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OFFICIAL JOURNAL OF THE AMERICAN ACADEMY OF PEDIATRICS

The Impact of Social Media on Children, Adolescents, and Families

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and Media

Pediatrics 2011;127;800; originally published online March 28, 2011;

DOI: 10.1542/peds.2011-0054

The online version of this article, along with updated information and services, is
located on the World Wide Web at:

<http://pediatrics.aappublications.org/content/127/4/800.full.html>

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Clinical Report—The Impact of Social Media on Children, Adolescents, and Families

abstract

FREE



Using social media Web sites is among the most common activity of today's children and adolescents. Any Web site that allows social interaction is considered a social media site, including social networking sites such as Facebook, MySpace, and Twitter; gaming sites and virtual worlds such as Club Penguin, Second Life, and the Sims; video sites such as YouTube; and blogs. Such sites offer today's youth a portal for entertainment and communication and have grown exponentially in recent years. For this reason, it is important that parents become aware of the nature of social media sites, given that not all of them are healthy environments for children and adolescents. Pediatricians are in a unique position to help families understand these sites and to encourage healthy use and urge parents to monitor for potential problems with cyberbullying, "Facebook depression," sexting, and exposure to inappropriate content. *Pediatrics* 2011;127:800–804

SOCIAL MEDIA USE BY TWEENS AND TEENS

Engaging in various forms of social media is a routine activity that research has shown to benefit children and adolescents by enhancing communication, social connection, and even technical skills.¹ Social media sites such as Facebook and MySpace offer multiple daily opportunities for connecting with friends, classmates, and people with shared interests. During the last 5 years, the number of preadolescents and adolescents using such sites has increased dramatically. According to a recent poll, 22% of teenagers log on to their favorite social media site more than 10 times a day, and more than half of adolescents log on to a social media site more than once a day.² Seventy-five percent of teenagers now own cell phones, and 25% use them for social media, 54% use them for texting, and 24% use them for instant messaging.³ Thus, a large part of this generation's social and emotional development is occurring while on the Internet and on cell phones.

Because of their limited capacity for self-regulation and susceptibility to peer pressure, children and adolescents are at some risk as they navigate and experiment with social media. Recent research indicates that there are frequent online expressions of offline behaviors, such as bullying, clique-forming, and sexual experimentation,⁴ that have introduced problems such as cyberbullying,⁵ privacy issues, and "sexting."⁶ Other problems that merit awareness include Internet addiction and concurrent sleep deprivation.⁷

Many parents today use technology incredibly well and feel comfortable and capable with the programs and online venues that their chil-

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KEY WORDS

Internet, cyberbullying, online harassment, Facebook depression, sexting, social media, digital footprint, COPPA, advertising, social networking, bullying, adolescents, children

ABBREVIATION

AAP—American Academy of Pediatrics

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The guidance in this report does not indicate an exclusive course of treatment or serve as a standard of medical care. Variations, taking into account individual circumstances, may be appropriate.

www.pediatrics.org/cgi/doi/10.1542/peds.2011-0054

doi:10.1542/peds.2011-0054

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PEDIATRICS (ISSN Numbers: Print, 0031-4005; Online, 1098-4275).

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dren and adolescents are using. Nevertheless, some parents may find it difficult to relate to their digitally savvy youngsters online for several reasons. Such parents may lack a basic understanding of these new forms of socialization, which are integral to their children's lives.⁸ They frequently do not have the technical abilities or time needed to keep pace with their children in the ever-changing Internet landscape.⁸ In addition, these parents often lack a basic understanding that kids' online lives are an extension of their offline lives. The end result is often a knowledge and technical skill gap between parents and youth, which creates a disconnect in how these parents and youth participate in the online world together.⁹

BENEFITS OF CHILDREN AND ADOLESCENTS USING SOCIAL MEDIA

Socialization and Communication

Social media sites allow teens to accomplish online many of the tasks that are important to them offline: staying connected with friends and family, making new friends, sharing pictures, and exchanging ideas. Social media participation also can offer adolescents deeper benefits that extend into their view of self, community, and the world, including^{1,10}:

1. opportunities for community engagement through raising money for charity and volunteering for local events, including political and philanthropic events;
2. enhancement of individual and collective creativity through development and sharing of artistic and musical endeavors;
3. growth of ideas from the creation of blogs, podcasts, videos, and gaming sites;
4. expansion of one's online connections through shared interests to

include others from more diverse backgrounds (such communication is an important step for all adolescents and affords the opportunity for respect, tolerance, and increased discourse about personal and global issues); and

5. fostering of one's individual identity and unique social skills.¹¹

Enhanced Learning Opportunities

Middle and high school students are using social media to connect with one another on homework and group projects.¹¹ For example, Facebook and similar social media programs allow students to gather outside of class to collaborate and exchange ideas about assignments. Some schools successfully use blogs as teaching tools,¹² which has the benefit of reinforcing skills in English, written expression, and creativity.

Accessing Health Information

Adolescents are finding that they can access online information about their health concerns easily and anonymously. Excellent health resources are increasingly available to youth on a variety of topics of interest to this population, such as sexually transmitted infections, stress reduction, and signs of depression. Adolescents with chronic illnesses can access Web sites through which they can develop supportive networks of people with similar conditions.¹³ The mobile technologies that teens use daily, namely cell phones, instant messaging, and text messaging, have already produced multiple improvements in their health care, such as increased medication adherence, better disease understanding, and fewer missed appointments.¹⁴ Given that the new social media venues all have mobile applications, teenagers will have enhanced opportunities to learn about their health issues and communicate with their doctors.

However, because of their young age, adolescents can encounter inaccuracies during these searches and require parental involvement to be sure they are using reliable online resources, interpreting the information correctly, and not becoming overwhelmed by the information they are reading. Encouraging parents to ask about their children's and adolescents' online searches can help facilitate not only discovery of this information but discussion on these topics.

RISKS OF YOUTH USING SOCIAL MEDIA

Using social media becomes a risk to adolescents more often than most adults realize. Most risks fall into the following categories: peer-to-peer; inappropriate content; lack of understanding of online privacy issues; and outside influences of third-party advertising groups.

Cyberbullying and Online Harassment

Cyberbullying is deliberately using digital media to communicate false, embarrassing, or hostile information about another person. It is the most common online risk for all teens and is a peer-to-peer risk.

Although "online harassment" is often used interchangeably with the term "cyberbullying," it is actually a different entity. Current data suggest that online harassment is not as common as offline harassment,¹⁵ and participation in social networking sites does not put most children at risk of online harassment.¹⁶ On the other hand, cyberbullying is quite common, can occur to any young person online, and can cause profound psychosocial outcomes including depression, anxiety, severe isolation, and, tragically, suicide.¹⁷

Sexting

Sexting can be defined as “sending, receiving, or forwarding sexually explicit messages, photographs, or images via cell phone, computer, or other digital devices.”¹⁸ Many of these images become distributed rapidly via cell phones or the Internet. This phenomenon does occur among the teen population; a recent survey revealed that 20% of teens have sent or posted nude or seminude photographs or videos of themselves.¹⁹ Some teens who have engaged in sexting have been threatened or charged with felony child pornography charges, although some states have started characterizing such behaviors as juvenile-law misdemeanors.^{20,21} Additional consequences include school suspension for perpetrators and emotional distress with accompanying mental health conditions for victims. In many circumstances, however, the sexting incident is not shared beyond a small peer group or a couple and is not found to be distressing at all.⁴

Facebook Depression

Researchers have proposed a new phenomenon called “Facebook depression,” defined as depression that develops when preteens and teens spend a great deal of time on social media sites, such as Facebook, and then begin to exhibit classic symptoms of depression.^{22–27} Acceptance by and contact with peers is an important element of adolescent life. The intensity of the online world is thought to be a factor that may trigger depression in some adolescents. As with offline depression, preadolescents and adolescents who suffer from Facebook depression are at risk for social isolation and sometimes turn to risky Internet sites and blogs for “help” that may promote substance abuse, unsafe sexual practices, or aggressive or self-destructive behaviors.

PRIVACY CONCERNS AND THE DIGITAL FOOTPRINT

The main risk to preadolescents and adolescents online today are risks from each other, risks of improper use of technology, lack of privacy, sharing too much information, or posting false information about themselves or others.²⁸ These types of behavior put their privacy at risk.

When Internet users visit various Web sites, they can leave behind evidence of which sites they have visited. This collective, ongoing record of one's Web activity is called the “digital footprint.” One of the biggest threats to young people on social media sites is to their digital footprint and future reputations. Preadolescents and adolescents who lack an awareness of privacy issues often post inappropriate messages, pictures, and videos without understanding that “what goes online stays online.”⁸ As a result, future jobs and college acceptance may be put into jeopardy by inexperienced and rash clicks of the mouse. Indiscriminate Internet activity also can make children and teenagers easier for marketers and fraudsters to target.

INFLUENCE OF ADVERTISEMENTS ON BUYING

Many social media sites display multiple advertisements such as banner ads, behavior ads (ads that target people on the basis of their Web-browsing behavior), and demographic-based ads (ads that target people on the basis of a specific factor such as age, gender, education, marital status, etc) that influence not only the buying tendencies of preadolescents and adolescents but also their views of what is normal. It is particularly important for parents to be aware of the behavioral ads, because they are common on social media sites and operate by gathering information on the person using a site and then targeting that person's

profile to influence purchasing decisions. Such powerful influences start as soon as children begin to go online and post.²⁹ Many online venues are now prohibiting ads on sites where children and adolescents are participating. It is important to educate parents, children, and adolescents about this practice so that children can develop into media-literate consumers and understand how advertisements can easily manipulate them.

ON TOO YOUNG: MIXED MESSAGES FROM PARENTS AND THE LAW

Many parents are aware that 13 years is the minimum age for most social media sites but do not understand why. There are 2 major reasons. First, 13 years is the age set by Congress in the Children's Online Privacy Protection Act (COPPA), which prohibits Web sites from collecting information on children younger than 13 years without parental permission. Second, the official terms of service for many popular sites now mirror the COPPA regulations and state that 13 years is the minimum age to sign up and have a profile. This is the minimum age to sign on to sites such as Facebook and MySpace. There are many sites for preadolescents and younger children that do not have such an age restriction, such as Disney sites, Club Penguin, and others.

It is important that parents evaluate the sites on which their child wishes to participate to be sure that the site is appropriate for that child's age. For sites without age stipulations, however, there is room for negotiation, and parents should evaluate the situation via active conversation with their preadolescents and adolescents.

In general, if a Web site specifies a minimum age for use in its terms of service, the American Academy of Pediatrics (AAP) encourages that age to be respected. Falsifying age has become

common practice by some preadolescents and some parents. Parents must be thoughtful about this practice to be sure that they are not sending mixed messages about lying and that online safety is always the main message being emphasized.

THE ROLE OF PEDIATRICIANS

Pediatricians are in a unique position to educate families about both the complexities of the digital world and the challenging social and health issues that online youth experience by encouraging families to face the core issues of bullying, popularity and status, depression and social anxiety, risk-taking, and sexual development. Pediatricians can help parents understand that what is happening online is an extension of these underlying issues and that parents can be most helpful if they understand the core issues and have strategies for dealing with them whether they take place online, offline, or, increasingly, both.

Some specific ways in which pediatricians can assist parents include:

1. Advise parents to talk to their children and adolescents about their online use and the specific issues that today's online kids face.
2. Advise parents to work on their own participation gap in their homes by becoming better educated about the many technologies their youngsters are using.

3. Discuss with families the need for a family online-use plan that involves regular family meetings to discuss online topics and checks of privacy settings and online profiles for inappropriate posts. The emphasis should be on citizenship and healthy behavior and not punitive action, unless truly warranted.
4. Discuss with parents the importance of supervising online activities via active participation and communication, as opposed to remote monitoring with a "net-nanny" program (software used to monitor the Internet in the absence of parents).

In addition, the AAP encourages all pediatricians to increase their knowledge of digital technology so that they can have a more educated frame of reference for the tools their patients and families are using, which will aid in providing timely anticipatory media guidance as well as diagnosing media-related issues should they arise.

To assist families in discussing the more challenging issues that kids face online, pediatricians can provide families with reputable online resources, including "Social Media and Sexting Tips" from the AAP (www.aap.org/advocacy/releases/june09socialmedia.htm),³⁰ the AAP Internet safety site (<http://safetynet.aap.org>),³¹ and the AAP public education site, Healthy Children.org (www.healthychildren.org/english/search/pages/results.aspx?Type=Keyword&Keyword=Internet+safety),³² and encourage parents to

discuss these resources with their children. Pediatricians with Web sites or blogs may wish to create a section with resources for parents and children about these issues and may suggest a list of or links to social media sites that are appropriate for the different age groups. In this way, pediatricians can support the efforts of parents to engage and educate youth to be responsible, sensible, and respectful digital citizens.

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REFERENCES

1. Ito M, Horst H, Bittani M. *Living and Learning With New Media: Summary of Findings From the Digital Youth Project*. Chicago, IL: John D. and Catherine T. MacArthur Foundation Reports on Digital Media and Learning; 2008. Available at: <http://digitalyouth.ischool.berkeley.edu/files/report/digitalyouth-TwoPageSummary.pdf>. Accessed July 16, 2010
2. Common Sense Media. *Is Technology Networking Changing Childhood? A National Poll*. San Francisco, CA: Common Sense Media; 2009. Available at: www.common SenseMedia.org/sites/default/files/CSM_teen_social_media_080609_FINAL.pdf. Accessed July 16, 2010
3. Hinduja S, Patchin J. Offline consequences of online victimization: school violence and delinquency. *J Sch Violence*. 2007;6(3):89–112
4. Lenhart A. *Teens and Sexting*. Washington, DC: Pew Research Center; 2009. Available at: <http://pewinternet.org/Reports/2009/Teens-and-Sexting.aspx>. Accessed August 4, 2010
5. Patchin JW, Hinduja S. Bullies move beyond the schoolyard: a preliminary look at cyberbullying. *Youth Violence Juv Justice*. 2006;4(2):148–169
6. A thin line: 2009 AP-TVT digital abuse study. Available at: www.athinline.org/MTV-AP-Digital_Abuse_Study_Executive_Summary.pdf. Accessed July 16, 2010

7. Christakis DA, Moreno MA. Trapped in the net: will internet addiction become a 21st-century epidemic? *Arch Pediatr Adolesc Med*. 2009;163(10):959–960
8. Palfrey J, Gasser U, Boyd D. *Response to FCC Notice of Inquiry 09-94*: “Empowering Parents and Protecting Children in an Evolving Media Landscape.” Cambridge, MA: Berkman Center for Internet and Society at Harvard University; 2010. Available at: http://cyber.law.harvard.edu/sites/cyber.law.harvard.edu/files/Palfrey_Gasser_boyd_response_to_FCC_NOI_09-94_Feb2010.pdf. Accessed July 16, 2010
9. Jenkins H, Clinton K, Purushotma R, Robinson AJ, Weigel M. *Confronting the Challenges of Participatory Culture: Media Education for the 21st Century*. Chicago, IL: John D. and Catherine T. MacArthur Foundation Reports on Digital Media and Learning; 2006. Available at: http://digitallearning.macfound.org/atf/cf/{7E45C7E0-A3E0-4B89-AC9C-E807E1B0AE4E}/JENKINS_WHITE_PAPER.PDF. Accessed July 16, 2010
10. Boyd D. Why youth (heart) social network sites: the role of networked publics in teenage social life. In: Buckingham D, ed. *MacArthur Foundation Series on Digital Learning: Youth, Identity, and Digital Media Volume*. Cambridge, MA: MIT Press; 2007. Available at: www.danah.org/papers/WhyYouthHeart.pdf. Accessed July 16, 2010
11. Boyd D. *Taken Out of Context: American Teen Sociality in Networked Publics*. Berkeley, CA: University of California; 2008. Available at: www.danah.org/papers/TakenOutOfContext.pdf. Accessed July 16, 2010
12. Borja RR. “Blogs” catching on as tool for instruction: teachers use interactive Web pages to hone writing skills. *Educ Week*. December 14, 2005. Available at: www.iapsych.com/edblogs.pdf. Accessed July 16, 2010
13. Lenhart A, Purcell K, Smith A, Zickur K. *Social Media and Young Adults*. Washington, DC: Pew Research Center; 2010. Available at: <http://pewinternet.org/Reports/2010/Social-Media-and-Young-Adults.aspx>. Accessed July 16, 2010
14. Krishna S, Boren SA, Balas EA. Healthcare via cell phones: a systematic review. *Telemed E Health*. 2009;15(3):231–240
15. Lenhart A. *Cyberbullying*. Washington, DC: Pew Research Center; 2007. Available at: www.pewinternet.org/Reports/2007/Cyberbullying.aspx. Accessed July 16, 2010
16. Ybarra ML, Mitchell KJ. How risky are social networking sites? A comparison of places online where youth sexual solicitation and harassment occurs. *Pediatrics*. 2008; 121(2). Available at: www.pediatrics.org/cgi/content/full/121/2/e350
17. Hinduja S, Patchin JW. Bullying, cyberbullying, and suicide. *Arch Suicide Res*. 2010; 14(3):206–221
18. Berkshire District Attorney. *Sexting*. Pittsfield, MA: Commonwealth of Massachusetts; 2010. Available at: www.mass.gov/?pageID=berterminal&L=3&LO=Home&L1=Crime+Awareness+%26+Prevention&L2=Parents+%26+Youth&sid=Dber&b=terminalcontent&f=parents_youth_sexting&csid=Dber. Accessed September 7, 2010
19. National Campaign to Prevent Teen and Unplanned Pregnancy. *Sex and Tech: Results of a Survey of Teens and Young Adults*. Washington, DC: National Campaign to Prevent Teen and Unplanned Pregnancy; 2008. Available at: www.thenationalcampaign.org/SEXTECH/PDF/SexTech_Summary.pdf. Accessed July 16, 2010
20. Gifford NV. *Sexting in the USA*. Washington, DC: Family Online Safety Institute Report; 2009. Available at: www.fosi.org/cms/downloads/resources/Sexting.pdf. Accessed July 16, 2010
21. Walker J. Child’s play or child pornography: the need for better laws regarding sexting. *ACJS Today*. 2010;XXXV(1): 3–9. Available at: www.acjs.org/pubs/uploads/ACJSToday_February_2010.pdf. Accessed July 16, 2010
22. Davila J, Stroud CB, Starr LR, et al. Romantic and sexual activities, parent-adolescent stress, and depressive symptoms among early adolescent girls. *J Adolesc*. 2009; 32(4):909–924
23. Selfhout MHW, Branje SJT, Delsing M, ter Bogt TFM, Meeu WHJ. Different types of Internet use, depression, and social anxiety: the role of perceived friendship quality. *J Adolesc*. 2009;32(4):819–833
24. Melville K. Facebook use associated with depression. *Science A Go Go*. February 3, 2010. Available at: www.scienceagogo.com/news/20100102231001data_trunc_sys.shtml. Accessed September 7, 2010
25. Irvine C. Excessive chatting on Facebook can lead to depression in teenage girls. *Daily Telegraph*. January 31, 2010. Available at: www.telegraph.co.uk/technology/facebook/4405741/Excessive-chatting-on-Facebook-can-lead-to-depression-in-teenage-girls.html. Accessed September 7, 2010
26. Herr J. Internet entangles college students in a web of loneliness and depression. *Truman State University Index*. February 27, 2007. Available at: www.trumanindex.com/2.10111/internet-entangles-college-students-in-a-web-of-loneliness-and-depression-1.1462681. Accessed September 7, 2010
27. Sturm S. Social networking psych studies: research shows teen Facebook users prone to depression. *TrendHunter*. Available at: www.trendhunter.com/trends/depression-from-facebook. Accessed September 7, 2010
28. Barnes S. A privacy paradox: social networking in the United States. *First Monday*. 2006;11(9). Available at: <http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/1394/1312>. Accessed July 16, 2010
29. Kunkel D, Wilcox BL, Cantor J, Palmer E, Linn S, Dowrick P. Report of the APA Task Force on Advertising and Children. Section: psychological aspects of commercialization of childhood. February 2004. Available at: www.chawisconsin.org/Obesity/02ChildAds.pdf. Accessed July 16, 2010
30. American Academy of Pediatrics. Talking to kids and teens about social media and sexting. Available at: www.aap.org/advocacy/releases/june09socialmedia.htm. Accessed September 7, 2010
31. American Academy of Pediatrics. Safety net. Available at: <http://safetynet.aap.org>. Accessed September 7, 2010
32. American Academy of Pediatrics. Internet safety. Available at: www.healthychildren.org/english/search/pages/results.aspx?Type=Keyword&Keyword=internet+safety. Accessed September 7, 2010

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DOI: 10.1542/peds.2011-0054

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