

Articles

Assessing Middle School Students' Knowledge of Conduct and Consequences and Their Behaviors Regarding the Use of Social Networking Sites

STACEY L. KITE, ROBERT GABLE, and LAWRENCE FILIPPELLI

Abstract: Cyberbullying and threats of Internet predators, not to mention the enduring consequences of postings, may lead to dangerous, unspeakable consequences. Cyberbullying and threats of Internet predators through social networking sites and instant messaging programs are initiating numerous problems for parents, school administrators, and law enforcement on a national level (McKenna 2007, 60). A 34 item survey was developed to assess Knowledge of appropriate behavior on social networking sites (alpha = .84), Bullying Behavior (alpha = .72), and Internet Use (alpha = .78) of social networking sites for N = 588 grade 7–8 students from an urban and a suburban school. Implications for educators and parents regarding Cyberbullying and Internet Predators are discussed.

Keywords: cyberbullying, Internet predators, middle school behaviors

A t a young age, children are taught consequences for their actions. The Internet has introduced consequences of which we never dreamed. Cyberbullying and threats of Internet predators, not to mention the enduring consequences of postings, may lead to danger-

ous, unspeakable outcomes. Cyberbullying and threats of predation through social networking sites and instant messaging programs have created numerous problems for parents, school administrators, and law enforcement on a national level (McKenna 2007, 60). Students today have access to cell phones, personal digital assistants, and computers to access the Internet and communicate with peers almost instantly, leaving them less time to contemplate the words with which they communicate. Jenkins and Boyd (2006) identify one important aspect of the problem to be the permanence and accessibility of online activity:

Indeed, one of the biggest risks of these digital technologies is not the ways that they allow teens to escape adult control, but rather the permanent traces left behind of their transgressive conduct. Teens used to worry about what teachers and administrators might put on their permanent records since this would impact how they were treated in the future. Yet, we are increasingly discovering that everything we do online becomes part of our public and permanent record, easily recoverable by anyone who knows how to Google, and that there is no longer any statute of limitation on our youthful indiscretions. (Jenkins and Boyd 2006)

The purpose of this study was to access the knowledge of middle school students with regard to appropriate

Stacey Kite, DBA, is a professor of research in the School of Education at Johnson & Wales University, Providence, RI. Robert Gable, EdD, is a professor of research the School of Education at Johnson & Wales University, Providence, RI. Lawrence Filippelli, EdD, is the assistant superintendent at Scituate Schools, Scituate, RI.

use of social networking sites. Specifically, we examined their conduct and its consequences when online using a self-administered survey.

Cyberbullying

Franek defines a cyberbully as "anyone who repeatedly misuses technology to harass, intimidate, bully, or terrorize another person" (2005/2006, 36). The typical schoolyard bully, whose torment of students would stop when the final bell rang, now has new forums to carry out this behavior. The cyberbully has almost limitless time to harass, degrade, and assert control over his or her victims. When students leave school and log on at home, the cyberbully pops up on their instant messenger and engages them in the same hurtful conversations and torment as they did earlier in the day.

Engaging the digital age bully poses many problems. One such problem is the removal of social cues. With the schoolyard bully, both the bully and the victim can read each other's social cues, such as body posture, speaking volume, facial expressions, and level of engagement. Cyberbullying removes all of the social cues that are learned through face-to-face interactions, and the bully and victim are left with caustic words being exchanged without any other interactions.

Franek (2005/2006, 41) suggests that students who have been bullied online are more likely to turn into cyberbullies themselves. This possibility is of great concern, considering the two national studies cited by Erb (2006) that indicate that between 20 percent and 33 percent of adolescents have reported being victims of cyberbullying (Southern Poverty and Law Center 2006; Patchin and Hinduja 2006). As Erb (2006) stated in his *Middle School Journal* editorial, bullies can establish power over their victims with little responsibility for their actions. This should be of great concern to school administrators.

Social Networking Sites

Social networking sites are not new ideas. Similar sites were created shortly after the Internet boom of the mid 1990s. America Online and Yahoo offered Web sites where people could connect with old friends, post pictures, and write descriptions of recent activities. At that time, posting an e-mail or instant messenger screen name on such sites was not popular, because people (even teenage students) thought that it was not a good idea to post that type of information online. Less than a decade later, students of all ages are posting personal information, conversation threads, blogs, and inappropriate pictures, which sometimes include illegal activity such as alcohol and narcotics use. In some areas of the country, gangs use social networking sites to recruit members, post messages in code, and conduct other gang-related activity. "There is no doubt that these online teen hangouts have a huge influence on how adolescents today think and behave. The challenge for school administrators is to keep pace with how students are using these tools in positive ways and consider how they might incorporate this technology into the school setting" (Bryant 2007).

Access to the Internet does not always mean trouble for students. The Internet is a vast resource for many uses. Proper education and supervision allows school administrators to work in conjunction with parents and the school community to teach their students about the dangers of social networking sites, cyberbullying, and instant messaging. To assist in the development of educational programs, schools should assess students' knowledge of their conduct and its consequences regarding the use of social networking sites. The research reported in this article can contribute to these efforts.

Methodology

Sample

A total of 588 male and female students in grades 7 and 8 from an urban (n = 185) and a suburban (n = 403) school responded to the our Survey of Internet Risk and Behavior during a regularly scheduled school activity period.

The urban school population was 9 percent Asian American, 7 percent African American, 11 percent Hispanic, and 73 percent Caucasian. The district where the school was located scored 40 percent in reading proficiency, 33 percent in math proficiency, and 27 percent in writing proficiency on a state standardized test.

The suburban school district achieved a higher level of proficiency, reaching 74 percent in reading, 67 percent in math, and 57 percent in reading on the state standardized test. The school population was less than 1 percent American Indian, less than 1 percent Asian American, 1 percent African American, 1 percent Hispanic, and 97 percent Caucasian.

Instrumentation

The Survey of Internet Risk and Behavior was developed for this study to assess student knowledge and behavior at two schools in a northeast state. The instrument was developed using the literature and expert opinions from two current middle school leaders (not from the schools under investigation). The details of the content, format, validity, and reliability are presented in the following sections.

Dimension/item content. The Survey of Internet Risk and Behavior contained thirty-three items. Following the item analysis and data reliability assessment, the findings reported in this article are based on twenty-eight of the original thirty-three items. The first seven investigate the views and experiences of the students with regard to social networking. The remaining items

assess two global dimensions: Knowledge and Behavior. The Knowledge dimension is composed of sixteen items describing the students' knowledge of appropriate behavior on social networks and potential risk of Internet predators. The Behavior items are categorized into two subdimensions: Bullying Behavior and Internet Use. Bullying Behavior encompasses two items that directly query the students on their bullying behaviors on both MySpace and instant messenger sites. Finally, Internet Use is composed of three items that assess whether the respondents use the Internet for instant messaging, e-mail, or social networking on a daily basis.

Response format. Students responded to each item by selecting agree, disagree, or don't know. Using a "correct" response grid, each statement received 1 point for the "appropriate" or "correct" response and 0 points for the "incorrect" or "don't know" response.

Validity and reliability. Content validity of the survey items was supported through the literature (Franek 2005/2006; McKenna 2007; Weaver 2007) and a judgmental review by five middle school teachers. Cronbach's alpha for the respective dimensions was as follows: Knowledge = .84; Bullying Behavior = .72; Internet Usage = .78.

Data Analysis

Response percentages for the agree, disagree, and don't know options are presented for all items. For the Knowledge, Bullying Behaviors, and Internet Use dimensions, the overall percent "correct" for the set of items defining the respective dimension is also presented. Items were also ranked within each category based on the percentage of "correct" responses to identify the high and low knowledge or behavior areas.

Results and Discussion

Social Networking Experiences and Opinions

Table 1 contains the response percentages for the students' ratings of their social networking experiences and opinions. Inspection of the data for some key items indicates that only 10 percent of the students had been bullied by another student at home while online (item 1). Although the majority (53%) of students were not sure if their friends' parents were aware of what they were doing online, 70 percent of the students felt that their parents knew about their social networking sites (item 7). According to 74 percent of the students, their friends used social networking sites like MySpace or Facebook. Although roughly half (51%) of the students disagreed that adding friends to their Instant Messaging account would make them more popular, only 17 percent agreed, and 32 percent did not know if this was the case.

Knowledge

Table 2 contains the ranked response percentages for students' knowledge of appropriate behaviors and risk of Internet predators. The "correct" or "appropriate" response percentages are boxed in the table. The behaviors associated with the boxed "disagree" percentages exceeding 60 percentage indicate positive results, since appropriate student behaviors are indicated. Of particular concern are the five items (24, 17, 20, 21, and 32) with boxed bold "agree" percentages at the top of the table. The behaviors described by these items reflect two areas of concern: knowing how easily predators can contact students and willingness to inform a parent or adult about possibly inappropriate Internet contact. Regarding contact, only 29 percent of the students felt that a predator would make contact with them based on the information they had posted online (item 24), and only 37 percent felt that it would be easy for a predator to

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IABLE 1. Social Networki	ocial Networking Experiences and Opinions: Response Percentage				

Item	Agree	Disagree	Don't Know
1. I have been bullied by another student at home while online.	10	83	7
3. My friends' parents don't know what they do online.	18	29	53
7. My parents do not know about my social networking sites.	10	70	20
11. Most of my friends have social networking sites like myspace or facebook.	74	9	17
15. I am much better with computers and the internet than my parents.	62	21	17
23. The more "friends" you add to your Instant Messenging account, the more popular you are.	17	51	32
31. I log onto an instant messenging program at least three times per week.	52	37	11

TABLE 2. Knowledge of Appropriate Behaviors and Risk of Internet Predators: Ranked Response
Percentages ^a (N = $\overline{5}88$)

Item	Agree	Disagree	Don't Know
24. An internet predator will make contact with me based on the information I have posted online.	29	32	39
17. With the contact information I put on myspace or facebook, it would be easy for an internet predator to contact me.	37	38	25
20. If I were contacted by some I didn't know on Instant Messenger, I would tell an adult.	40	31	29
21. An internet predator can easily use sites such as google earth, MSN live or other programs to locate my school and house.	43	18	39
32. If I had mean or threatening things said about me on a site like myspace or facebook, I would tell a teacher, parent or another adult.	44	28	28
25. Threats online that I carry out at school can get me into trouble.	54	21	25
6. I have told a parent or another adult that I have been bullied online.	55	24	21
29. If I were being harassed by another student, I would tell a teacher, parent, or another adult.	57	23	20
2. Making threats online can get me in trouble with the police.	60	17	23
13. A predator would never contact me from a social networking site even if I posted my personal information on it.	7	62	31
5. Putting personal contact information on a social networking site is no big deal.	12	69	19
12. If I were contacted by someone on myspace that I did not know, it would be OK to add them as a friend.	14	70	16
14. I would create a "hatespace" about another student on a site like myspace or facebook.	5	77	18
9. Giving my personal information away to an IM buddy I am unfamiliar with is no big deal.	8	79	13
10. I would post mean or threatening statements about another student a site such as myspace or facebook.	6	79	15
16. If I were contacted by someone on myspace that I did not know, it would be OK to share my information with them. Overall "Appropriate" Response for Knowledge 59%	4	85	11

contact them based on the contact information they put on their MySpace or Facebook page (item 17). Likewise, only 43 percent felt that it would be possible for an Internet predator to locate their home or school using Google Earth or MSN live (item 21). One would hope that students think this is the case because they have not listed specific contact information on their site.

The potential to inform an adult of inappropriate contact on a site such as MySpace or Facebook is an issue of great concern. Only 40 percent of the students indicated that they would tell an adult if they were contacted on instant messenger by someone they did not know (item 20). Furthermore, only 44 percent indicated that they would tell a teacher, parent, or another adult if mean or threatening things were said about them on a site such as MySpace or Facebook (item 32).

Overall, for the set of sixteen items defining the Knowledge dimension, only 59 percent of the students indicated what most educators would consider a "correct" or "appropriate" response. If we are applying any version of our usual educators' concept of mastery in the realm of knowledge, it appears that school officials and teachers have some serious areas that require discussion with our students.

Behavior

Table 3 contains the ranked response percentages for students' bullying behavior and Internet use. A somewhat positive finding is that 78 percent of the students indicate that they have not threatened or bullied another student using an instant messenger program (item 18); additionally, 83 percent indicate that they have not threatened or bullied a friend (item 22). We note that 10

Dimension/Item	Agree	Disagree	Don't Know
Bullying			
18. I have threatened or bullied another student online using an instant messenger.	10	78	12
22. I have threatened or bullied one of my friends online. Overall "Appropriate" Response for Bullying 81% Internet Use for Instant Messenging and Social Networks	6	83	11
27. I log onto an instant messenging program daily.	49	40	11
30. I access social networking sites more than three times per week.	41	42	17
33. I access social networking sites at least once a day. Overall "Appropriate" Response for Internet Use 43%	39	44	17

percent of the students did agree that they have engaged in these behaviors. While 10 percent may seem low, it raises a valid concern, since it represents 59 of the students in this study. Overall, 81 percent of the students indicated an "appropriate" response for the set of two Bullying items.

Table 3 also lists the findings for three items describing the frequency of Internet use for instant messaging and accessing social networks. Less than half of the students indicated that they frequently engage in these behaviors, and overall, 43 percent responded with what many educators would consider to be an "appropriate" response.

Summary, Conclusions, and Implications for Educators

Internet predator threats and cyberbullying through the use of social networking sites are major issues. Although the media presents concerns of social networking sites (usually Internet predator risks), we rarely hear of cyberbullying through these sites. While the threat of predators is a serious concern, a child is far more likely to be bullied online. Educating students on the risks they may encounter through social networking sites is paramount. As can be seen from the findings outlined in the following sections, many students do not fully understand the risks they are taking. Some of the key findings from this survey of middle school students were as follows:

Internet Predators

Most students (71%) do not think that an Internet predator will contact them based on postings online. Furthermore, 63 percent do not fully understand the potential risk of Internet predators (i.e., their ability to track students on the Internet). It is clear that more education on the risk of cyber behaviors is needed. Addi-

tionally, the education about students' online behaviors needs to extend to more than just the educational community. Parents and law enforcement groups are crucial players in keeping students safe from online predators.

Only 40 percent of the students indicated that they would tell an adult if they were contacted by someone they did not know. The fear is, perhaps, that they would not be allowed to continue using the Internet if this were to happen. Parents need to keep a closer eye on their children's behaviors and discuss Internet dangers with them, as they would discuss any important topic. This low percentage will be shocking to anyone who is familiar with this type of research. The National Association of Secondary School Principals' publication News Leader (National Association of Secondary School Principals 2006, 9) has indicated that only 16 percent of teens and preteens affected by online bullying or predatory behavior would tell someone. The finding of 40 percent for this sample of students is more positive but still much too low and therefore quite significant.

Cyberbullying

Similar to the finding for the Internet predation item, only 44 percent indicated that they would tell an adult if they were the victim of cyberbullying. When asked if they had been bullied while online, 10 percent indicated yes. The 2006 NASSP publication *News Leader* indicated that 33 percent of all teens aged 12 to 17 years have had mean, threatening, or embarrassing things said about them online. While our findings of 10 percent may appear low in light of the national average, there is still a need for concern for this behavior. For our sample of 588 students, this percentage indicates that approximately fifty-nine of the students have been bullied by another student at home while online. Some would conclude that *one* is too many in this case.

Shariff (2008) reports that an extreme but real consequence of this behavior could be suicidal thoughts or action. It is clear that parents need to take a more active role in the development of their child's behaviors, particularly in the digital world. Shariff states:

As human beings, we teach our children how to eat, clean themselves, and communicate, and we protect and nurture them, until they are old enough to go to school. Once they are at school, we suddenly place more emphasis on supervision, discipline, authority, subordination, punishment, and consequences, with less attention to the social survival skills they will need in the contemporary world. (2008, 113)

We anticipate that the findings presented in this article will facilitate further understanding of students' awareness and behaviors regarding these issues and their consequences; and support school administrators' and teachers' increased attention to them.

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