ABSTRACT
Youth engaging in sexting (texting plus sex) includes behaviors such as sending, receiving, or forwarding of nude or partially nude images via cell phones. The true prevalence of tweens and teens engaging in sexting is unclear. This might be because of the general secrecy of the behavior, the rapid advances in technology, and the lack of a clear definition that accounts for the added developmental factors (e.g., peak sexual development, impulsivity). Additionally, there is a lack of recognition of the consequences and increased risks of sexting (e.g., shame and guilt, earlier sexual behavior, bullying, incarceration, substance abuse, depression, suicide) for youth as a vulnerable population. The purpose of this article is to examine sexting behaviors among youth by exploring factors specific to today’s adolescent population that may influence the prevalence and outcomes of sexting behavior. Implications for nursing practice, including the assessment, intervention, and evaluation that is needed to treat adolescents affected by sexting, are discussed. [Journal of Psychosocial Nursing and Mental Health Services, 51(7), 22-30.]
Scenarios such as this would probably be unheard of a decade ago but are increasingly becoming an issue for schools, parents, mental health and other health care professionals, and even the legal community. The phenomenon of sexting in youth appears to be the result of a number of factors, including raging adolescent hormones and attitudes of invincibility, digital technological advancements, and peer pressure. This increasingly popular behavior poses a number of potential risks and consequences for youth, such as earlier sexual behavior, promiscuity, sexually transmitted diseases, unwanted pregnancy, substance abuse, harassment and cyberbullying, guilt and shame, arrest and incarceration, depression, and even suicide (Benotsch, Snipes, Martin, & Bull, 2013; Dake, Price, Maziarz, & Ward, 2012; Diliberto & Mattey, 2009; Inbar, 2009).

School administrations and boards of education are facing many challenges regarding how to discipline students for such behaviors. Lack of or poorly developed policies and procedures are compounded with the rapid developments in communication technologies and the ambiguities of state and federal laws dealing with sexting and child pornography offenses. School administrators struggle to balance discipline policies between the rights of the students and the school districts’ rights to discipline while complying with laws. Additionally, legal experts have warned administrators and educators that they could be at risk for serious consequences without having appropriate policies and procedures to deal with sexting incidents (Manzo, 2009).

To comprehend the magnitude of sexting, the term must first be defined. Simply put, sexting is a combination of the words texting and sex (Willard, 2010). This term has become almost as commonplace in our vocabulary as technology use is to our youth; sexting is even in the dictionary (Mattey & Diliberto, 2013). This behavior does not have to include the images of a sexual act, but it does include the sending, receiving, or forwarding of nude or partially nude images via cell phones or other electronic media (Boucek, 2009). It becomes a serious problem when one of the dyad (sender or receiver) is a minor and the other an adult by state law definitions. Lounsbury, Mitchell, and Finkelhor (2011) suggested that the more accurate term for this behavior is “youth-produced sexual images.” This revised term would be defined as sexual images created by minors, which could be considered child pornography under the law (Lounsbury et al., 2011; Wolak, Finkelhor, & Mitchell, 2012). Interestingly, text messages alone are not considered pornography; rather the image must be present in the message to meet the legal criteria. Even with the potential risks, why young people are participating in such behavior remains unclear.

Contemporary youth have grown up in a digital age. Data from a recent Pew Internet and American Life Project indicate that approximately 75% of youth ages 12 to 17 have their own cell phones, and at least 93% have Internet access (Lenhart, 2009). Not only does this population have considerable access to cell phones and Internet social networking sites (SNS) (e.g., Facebook, Flickr®, blogs), but...
they are also very savvy in finding ways to communicate with their peers.

PREVALENCE

Sexting has been considered to be a globalized social phenomenon, and although the media have given much attention to sexting behaviors among youth in recent years, the actual prevalence remains unknown (Agustina & Gómez-Durán, 2012). Little is known about this phenomenon, in part, due to youth taking advantage of the rapid developments in technological advances to communicate with each other, making it difficult to study (Katzman, 2010).

Obvious concerns about the risks and consequences of such behaviors have resulted in a number of studies being conducted among our youth (Table 1). Lounsbury et al. (2011) are quick to point out that research findings have been inconsistent and unreliable, which in turn have been distorted by the media. Furthermore, studies could potentially be biased by the nature of the population (adolescents and social desirability), the instruments (asking different questions), and the data collection methods (Internet surveys). Thus, the public may be ill informed about a behavior, which is problematic but not normative, or as extensive as it has been portrayed by the media (Mitchell, Finkelhor, Jones, & Wolak, 2012). For this discussion, youth are considered to be tweens, teens, or adolescents ages 10 to 17.

ADOLESCENT DEVELOPMENT AND MEDIA USE

Research on adolescent developmental behaviors suggests that youth have always found ways to explore their sexual identities (Katzman, 2010).

### TABLE 1

<table>
<thead>
<tr>
<th>Study Behavior</th>
<th>Sample/Setting</th>
<th>Findings</th>
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| Sent or received nude images or messages (Knowledge Networks, 2009) | 1,247 youth ages 14 to 24; online panel recruited by telephone/mail | • 33% senders ages 18 to 24  
• 24% senders ages 14 to 17  
• 29% overall received messages  
• 17% overall forwarded messages to others  
• Girls more likely to produce images (13% versus 9% boys)  
• Boys more likely to receive images (14% versus 9% girls) |
| Sent sexually suggestive or nude photos (Cox Communications, 2009) | 655 teens ages 13 to 18; Internet survey | • 19% engaged in sexting  
• 12% girls sent messages  
• 6% boys sent messages |
| Sent or received sexually suggestive or nude photos (Dake, Price, Maziarz, & Ward, 2012) | 1,289 teens ages 12 to 18; in-school questionnaires | • More common in ethnic minorities and older teens  
• 17% overall  
• 3% to 22% ages 12 to 15  
• 22% to 28% ages 16 to 18 |
| Sent sexually suggestive or nude photos (Ferguson, 2011) | 207 Hispanic girls ages 16 to 25; in-school survey | • 20.5% sent messages |
| Sent suggestively nude or nearly nude images (Lenhart, 2009) | 800 teens ages 12 to 17; Internet survey | • 4% sent messages  
• 15% received messages |
| Received sexually suggestive or nude photos (Mitchell, Finkelhor, Jones, & Wolak, 2012) | 1,580 adolescents ages 10 to 17 who use the Internet; phone survey | • 7% boys and girls received messages |
| Sent or posted nude or semi-nude photos or videos (National Campaign to Prevent Teen and Unplanned Pregnancy & CosmoGirl.com, 2008) | 653 teens ages 13 to 19; Internet survey | • 22% teen girls sent messages  
• 18% teen boys sent messages  
• 11% young teen girls (ages 13 to 16) sent/posted messages |
| Sexted or received sexually explicit cell phone messages (Rice et al., 2012) | 1,839 high school students; in-school questionnaires | • 15% sent/received messages |
| Sent sexually suggestive or nude photos (Strassberg, McKinnon, Sustaíta, & Rullo, 2013) | 606 high school students; in-school questionnaires | • 18.3% boys sent messages  
• 17.3% girls sent messages |
Chalfen (2009) had an interesting approach to understanding the adolescent sexting phenomenon. In addition to home and school environments, Chalfen claimed that components of four other cultures impact youth daily. These include: media culture (media makers), techno culture (camera users), intense visual culture (looking good), and the adolescent culture (identity seekers and sexual awakening). Although each of these cultural components plays a part in the choice to participate in or refrain from this behavior, this discussion needs to address the influence of adolescent development. For instance, Erikson’s (1968) adolescent stage of psychosocial development focuses on identity formation. In searching for one’s identity, the adolescent explores his or her independence and seeks sexual and self-identity. Peer relationships are extremely important at this time. This exploration can result in privacy seeking, rebelliousness, curiosity, sexual awakening, invincibility, and a “living in the moment” attitude (Chalfen, 2009). Sexting allows for exploration and fairly private social interactions within a technological comfortable environment.

INFLUENCES OF TECHNOLOGY AND THE MEDIA

A snapshot of American teens gives an expected picture of their media use. Contemporary youth spend more time using media, up from 7 hours and 29 minutes in 1999 to 10 hours and 45 minutes in 2009, largely due to new technology and multitasking with multiple media sources simultaneously (Stewart & Kaye, 2012). In addition to television and music, teens are spending a great deal of time using what has been called digital media. Not only are they surfing the Internet, but also they are accessing video media (e.g., YouTube®), posting and reading on SNS, and using their cell phones.

Social Media

Once teens have access to the Internet, they quickly discover and become active on SNS, such as Facebook and MySpace®. The results of the 2009 Teen Online and Wireless Safety Survey (Cox Communications, 2009) indicated that teens spend considerable time (26.8 hours) weekly on the Internet, e-mailing, researching, playing games, and accessing SNS. Although they are aware of the safety risks, the survey results also indicate that 75% of the respondents had a profile and many have posted content and images, some of a personal nature (e.g., youth in provocative clothing, mimicking sexual acts, posing partially nude). Youth are also more likely to find answers to questions they may have regarding topics such as sex on the Internet, blogging sites, or SNS, not realizing that such information may be far from credible.

Video Media

Teens are connecting with each other via Skype®, FaceTime®, and other videochat sites, but they tend to use YouTube to learn how to do things from other strangers (Harris, 2011). Interactive videochat media can put teens at the same risks as texting, as still pictures can be taken, saved, and distributed to others without their knowledge or permission.

Cell Phones and Applications

In addition to the potential risks of sexting on a phone, teens are also accessing the Internet via their phones, perhaps without parental knowledge. A fairly new mobile application (“app”), Snapchat (http://www.snapchat.com), available for most cell phones, allows the user to take images and short videos that will disappear after a user-determined number of seconds (up to 10) (Gross, 2013). This app has become very appealing for users (mostly teens and 20-somethings) for sending “naughty” pictures that are unfiltered and will immediately disappear. Users have become less concerned about the permanency of any images sent to others because of the temporary nature of the pictures. However, there are concerns that a security flaw has allowed the users to retrieve images that have been previously created (Gross, 2013).

SEXTING RISKS AND CONSEQUENCES

Several developmental factors place adolescents in danger for taking part in risky behaviors (Harris, 2011). Although a number of influences impact adolescent behavior, peers and the media are likely the most significant influences. It is also likely that many youth do not perceive sexting as being much of a “big deal” because they are unaware of many of the potential risks and consequences (Lenhart, 2009). Sexting behaviors have been associated with a number of psychosocial and mental health issues. For example, in addition to sexual risks and substance abuse, sexting may be associated with depression, contemplation of/attempted suicide, or a victimization of physical abuse or cyberbullying (Dake et al., 2012).
Mattey and Diliberto (2013) referred to sexting as a gateway drug to risky sexual behavior in this population, one which can take place in a safe and private environment. Similarly, Rice et al. (2012) determined that sexting appeared to be part of a cluster of sexual risk-taking behaviors in the adolescents they studied. This premise has been supported by researchers who found a relationship between sexting and high-risk sexual behaviors (e.g., oral and anal sexual acts, multiple partners, unprotected...
TABLE 2 (CONTINUED)

IMPLICATIONS FOR PRACTICE, EDUCATION, AND RESEARCH REGARDING SEXTING

<table>
<thead>
<tr>
<th>Parents</th>
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<tr>
<td>• Limit media use (Harris, 2011)</td>
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<td>• Discuss concerns and potential risks (Harris, 2011)</td>
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<tr>
<td>• Use Internet filters for sexual content (Harris, 2011)</td>
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<tr>
<td>• Monitor cell phone minutes and posting on social networking sites (Harris, 2011)</td>
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<tr>
<td>• Be aware of media/music content (Harris, 2011)</td>
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<tr>
<td>• Know who your children are communicating with and set expectations, as needed (National Campaign to Prevent Teen and Unplanned Pregnancy &amp; CosmoGirl.com, 2008)</td>
</tr>
<tr>
<td>• Do not wait for an incident to happen before discussing sexting behavior (National Campaign to Prevent Teen and Unplanned Pregnancy &amp; CosmoGirl.com, 2008)</td>
</tr>
<tr>
<td>• Understand the legal and other risks to children regarding sexting, especially if it involves underage youth (Diliberto &amp; Mattey, 2009)</td>
</tr>
<tr>
<td>• Use sexting as a topic to further discuss sexual risk taking and prevention of sexually transmitted infections and pregnancy (Diliberto &amp; Mattey, 2009; Rice et al., 2012)</td>
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<tr>
<th>Community</th>
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<tr>
<td>• Encourage public health messages regarding sexting and associated risky behaviors (Rice et al., 2012)</td>
</tr>
<tr>
<td>• Consider sexual health messaging programs to target youth (e.g. Sexinfo, Hookup) (Rice et al., 2012)</td>
</tr>
<tr>
<td>• Encourage school systems to develop policies and procedures to deal with the prevention and consequences of sexting behavior</td>
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</table>

intercourse) (Benotsch et al., 2013; Dake et al., 2012).

Substance Use

In their 2012 study with 1,298 middle and high school students, Dake et al. found that sexting was associated with substance use activities (i.e., alcohol, cigarettes, and marijuana). Researchers in a similar study found similar relationships with substances such as cocaine, ecstasy, and other recreational drugs (Benotsch et al., 2013). Whether sexting naturally occurs as a progressive behavior of sexual risk taking or is the result of substance use is only speculative at this time. Regardless, the fact that such behaviors bear some potential relationship is disconcerting.

Harassment and Cyberbullying

Cyberbullying is the intentional harassment of an individual through electronic forms of contact (Srinivas, White, & Omar, 2011). This type of bullying can be anonymous, intense, repetitive, can occur from a distance, and can result in the dissemination of the episode becoming public knowledge. The effects of cyberbullying can range from anxiety to severe emotional distress and even suicide. The results of the 2009 Teen Online and Wireless Safety Survey (Cox Communications, 2009) indicated that more than one third of the survey respondents have experienced it, have engaged in it, or know of others who have done either of these. These abusive behaviors could potentially lead to exploitation, severe physical harm, and more serious safety issues. With tight parental controls, cyberbullying can be averted, yet continued support of parents, community, and the health care community are needed to minimize the effects of this serious problem.

Attachment Issues

Relationship attachments and the impact of sexting on romantic relationships have been studied. Although the research was completed on older teens and young adults (ages 18 to 36), researchers have uncovered some concerns, which may soon apply to the younger youth. Drouin and Landgraff (2012) studied how texting and sexting were related to attachments in committed romantic relationships. They found that texting was more common in secure relationships, whereas sexting was found to be more prevalent with insecure attachments (Drouin & Landgraff, 2012). The researchers suggested that this population may keep intimacy at a distance in an effort to avoid attachment. They further speculated that sexting may be a form of casual sex and question whether this behavior can lead to additional risk-taking sexual behaviors void of attachment.

Internet Addiction and Depression

The Internet is a great resource for youth to locate educational information and to communicate with others.
Still, the amount of time spent online and “surfing” has been associated with sexting behaviors (Dake et al., 2012). Because of their unrefined ability to self-regulate emotions and vulnerability to peer pressure, youth are more susceptible to risks as they navigate the Internet and SNS. For example, the intensity of this online environment can lead to too much time spent online, and even depression (Dake et al., 2012). Seeking advice from others in this environment can result in high-risk behaviors (O’Keefe & Clark-Pearson, 2011). In addition, relying on advice and support from an online environment can mean that youth may not get the mental health help that they really need.

Shame and Suicide

Participation in this behavior can lead to shame and humiliation (Taylor, 2009) and even to suicide (Diliberto & Mattey, 2009; Inbar, 2009). Not knowing what the receiver will do with images sent to him or her, the sender (usually a girl) may find out later that these sensitive images have been intentionally forwarded to others or even mistakenly sent to unintended individuals. If this act results in humiliation—or worse, with arrests and legal actions—the individual who has sexted may suffer from shame and other potentially significant psychological and mental health consequences. Spotlighted news stories have documented that victims’ shame and embarrassment have resulted in suicide (Inbar, 2009).

Legal Issues

These crimes of technology and poor judgment have caught everyone off guard (youth, parents, schools, health care providers, legal community) and have resulted with arrests and even jail sentences for some. Those youth who believe that they are at risk for serious legal consequences for sexting are less likely to reveal that they have sexted another (Strassberg, McKinnon, Sustaíta, & Rullo, 2013). The three crimes that they may be committing are (a) taking a nude picture of someone legally considered a minor (production of child pornography); (b) sending a sext (distribution of child pornography); and (c) keeping possession of a sext (possession of child pornography) (Chalfen, 2009). These legal issues can be accompanied by shame, humiliation, social isolation, depression, and even suicide for some (Chalfen, 2009; Dake et al., 2012; Jaishankar, 2009).

Currently, there is no quick fix for this serious legal situation. Some states are charging teens with child pornography, whereas others are beginning to pass legislation to decrease the offenses for consensual sexting (Chafen, 2009; Wolak & Finkelhor, 2011). Some believe that the criminalizing of sexting behaviors will not prevent them (Jaishankar, 2009).

IMPLICATIONS

Significant practice, education, and research implications exist for men-

### TABLE 3

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<thead>
<tr>
<th>Resource</th>
<th>URL</th>
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<tbody>
<tr>
<td>American Library Association</td>
<td><a href="http://www.ala.org/offices/oif/foyoungpeople/childrenparents/especiallychildren">http://www.ala.org/offices/oif/foyoungpeople/childrenparents/especiallychildren</a></td>
</tr>
<tr>
<td>American Sexual Health Association</td>
<td><a href="http://www.iwannahknow.org">http://www.iwannahknow.org</a></td>
</tr>
<tr>
<td>Amplify</td>
<td><a href="http://www.amplifyyourvoice.org">http://www.amplifyyourvoice.org</a></td>
</tr>
<tr>
<td>Centers for Disease Control and Prevention</td>
<td><a href="http://www.cdc.gov/Features/DatingViolence">http://www.cdc.gov/Features/DatingViolence</a></td>
</tr>
<tr>
<td>Common Sense Media</td>
<td><a href="http://www.commonsensemedia.org/advice-for-parents/talking-about-sexting">http://www.commonsensemedia.org/advice-for-parents/talking-about-sexting</a></td>
</tr>
<tr>
<td>CyberTipline*</td>
<td><a href="http://www.cybertipline.com">http://www.cybertipline.com</a></td>
</tr>
<tr>
<td>The National Campaign to Prevent Teen and Unplanned Pregnancy</td>
<td><a href="http://www.thenationalcampaign.org">http://www.thenationalcampaign.org</a></td>
</tr>
<tr>
<td>National Center for Missing and Exploited Children</td>
<td><a href="http://www.ncmec.org">http://www.ncmec.org</a></td>
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<tr>
<td>Netsmartz® Workshop</td>
<td><a href="http://www.netsmartz.org">http://www.netsmartz.org</a></td>
</tr>
<tr>
<td>OnGuardOnline.gov</td>
<td><a href="http://www.onguardonline.gov/articles/0012-kids-and-socializing-online">http://www.onguardonline.gov/articles/0012-kids-and-socializing-online</a></td>
</tr>
<tr>
<td>Sex, Etc.</td>
<td><a href="http://www.sexetc.org">http://www.sexetc.org</a></td>
</tr>
<tr>
<td>That’s Not Cool</td>
<td><a href="http://www.thatsonotcool.com">http://www.thatsonotcool.com</a></td>
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</table>

Adapted from Brown, Keller, and Stern (2009) and Fantasia and Fontenot (2011).
tual health and school nurses and other care providers who have contact with youth. Because of the global nature of this problem, there are also important implications for parents and communities and the youth themselves (Table 2). Perhaps the most important advice that can be given to our youth is a message from the 2008 National Campaign to Prevent Teen and Unplanned Pregnancy and CosmoGirl.com Sex and Tech Survey:

Five things to think about before pressing “send”.... Don’t assume anything you send or post is going to remain private.... There is no changing your mind in cyberspace—anything you send or post will never truly go away.... Don’t give in to the pressure to do something that makes you uncomfortable, even in cyberspace.... Consider the recipient’s reaction.... Nothing is truly anonymous. (p. 2)

It is imperative that nurses and care providers have current knowledge about technology developments in social media and other media trends being used by youth so they know appropriate questions to ask during assessment (Hua, 2012). Understanding that sexting behavior can possibly lead to other consequences and risky behaviors, nurses should be prepared to have conversations regarding sexual risks and behaviors, a subject that may be uncomfortable for young people (Table 3). Psychiatric-mental health nurses have special expertise in assessing emotional distress, co-occurring mental illness, or co-occurring substance abuse. Additionally, mental health professionals need to consider such things as the youth’s motivation for sexting, the developmental stage and associated behaviors, and past emotional or psychiatric problems, and be prepared to plan for appropriate interventions or referrals, as necessary (Hua, 2012). Regardless of the prevalence of this problem, it is real and is associated with risky behaviors and potentially serious consequences. Mental health providers have a central role in the recognition and management of this potentially serious problem for youth.

KEYPOINTS

1. Sexting includes the sending, receiving, or forwarding of nude or partially nude images via cell phone.

2. The true prevalence of this serious behavior among youth is unknown.

3. Although this behavior poses mental health and potentially legal risks to youth, there is a lack of recognition of these consequences in this population.

4. Significant practice and educational implications exist for mental health nurses working with youth.

Do you agree with this article? Disagree? Have a comment or questions? Send an e-mail to the Journal at jpn@healio.com.

SUMMARY
Today’s adolescents are multitaskers—social, exploring, and technologically savvy. They choose to interact with their peers and desire to be socially accepted by them. Youth do not always consider the risks and consequences of their behaviors and in fact may not even be aware what their poor choices can lead to (i.e., being arrested as a child pornographer). Although much of the current focus on Sexting behaviors concerns the legal and social issues of minors, research findings have shown that all youth are at risk for serious health-jeopardizing behaviors (e.g., substance use, consequences of their behaviors and in fact may not even be aware what their poor choices can lead to (i.e., being arrested as a child pornographer). Criminalizing will not lead to the prevention of this behavior; prevention is the responsibility of youth, their parents, and to some extent, the community. Through assessment, education, and evidence-based interventions, nurses can assume a central role in the achievement of this goal.

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sociation with other high-risk sexual behaviors. Psychiatric Quarterly, 82, 239-243. doi:10.1007/s1126-010-9165-8


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