

“The Internet is a Mask”: High School Students’ Suggestions for Preventing Cyberbullying

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Introduction: Interactions through technology have an important impact on today’s youth. While some of these interactions are positive, there are concerns regarding students engaging in negative interactions like cyberbullying behaviors and the negative impact these behaviors have on others. The purpose of the current study was to explore participant suggestions for both students and adults for preventing cyberbullying incidents.

Methods: Forty high school students participated in individual, semi-structured interviews. Participant experiences and perceptions were coded using constant comparative methods to illustrate ways in which students and adults may prevent cyberbullying from occurring within their school and community.

Results: Students reported that peers would benefit from increasing online security, as well as becoming more aware of their cyber-surroundings. Regarding adult-provided prevention services, participants often discussed that there is little adults can do to reduce cyberbullying. Reasons included the difficulties in restricting online behaviors or providing effective consequences. However, some students did discuss the use of in-school curricula while suggesting that adults blame people rather than technology as potential ways to prevent cyberbullying.

Conclusion: Findings from the current study indicate some potential ways to improve adult efforts to prevent cyberbullying. These strategies include parent/teacher training in technology and cyberbullying, interventions focused more on student behavior than technology restriction, and helping students increase their online safety and awareness. [West J Emerg Med. 2014;15(5):587–592.]

INTRODUCTION

Technology exposure for youth has increased substantially in the past decade, with students spending about the same amount of time using technology as they do in school.¹ While access to technology has many advantages, it also increases the potential for cyberbullying.² Cyberbullying has been defined as the repeated use of technology to cause intentional distress or to threaten others.^{3,4} Researchers have demonstrated that being a victim of cyberbullying was associated with negative mental health and behavioral concerns such as loneliness,⁵ conduct problems,^{4,6} and feelings of fearfulness.⁷ Some studies have suggested that victims of cyberbullying were at increased risk

for depression,^{6–8} suicidal ideation,⁹ and lowered self-esteem.^{6,8} Given the impact cyberbullying may have on students’ mental health, it is important to identify ways in which both students and adults can address this phenomenon.

The most commonly reported coping strategies in prior research on cyberbullying has been avoidance.^{10,11} Avoidance strategies involved deleting hurtful messages or blocking the cyberbully from posting on online profiles,^{3,10,11,13} either to ignore negative emotions or to discourage continued cyberbullying.^{3,10} Participants also have reported coping strategies such as ignoring the situation,^{10,12} substance use,¹⁴ pretending that it did not bother them,¹² or talking to

friends.^{10,11,13} Students have been found to be less likely to talk to adults about cyberbullying when compared to victims of traditional bullying.^{10,11,13} The reported reasons for not talking to adults about cyberbullying included the fear that reporting incidents would result in technology being taken away, as well as a lack of confidence in adults' ability to address the problem.^{3,10,13}

The current literature provides some suggestions about how adults can address cyberbullying. These suggestions included clearer policies and psychoeducational interventions regarding online safety.³ To date, few studies have focused on student suggestions for how adults can reduce or prevent cyberbullying. Student-generated strategies for parents have included setting age-appropriate limits on technology use, monitoring their children's technological activities, sharing evidence of cyberbullying with the school, and informing children about appropriate ways to resolve conflicts.³ More research is needed to understand what students believe are effective strategies for adults because students may have a better understanding than adults about what would reduce or prevent peer engagement in cyberbullying.

The purpose of the current study was to explore student suggestions for preventing cyberbullying. The majority of studies regarding how students cope with cyberbullying refer to actions taken after an incidence occurred (e.g., deleting messages, telling an adult); however, information regarding how students may protect themselves from future cyberbullying would be beneficial. Additionally, allowing students to provide suggestions for adults based on their own experiences and perceptions would offer insight into how parents, teachers, and others in the community can help prevent cyberbullying. Further, it has been suggested that differences in cyberbullying perceptions may vary based on the school participants attend. Student reports indicated that urban students felt that cyberbullying, while still a concern, was not as important as other life effects when compared to suburban and rural students.¹⁵ It is possible that other differences between urban and suburban students exist regarding how they respond to cyberbullying incidents.

There were 3 research questions: 1) How do students describe their approaches to preventing cyberbullying; 2) How do students believe adults can be effective in reducing cyberbullying?; and 3) Are there differences based on gender or school location (i.e., urban, suburban) in student perceptions of cyberbullying prevention?

METHOD

Participants

We used a combination of convenience (i.e., those readily available to the researchers) and criterion sampling (i.e., students had to meet a set of requirements to participate).¹⁶ The criteria for participation included that the student was enrolled in the high school and had access to and used technology on a daily basis. The second criterion was assessed through a survey

Table. Participant demographic information.

	Urban	Suburban	Total sample	
			<i>n</i>	(%)
Gender				
Male	9	13	22	55%
Female	11	7	18	45%
Ethnicity				
African American	4	8	12	30%
Caucasian	13	6	19	47.5%
Hispanic	0	3	3	7.5%
Other	3	3	6	15%
Grade				
9 th Grade	7	0	7	17.5%
10 th Grade	6	2	8	20%
11 th Grade	3	5	8	20%
12 th Grade	4	13	17	42.5%
Technology usage				
Owned a cell phone	17	18	35	87.5%
Computer at home	20	20	40	100%
Internet at home	20	20	40	100%
Social networking profile	16	18	34	85%
Daily use*	2 hours	4 hours		

* Due to range (e.g., 'all day'), the mode of daily technology use is reported.

administered prior to the interview to assess the amount of access and use of technology (Table). Based on the recommended number of participants for this particular form of qualitative methodology,¹⁶ the total target sample size was 40 participants, with 20 participants from each participating school to allow for cross-site analysis (i.e., across schools).¹⁷ We recruited participants at the suburban school through the use of fliers placed in hallways and lobbies, as well as requests for volunteers that were made over a public announcement system each morning. When similar procedures at the urban school resulted in very few participants, additional steps were taken, as per the request of the dean of students and instructional technology teacher. These steps involved sending recruitment letters to 90 randomly chosen students across all 4 grades. These procedures resulted in the target of 20 participants per school, with all volunteers indicating sufficient technology usage and access. The suburban sample consisted of students ranging in age from 15 to 19 ($M = 17.5$, $SD = 1.05$) while the urban participants were from 15 to 18 years old ($M = 16.0$; $SD = 1.13$). Descriptive information for participants can be found in the Table.

Data Collection

We obtained parental consent and student assent for all students under the age of 18. Students who were 18-years-old

and over signed consent for participation. All procedures and forms were approved by the university Institutional Review Board. Graduate research assistants conducted semi-structured interviews with students to discuss various aspects of electronic communication and cyberbullying.¹⁸ (For a copy of the interview protocol, contact the first author.) Interviews were recorded and then transcribed verbatim and uploaded into Atlas.Ti 5.0, a computer-based data management program.

Data Analysis

The current study used a sequential qualitative methodology with multiple phases of data analyses which involved cross-site analysis.¹⁷ Data analysis was based on grounded theory and used an inductive-deductive approach.¹⁹ Inductive (i.e., data-driven) methods helped to uncover themes based solely on information from respondents.¹⁹ Deductive (i.e., literature-driven) methods were then used to determine how developed codes related to previous literature regarding cyberbullying.¹⁹ Two researchers individually reviewed interviews to identify possible themes and met once a week to discuss themes and determine appropriate codes. After considering both data-driven and literature-based information, we developed an initial coding manual.¹⁸

The 2 researchers then applied the initial coding manual to each interview using a constant comparative method.²⁰ Two researchers individually applied codes to each interview based on question-response segments. They would meet weekly to discuss discrepancies in coding until consensus was obtained for each interview.²⁰ The coding manual was organized in a hierarchical structure that included primary codes (Level 1) and sub-codes for secondary themes (Level 2). The manual was revised after reviewing each interview resulting in a final manual based on consensus among raters.²¹ Interrater reliability (i.e., IRR) for each interview was calculated until the researchers obtained 90% IRR on three consecutive interviews.²¹ Once this criterion was met, raters divided and individually coded the remaining interviews and met weekly to determine IRR for 10% of each of the remaining interviews to control for coder drift.¹⁹

The suburban interviews were coded first, with an initial IRR mean of 86.5% and a total of 9 interviews being coded before the criterion of 90% on 3 consecutive interviews was met.²¹ The coder drift IRR was 96.8%, with an overall mean IRR for all 20 interviews at 92.5%. The initial IRR for the urban sample was 88.9%, with a total of 11 interviews coded prior to meeting the criterion for individual coding. The IRR during the coder drift phase for the urban sample was 93.7%, with 91.3% as the overall IRR. Coding the urban interviews resulted in changes to the final coding manual; therefore, raters applied these changes to the suburban sample with an IRR of 100%. Frequency counts for the total sample, school location, and gender can be found in the figure.

RESULTS

Student Preventive Coping (Level 1)

Student Preventive Coping addressed research question 1 and involved strategies focused on averting cyberbullying (Figure). This could include general protective strategies or reactions to situations that had the potential to result in cyberbullying. This Level 1 code included 2 sub-codes (Level 2), *increased security and awareness* and *talk in person*. These strategies are discussed in the following sections, including differences based on gender and school location when appropriate.

Increased Security and Awareness (Level 2)

In an attempt to prevent cyberbullying, many students reported *increased security and awareness* ($n = 39$). These strategies included password protection, restricting who has access to online networking profiles, limiting the amount of personal information available online, and being more aware of the cyber-environment (e.g., who you are talking to). For example, one 18-year-old female suburban student explained that people “can only see what you put [online],” so students can reduce the risk of being cyberbullied by filtering what the information they make available. A 15-year-old female urban student also reported that people could put themselves at risk by not being aware of whom they were talking to, stating “people put on the internet mask and pretend to be who they want to be,” so students should be mindful of their interactions online. Students described this increased awareness as a way of identifying potentially risky situations. Interestingly, students did not focus just on their own awareness but discussed making sure others are aware of potential cyberbullying situations as well. For example, a 17-year-old male urban student reported that he let his friends know of “this guy who was trying to start a fight, just saying threatening stuff and spreading rumors” by posting a warning to his Facebook page.

Talk In Person (Level 2)

The Level 2 code *talk in person* reflected the need to talk face-to-face with a person during a disagreement in order to prevent the negative situation from leading to cyberbullying. Sixteen students discussed the need for this preventive strategy due to the inability to detect tone or sarcasm online. A 17-year-old female urban student explained that cyberbullying might be prevented when having a disagreement online, if students would “get it off the Internet . . . [they] need to talk to them to their face, because the Internet can be like a mask so that [the other person] doesn’t really have to face them.” She further explained that sometimes this mask causes students to “say things they wouldn’t say to your face or in a way that’s hurtful.” Approaching others in person can help a student discern tone, sarcasm, so that they can read and respond appropriately to the situation. An 18-year-old male suburban student stated that when “face-to-face you can see their expressions” and

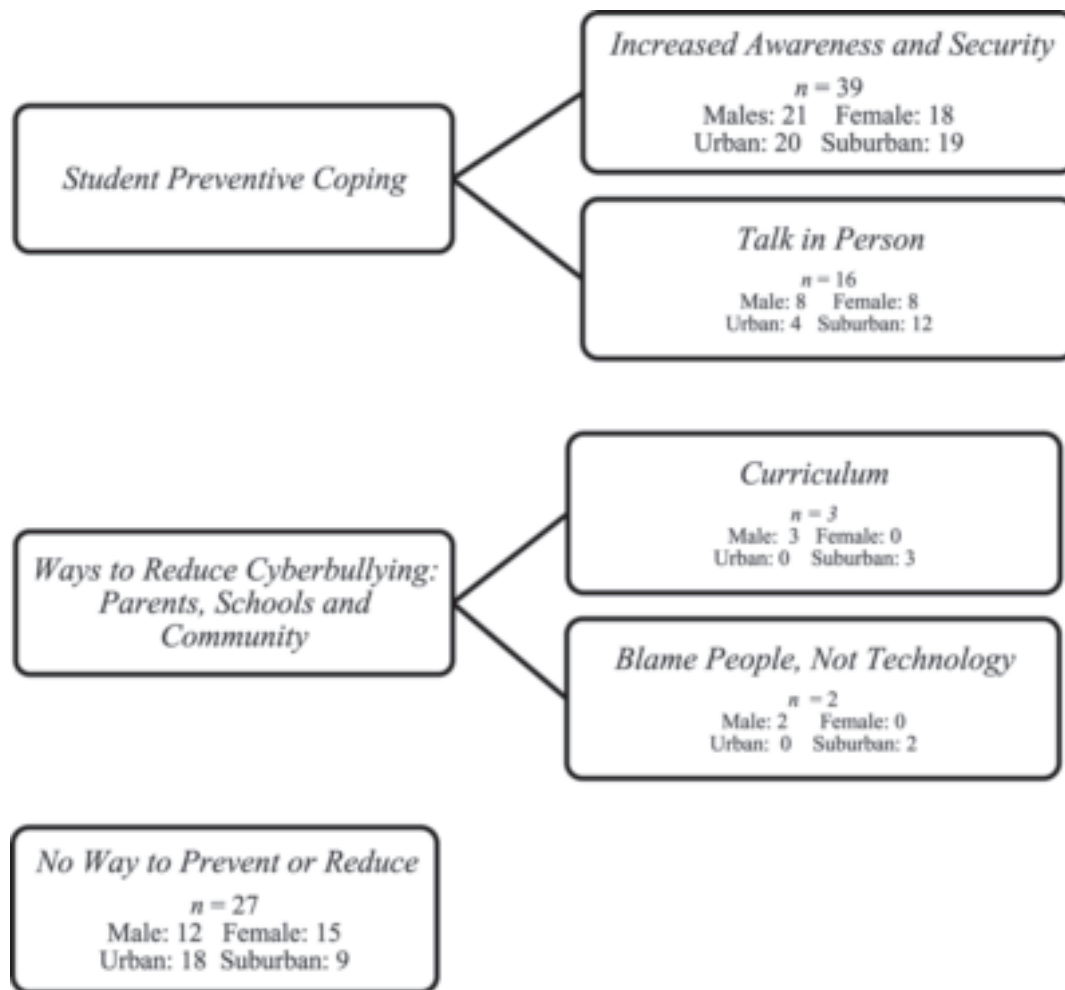


Figure. Coding hierarchy for the Level 1 codes student preventive coping, ways to reduce cyberbullying: schools and community, and no way to prevent or reduce.

understand if they were joking or not, whereas online “words can be misinterpreted” and escalate to cyberbullying.

Ways to Reduce Cyberbullying—Parents, Schools and Community (Level 1)

The second primary research question, student suggestions regarding ways in which adults (e.g., parents, school personnel, and community members) could address cyberbullying resulted in the Level 1 code *Ways to Reduce Cyberbullying—Parents, School and Community* and two Level 2 codes: *Curriculum* and *Blame people not technology* (Figure).

Curriculum (Level 2)

When describing how adults may help address cyberbullying, 3 male suburban students discussed the use of a curriculum or school information session, and this was coded *curriculum*. One 16-year-old stated that you “have to educate the actual people” and that this education could be provided as a class or assembly. The 3 students who discussed the use of a curriculum indicated that information should be provided early

(i.e., elementary school) and by someone experienced with technology and cyberbullying. A 17-year-old male student explained schools could provide:

Like a class, just say early . . . like late elementary, early middle school . . . People teaching should either be people who have done it before, know that it’s wrong, or people who have a good understanding about it.

Blame People, Not Technology (Level 2)

Two suburban male participants discussed *blame people, not technology* (see Table), explaining that adults should focus on the people abusing technology rather than the negative aspects of technology or taking it away from students. One participant explained: “no one wants to blame another human, cause humans can fight back.” He continued by stating that “teachers don’t want to get blamed, the students don’t want to get blamed, so they blame an object.” Students explained that addressing those who abuse the technology would change

behavior (e.g., more effective consequences) instead of restricting technology access.

No Way to Reduce Cyberbullying (Level 1)

Twenty-seven of the 40 students reported the Level 1 code *no way to reduce cyberbullying*, with the majority of these students being from the urban school (Table). Students reported that nothing could be done to reduce cyberbullying, typically due to the difficulty tracking perpetrators, the ability to circumvent security blocks, and the fact that some students will continue despite consequences. When asked if there was a way to prevent cyberbullying, a 17-year-old male urban student answered, "Not that I can think of. . .you can't really stop somebody from talking to someone else because there is, like, freedom of speech." When asked the same question, a 16-year-old female suburban student replied, "I don't think so. Kids are going to be kids and they are going to argue regardless, they would just find another way."

DISCUSSION

Using in-depth individual interviews, we obtained information regarding how students believe cyberbullying may be prevented based on their personal experiences and perceptions of the phenomenon. When discussing how peers can help protect themselves from online peer aggression, the majority of the participants suggested increasing protection efforts when online, confirming previous literature.^{3,10} In addition to online security, participants focused on how students need to be more aware of their cyber-surroundings. Students often described using social media, such as online message boards and social networking sites (e.g., posting on Facebook), to warn others of cyberbullies, to ask for guidance, and to let the online community know of cyberbullying threats. Students in the current study were likely to reach out to their online community and network when addressing cyberbullying, rather than going to an adult (e.g., teacher, parent). This particular finding indicates an important potential avenue for prevention and intervention.

While students discussed using their online resources to identify and prevent cyberbullying, they also reported that sometimes removing oneself from that medium can reduce cyberbullying which represented a unique finding. Students reported that when negative interactions begin online it is beneficial to approach the situation face-to-face so that the internet, serving as a mask, does not interfere with communication. Helping students recognize that the internet often makes it hard to discern meaning and/or tone is one way students and adults can help prevent cyberbullying.

Unique findings concerned information about how adults can reduce cyberbullying. This included the use of classroom or school-wide lessons to educate youth about cyberbullying that involve people who "have experience" in cyberbullying. This suggests that the credibility of those providing such curricula would be important to students and that trustworthiness would

be assessed by how much knowledge the educator has, not only of technology but of cyberbullying behaviors. This indicates an important area for practice in that school personnel may need training before providing the services suggested by the participants in this study.

Few students reported adult intervention (e.g., teachers, parents) as an effective way to reduce cyberbullying. Further, students reported that rather than removing technology from victims for protection, schools and parents could develop strategies for addressing students who engage in cyberbullying behaviors. This finding suggests that schools and adults reconsider how they address cyberbullying, moving away from policies that restrict technology access and toward programs addressing specific attitudes or behaviors regarding cyberbullying. The finding regarding the limited number of suggestions for adult intervention was in contrast to a previous study where participants reported parents could help by monitoring and restricting their child's access to technology.³ One reason may be developmental differences, as this earlier study included middle school students while the current study used high school students who may opt for more independent problem solving.

Finally, the current study used cross-site analysis¹⁷ to examine differences in student suggestions based on gender and school location. In general there were no qualitative differences between male and female participants. Regarding school locations, urban students ($n = 18$) more often stated that there was nothing adults could do to reduce cyberbullying when compared to suburban students ($n = 9$). Similar to previous research,¹⁵ urban students stated that while cyberbullying was a negative aspect of their lives, they had additional stressors that could take precedence over addressing electronic victimization, such as taking care of siblings or weekend jobs. Differences between urban and suburban students illustrate the need to take into account context and culture when providing services to students experiencing cyberbullying. Additional research is warranted to explore these differences and implications for research and practice.

LIMITATIONS

One limitation of the current study was using only individual interviews to obtain qualitative information. There are many methods for qualitative research (e.g., focus group interviews) that may have provided additional information. Further, during the 2 data collection points, though only separated by 3 months, advances in technology may have had an effect on student technology usage. For example, Facebook added instant messaging, which allowed students in the urban sample to discuss technology that was not available during data collection with suburban students. Also, changes were made during the second data collection phase at the urban high school because the researchers did not receive responses using the methods that had recruited suburban participants (e.g., fliers). Therefore, recruitment was adapted to the particular culture and

context of the urban school.²² However, the differences in recruitment procedures may have resulted in samples that differed in motivation to participate and this may have been confounded with urban/suburban differences.

CONCLUSION

Using their experiences with and perceptions of cyberbullying, participants in the current study were able to illustrate ways for adults and students to prevent cyberbullying and to explain why those strategies may be beneficial. Students appeared to rely more on themselves and their online community when addressing cyberbullying than has been suggested by prior research. They provided fewer strategies for adults and largely reported that adults have limited, and often ineffective, options for reducing cyberbullying. The participants in the current study emphasized the need to receive help from those trained in technology and cyberbullying. However, it is possible that rather than focus on adult-led prevention efforts, parents and teachers can help students increase their own skills and abilities when protecting themselves against online aggression. Future research is needed to further investigate these findings.

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REFERENCES

1. Rideout V, Foehr U, Roberts D. Generation M²: Media in the lives of 8- to 18-year-olds. Menlo Park, CA: Henry J. Kaiser Family Foundation; 2010.
2. Internet Safety Technical Task Force. Enhancing child safety & online technologies. Cambridge, MA: Berkman Center for Internet & Society, Harvard University; 2008.
3. Kowalski R, Limber S, Agatston P. Cyber bullying: Bullying in the digital age. Malden, MA: Blackwell Publishing; 2008.
4. Hinduja S, Patchin J. Offline consequences of online victimization: School violence and delinquency. *J Sch Violence*. 2007;9:89–112.
5. Sahin M. The relationship between the cyberbullying/cybervictimization and loneliness among adolescents. *Child Youth Serv Rev*. 2012;34: 834–837.
6. Smith P, Mahdavi J, Carvalho M, et al. Cyberbullying: Its nature and impact in secondary school pupils. *J Child Psychol Psychiatry*. 2008;49: 376–385.
7. Gamez-Guadiz M, Orue I, Smith P, et al. Longitudinal and reciprocal relations of cyberbullying with depression, substance use, and problematic use among adolescents. *J Adolesc Health*. 2012;53:446–452.
8. Bonanno R, Hymel S. Cyber bullying and internalizing difficulties: Above and beyond the impact of traditional forms of bullying. *J Youth Adolesc*. 2013;42:685–698.
9. Hinduja J. Bullying, cyberbullying, and suicide. *Arch Suicide Res*. 2010; 14:206–221.
10. Parris L, Varjas K, Meyers J, et al. High school students' perceptions of coping with cyberbullying. *Youth Society*. 2012;44:282–304.
11. Šléglová V, Černá A. Cyberbullying in adolescent victims: Perception and coping. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*. 2011;5. Available at: www.cyberpsychology.eu/view.php?cisloclanku=2011121901&article=4
12. Dehue F, Bolman C, Vollink T. Cyberbullying: Youngsters' experiences and parental perception. *Cyberpsychology Behav*. 2008;11:215–223.
13. Mishna F, Cook C, Saini M, et al. Interventions to prevent and reduce cyber abuse of youth: A systematic review. *Res Soc Work Prac*. 2011; 21:5–15.
14. Lodge J, Frydenberg E. Cyber-bullying in Australian schools: Profiles of adolescent coping and insights for school practitioners. *The Australian Educational and Developmental Psychologist*. 2007;24:45–58.
15. Madigan L. Cyberbullying: A student perspective. 2010. Available at: www.illinoisattorneygeneral.gov/children/internet.html
16. Onwuegbuzie A, Collins M. A typology of mixed methods sampling designs in social science research. *Qual Rep*. 2007;12:281–316.
17. Miles M, Huberman A. Chapter 5: Cross Site Analyses. In: *Qualitative data analysis: A sourcebook of new methods*. Beverly Hills, CA: SAGE; 1984.
18. Schensul S, Schensul J, LeCompte M. *Essential ethnographic methods: Observations, interviews, and questionnaires*. Walnut Creek, CA: Alta Mira Press; 1999.
19. Nastasi B. Advances in qualitative research. In: Gutkin T, Reynolds C, eds. *The handbook of school psychology*, 4th ed. Danvers, MA: Wiley; 2009.
20. Strauss A, Corbin J. *Basics of qualitative research: Techniques and procedures for developing Grounded Theory*. Thousand Oaks, CA: SAGE; 1998.
21. Bakeman R, Gottman JM. *Observing interactions: An introduction to sequential analysis*. New York, NY: Cambridge University Press; 1986.
22. Nastasi B, Moore R, Varjas K. *School-based mental health services: Creating comprehensive and culturally specific programs*. Washington, DC: American Psychological Association; 2004.