

**Cyberbullying Goes to College**

Critically, however, these numbers all focus primarily on K-12 students. In the 2007 study, we decided to investigate whether or not online bullying (possibly unlike traditional bullying) would follow students to college. I did not anticipate that it would, and was surprised to find that 8% of the respondents reported being cyberbullied via instant messaging while at college. While the frequency of cyberbullying diminished significantly following high school, it did not cease entirely. Figure 2 shows the distribution of secondary and post-secondary online bullying victimization among our subjects.
Cyberbullying and Information Exposure

Figure 2. Frequency of cyberbullying victimization

As with cyberbullying victimization, the proportion of college students who admitted to being cyberbullies is much lower relative to high school students — in this study, 3% of college students admitted to cyberbullying others while in college. Figure 3 compares the frequency of cyberbullying behaviors between high school and college.

![Been a cyberbully via IM?](chart)

Figure 3. Frequency of cyberbullying

Comparing Secondary and Post-Secondary Cyberbullying

It is notable that only 10 individuals admitted to being a cyberbully while in college; for that reason, any comparisons and results must be only regarded as suggestive (73 respondents admitted to being a cyberbully while in high school). In the analysis below, “high school
cyberbullies” refers to college students who reported being a cyberbully while they were in high school and “college cyberbullies” refers to college students who reported being a cyberbully while in college. The first comparison, shown below in Figure 4, shows a different gender distribution between high school and college cyberbullies. High school cyberbullies were much more likely to be female, but college cyberbullies were slightly more likely to be male.

![Figure 4. Gender in secondary versus post-secondary cyberbullies.](image)

Figure 5 shows that high school cyberbullies were, on the whole, younger than college cyberbullies.

![Figure 5. Age of high school versus college cyberbullies.](image)
When we asked respondents about programs their high school had offered to help prevent bullying and/or cyberbullying, some interesting findings emerged. About equal proportions of high school cyberbullies and college cyberbullies had had such programs in high school, but college cyberbullies were much more pessimistic about the likelihood that such programs would make an impact; they also saw adults as more likely to be making no attempt to stop bullying and cyberbullying. High school cyberbullies were more likely to see adults as ineffective but well-intentioned (see Figures 6 and 7). Almost no cyberbullies thought adults were doing a lot to stop cyberbullying.

Figure 6. Would a program in your HS have helped reduce cyberbullying?
Figure 7. Did adults do enough to prevent cyberbullying in your school? The data also clearly suggest that respondents tended to be victims of cyberbullying at the same developmental period during which they were victimizing others. Over 80% of high school cyberbullies were also victims of cyberbullying during high school, and 50% of the college cyberbullies reported being victims in college (see Figure 8).

Figure 8. Were you a victim of cyberbullying? By cyberbully status.

Interestingly, college cyberbullies might be less experienced on employing user-generated content about themselves on the internet. A much higher proportion of college cyberbullies, relative to high school cyberbullies, reported that they had never posted a profile of themselves on a social networking site (see Figure 9).

Figure 9. Have you ever posted a profile about yourself? By cyberbully status.
In the most recent MARC survey (Englander 2007), most cyberbullying perpetrators attributed their online bullying to either anger (65 percent) or “a joke” (35 percent) with “revenge” and “no reason” being distant third choices. These justifications for cyberbullying did not seem to differ significantly between high school and college cyberbullies (see Figure 10).

![Figure 10. Reasons for cyberbullying, by cyberbully status.](image)

**Summary of Cyberbullying in College versus High School**

This exploratory survey did find differences between those who cyberbullied only in high school and those who cyberbullied while in college. College cyberbullies tended to be a year or two older than their peers and were more likely to be male (relative to high school cyberbullies). They were less experienced with user-generated content (at least the social networking type), and they were more pessimistic about whether or not adults try to help adolescents with this issue; in any case, they found any such attempts to help wanting. Being even a mere year or two older, college cyberbullies may have missed any of the more recently-initiated attempts by parents or educators to educate them about online life. Taken together, these findings suggest that college cyberbullying, particularly, may be the result of a lack of education and awareness.

**CYBERIMMERSION AND INFORMATION EXPOSURE**

Apart from promoting an enormous surge in cyberbullying, the explosion of user-generated content has also changed the nature of information sharing and has introduced to a new level the phenomenon of
information exposure. It is not clear that user-generated content which reveals confidential or incriminating information or confessions is limited to high school and college students. Recent media reports have cited cases of educated, professional individuals who reveal inappropriate information on their social networking profiles — in other words, individuals one would expect to have the judgment to “know better.” Despite such reports, it seems clear that inappropriate information exposure happens predominantly among college and high school students. Indeed, in our research, almost three-quarters of college-aged respondents felt that high students frequently put themselves at risk by posting too much information online (Figure 11).

Figure 11. Do high schoolers post too much information online?

One intriguing characteristic about Cyberimmersion is the naïveté exhibited by individuals who expose information about themselves yet are paradoxically very comfortable with, and sophisticated about, the technical use of information technology. This naïveté reveals itself in several ways.

- First, children who effortlessly surf through online games frequently believe that individuals could not pass themselves off as someone they are not — a characteristic frequently discussed when examining children’s vulnerability to online predators.
- Second, individuals often exhibit a lack of understanding about the limits of some privacy mechanisms. For example, many users of Facebook set their profiles to “private,”
believing that this results in iron-clad security. They then blithely utilize applications within their profile that frequently expose all their information to the second-party software developers who develop these applications; or, they are certain that no one would ever reproduce their information in a less secure area (although that could happen very easily — imagine a quarrel with a friend who decides to take revenge by doing just that).

- Third, very few users (young or old) seem to realize the permanence of the internet. Having grown up with the concept of deletion, it is hard to imagine that absolutely anything and everything put online might be visible forever. Most users have never heard, for example, of archiving websites. This is a cruel concept for a child, who is bound to make mistakes and does not necessarily deserve to have these mistakes haunt him or her forever; but it is the reality of online life.

- Fourth, many individuals believe that openly visible content would not, or could not, be viewed by those in a position to judge them (e.g., employers). This includes content that the user makes absolutely no attempt to keep private or secure. I have seen countless examples of information exposed or poor judgment advertised to the world on the internet by users who seemed, inexplicably, to believe that it would never be seen. This could conceivably be part of a “mob effect,” namely, that users could conceptualize the internet as so vast that their little input is unlikely to ever be seen; but the internet is in fact organized by users into smaller “communities,” sites that are visited again and again by a smaller group of people, and this renders that information far less likely to go unnoticed.

- Fifth, even when they themselves have experienced an online attack, many adolescents and young adults seem to persist in the belief that what’s online doesn’t “count” and thus doesn’t hurt. This inability to extrapolate from their own victimization experiences to understand someone else’s perspective is developmentally typical in adolescence and not surprising.

**MANIFESTATIONS OF CYBERIMMERSION AND INFORMATION EXPOSURE**

Among college students, we’ve noticed a significant rise in two types of websites: gossip sites, and three dimension virtual worlds. These are quite different and distinct from one another and they both utilize user-generated content; both may result in information exposure.
Gossip Sites

These websites are, in essence, online competitions where individuals strive against each other to produce the most tantalizing piece of gossip. Examples are juicycampus.com and campusgossip.com. Both are geared towards college students. Both sites are advertisement-funded and do not cost users anything. In an effort to elicit the best nuggets of gossip, sites do not even require users to register — a step that does, to some extent, increase accountability (although using false or non-identifying information and email addresses to register is simple to do). The sites “rate” gossip based on the number of people who click on (and presumably read) gossip. Users compete to get the highest scores without regard for the feelings and consequence of those whose presumably private difficulties are being repeated in the gossip for the world to see. Gossip sites have created havoc on some campuses; at some universities, students (who typically support for free access) have actually asked campus IT to block these sites. Anyone searching for information on these sites should note that JuicyCampus, at least, claims it is not indexed by Google.

Three Dimension Virtual Worlds

Some have maintained that the future of the internet lies in virtual worlds, within which a user moves through information and entertainment portals that are similar to the websites found on the conventional internet we use today. The difference between the traditional internet and virtual worlds is through the emotional and audiovisual experience and in how information is located. It is difficult to describe a virtual world through text, as it is truly a unique experience. As an example, consider a situation where you were seeking information about purchasing a car. In the bricks-and-mortar world, you would go to a car dealer and look at the car—possibly test-drive it. Online, you might search or look for the URL for a car dealer or manufacturer and one you’ve found the URL, go to their webpage. In a virtual world, you would (using your computer) go the dealer’s lot and look at (and possibly test-drive) a virtual version of the car you’re interested in. Virtual worlds are more intuitively similar to the bricks-and-mortar world, in comparison to the internet we use widely today. Virtual worlds are used for socializing as well as for information and marketing, which is where user-generated content and information exposure occur. People can build virtual homes, put up virtual billboards about themselves, and because there are few or no limits, disclose any or everything about themselves.
CONCLUSION

User-generated content on the World Wide Web (the internet) has changed the world. There is no doubt about this. It has changed how children grow up; how they learn and think; how they interact with their peers; and how they navigate their lives. It has impacted political decisions and outcomes in a profound way. It is unlikely that this genie will ever be able to be put back in the bottle. As technology becomes more sophisticated, politically-motivated limitations on internet access will likely become easier to circumvent. Currently we find ourselves in a unique situation: young people are technically savvy but naïve about online security. This possibly temporary situation exposes opportunities for both gathering information that is unwittingly exposed and for being targeted in a potentially devastating manner online.

The research presented here on college cyberbullies represents a small start in the field, but it underscores the need for education and awareness. Indeed, there is no plausible alternative to such preparation, as people will be living at least some of their lives online. Furthermore, understanding the dangers online (including those from their peers) can help targets of cyberbullying withstand attacks emotionally, and can help others avoid the kind of information exposure that places so many at risk. At the Massachusetts Aggression Reduction Center, our goal is to conduct the research and fieldwork needed to bring up to date assistance to the people of Massachusetts. This includes work on violence, bullying, cyberbullying, and cyber behaviors that are potentially dangerous and harmful. With this data, we can become armed with the knowledge we need to teach children, parents, educators, and other professionals in the best methods of preventing harm.

NOTES

1. Queries may be sent to: Dr. Elizabeth Englander, Director, Massachusetts Aggression Reduction Center, Bridgewater State College, Bridgewater, MA 02325. eenglander@bridgew.edu.
2. Bullying refers to the physical and or psychological abuse, perpetuated by one powerful child upon another, with the intention to harm or dominate. Typically, bullying is repetitive, intentional, and involves an imbalance of power (Olweus, 1991).
3. On social networking sites, users create “profiles” — user-generated webpages upon which they post information about themselves and permit other users to post information and to blog (enter unedited text).
4. We know that all cyberbullying and online problems are at least partly related to education and awareness; these findings,
however, suggest that college cyberbullies may be particularly unaware of such issues.


6. Having difficulty understanding that something may appear differently from its substance is a well-documented developmental limitation. I vividly recall a conversation between two of my sons, then 9 and 12, about whether or not an adult could pretend to be a child online. My 12-year-old saw clearly that such a ruse was entirely possible; my 9-year-old keep insisting that “adults and children don’t talk the same” (i.e., if it appears to be a child, it must actually be a child).


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