



# PewResearchCenter

# **Teens and Sexting**

How and why minor teens are sending sexually suggestive nude or nearly nude images via text messaging

## December 15, 2009

Amanda Lenhart, Senior Research Specialist

**Pew Internet & American Life Project** An initiative of the Pew Research Center 1615 L St., NW – Suite 700 Washington, D.C. 20036 202-419-4500 | pewinternet.org



This publication is part of a Pew Research Center report series that looks at the values, attitudes and experiences of America's next generation: the Millennials. Find out how today's teens and twentysomethings are reshaping the nation at www.pewresearch.org/millennials.

### **Overview**

In a nationally representative survey of those ages 12-17 conducted on landline and cell phones, the Pew Research Center's Internet & American Life Project found:

- 4% of cell-owning teens ages 12-17 say they have sent sexually suggestive nude or nearly nude images of themselves to someone else via text messaging
- 15% of cell-owning teens ages 12-17 say they have received sexually suggestive nude or nearly nude images of someone they know via text messaging on their cell phone.
- Older teens are much more likely to send and receive these images; 8% of 17-year-olds with cell phones have sent a sexually provocative image by text and 30% have received a nude or nearly nude image on their phone.
- The teens who pay their own phone bills are more likely to send "sexts": 17% of teens who pay for all of the costs associated with their cell phones send sexually suggestive images via text; just 3% of teens who do not pay for, or only pay for a portion of the cost of the cell phone send these images.
- Our focus groups revealed that there are three main scenarios for sexting: 1) exchange of images solely between two romantic partners; 2) exchanges between partners that are shared with others outside the relationship and 3) exchanges between people who are not yet in a relationship, but where at least one person hopes to be.

# Introduction: Cell phones are more and more a part of teen life

Since the Pew Research Center's Internet & American Life Project first started tracking teen cell phone use, the age at which American teens acquire their first cell phone has consistently grown younger. In Pew Internet's 2004 survey of teens, 18% of teens age 12 owned a cell phone. In 2009, 58% of 12 year-olds own a cell phone. We also have found that cell phone ownership increases dramatically with age: 83% of teens age 17 now own a cell phone, up from 64% in 2004.

At the same time the level of adoption has been growing, the capacity of these cell phones has also changed dramatically. Many teens now use their phones not just for calling, but also to access the internet and to take and share photos and videos. In our survey of 800 youth ages 12-17 conducted from June 26 to September 24, we found that 75% of all teens those ages own a cell phone and 66% of teens use text messaging.

Texting has become a centerpiece in teen social life, and parents, educators and advocates have grown increasingly concerned about the role of cell phones in the sexual lives of teens and young adults. In particular, over the past year, press coverage and policy discussions have focused on how

teens are using or misusing cell phones as part of their sexual interactions and explorations. The greatest amount of concern has focused on "sexting" or the creating, sharing and forwarding of sexually suggestive nude or nearly nude images by minor teens.

Both laws and law enforcement practices around sexting are emerging to deal with the issue and they vary significantly from jurisdiction to jurisdiction. Some law enforcement officers and district attorneys have begun prosecuting teens who created and shared such images under laws generally reserved for producers and distributors of child pornography.

An incident in Pennsylvania that unfolded earlier this year highlighted the conflict between those committed to strictly enforcing the law and those who believe that such enforcement is a heavy-handed response to social problem best handled outside of the legal system in a way that treats minors as a special case (as in other parts of the justice system). In Pennsylvania, a local district attorney threatened to charge 17 students who were either pictured in images or found with "provocative" images on their cell phones with prosecution under child pornography laws unless they agreed to participate in a five-week after school program and probation. The parents of two of the girls countersued the DA with the assistance of the American Civil Liberties Union, who argued that the images did not constitute pornography and that the girls could not be charged as they did not consent to the distribution of the images that pictured them.<sup>1</sup> Similar incidents occurred in Massa-chusetts, <sup>2</sup> Ohio,<sup>3</sup> and several other states. One notable incident in Florida left 18-year-old Philip Alpert listed as registered sex offender for the next 25 years after he was convicted of sending nude images of his 16-year-old girlfriend to family and friends after an argument.<sup>4</sup> Teens are being charged with everything from "disorderly conduct" and "illegal use of a minor in nudity-oriented material" to felony "sexual abuse of children..., criminal [use] of a communications facility, or open lewdness."

Legislatures in a handful of states are stepping in to consider making laws that downgrade the charges for creating or trading sexually suggestive images of minors by text from felonies to misdemeanors. In 2009, the Vermont<sup>5</sup> and Utah<sup>6</sup> state legislatures downgraded the penalties for minors and first-time perpetrators of "sexting." Ohio has legislation pending to criminalize, at a milder level, sexting between minors.<sup>7</sup>

4 Deborah Feyerick and Sheila Steffen, "'Sexting' lands teen on sex offender list." 9 April 2009. CNN. http://www.cnn. com/2009/CRIME/04/07/sexting.busts/index.html

7 Bill Analysis, Legislative Service Commission, S.B. 103, 128th Ohio General Assembly (As Introduced). http://www.legislature.state.oh.us/analysis.cfm?ID=128\_SB\_103&ACT=As%20Introduced&hf=analyses128/s0103-i-128.htm

<sup>1 &</sup>quot;Sexting Girls Facing Porn Charge Sue D.A." 27 March 2009, CBS.com. http://www.cbsnews.com/stories/2009/03/27/early-show/main4896577.shtml

<sup>2</sup> Ibid.

<sup>3 &</sup>quot;Teens Face Child Porn Charge In Sexting Incident." Posted 7 April 2009, Updated 8 April 2009. WLWT.com. http://www.wlwt. com/news/19120685/detail.html

<sup>5</sup> House Proposal of Amendment/As Passed by House 2009. S.125. The State of Vermont Legislature. http://www.leg.state. vt.us/docs/2010/bills/House/S-125.pdf

<sup>6</sup> Title 76 Utah Criminal Code. Chapter 10 Offenses Against Public Health, Safety, Welfare, and Morals, Section 1204 Distributing pornographic material -- Penalties -- Exemptions for Internet service providers and hosting companies. http://www.le.utah.gov/UtahCode/getCodeSection?code=76-10-1204; Section 1206 Dealing in material harmful to a minor -- Penalties -- Exemptions for Internet service providers and hosting companies. http://www.le.utah.gov/UtahCode/getCodeSection?code=76-10-1206

In December 2008, The National Campaign to Prevent Teen and Unplanned Pregnancy and their research partners released a study called "Sex and Tech" that examined the role of technology in the sex lives of teens and young adults. In addition to the National Campaign's online survey, Cox Communications, partnered with National Center for Missing and Exploited Children and Harris Interactive, and MTV in partnership with the Associated Press have also released findings from online surveys on the topic. In the National Campaign study, 19% of teens ages 13-19 who participated in the survey said they had sent a sexually suggestive picture or video of themselves to someone via email, cell phone or by another mode, and 31% had received a nude or semi-nude picture from someone else. In the Cox study done in March 2009, 9% of teens ages 13-18 had sent a sexually suggestive text message or email with nude or nearly-nude photos, 3% had forwarded one, and 17% had received a sexually suggestive text message or email with nude or nearly nude photos.<sup>8</sup> The MTV-AP poll conducted in September reports that 1 in 10 young adults between the ages of 14 and 24 have shared a naked image of themselves. Another 8% of young adults have had someone send them naked pictures or videos of themselves. Another 8% of young adults have had someone send them naked images of someone else they know personally.<sup>9</sup>

## The Pew Internet Project's study

In our nationally-representative telephone survey conducted from June to September we asked teens whether they had sent or received sexually suggestive nude or nearly nude photos or videos of themselves or of someone they knew on their cell phones. Partnering with the University of Michigan, in October we conducted a series of focus groups with teens ages 12-18 and during those groups, teens took a private paper survey in which they wrote about their experiences with sexting.

These questions focus on the sending and receiving of images via cell phone, and do not address suggestive text messages without visual content or those shared by other means (such as email or online social networks). We chose this strategy because the policy community and advocates are primarily concerned with the legality of sharing images and because the mobile phone is increasingly the locus of teens' personal, and seemingly private communication.

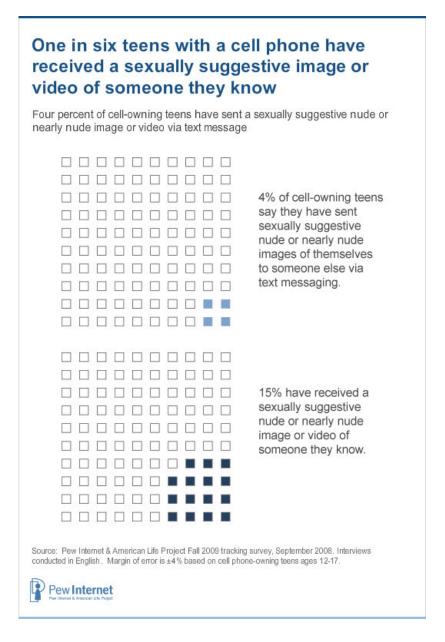
The Pew Internet survey data shows that 4% of all cell-owning teens ages 12-17 report sending a sexually suggestive nude or nearly-nude photo or video of themselves to someone else.<sup>10</sup> The data reveals no difference in this practice related to gender: Girls and boys are equally as likely to have sent a suggestive picture to another person. The oldest teens in our sample – those aged 17 – are the most likely to report having sent a sexually suggestive image via text with 8% of 17-year-olds having sent one, compared to 4% of those age 12. But otherwise, there is little variation across age groups in the likelihood of having sent a sexual image by text. Teens who paid for all of the costs

<sup>8</sup> Cox Communications Teen Online & Wireless Safety Survey, in Partnership with the National Center for Missing & Exploited Children® (NCMEC) and John Walsh. May 2009. http://www.cox.com/takecharge/safe\_teens\_2009/media/2009\_teen\_survey\_internet\_and\_wireless\_safety.pdf

<sup>9</sup> MTV-AP Digital Abuse Study, Executive Summary. AThinLine.org. http://www.athinline.org/MTV-AP\_Digital\_Abuse\_Study\_Executive\_Summary.pdf

<sup>10</sup> Note: sexting is a topic with a relatively high level of social disapproval. This raises the possibility that any time any researcher asks questions about the subject that respondents will not admit to engaging in the socially subject behavior, which may result in findings that underreport the actual incidence of a behavior. And while focus groups are not representative samples, the number of teens in our focus groups who were able to talk about these experiences suggests that this may be the case.

associated with their cell phone were more likely to report sending sexual images of themselves by text, with 17% of these teens sending sexually suggestive texts compared to just 3% of teens who did not pay for or only paid for a portion of the cost of their cell phone. Overall, 70% of teens have a cell phone that someone else, usually a parent, pays for, 19% pay part of the costs and 10% pay all of the costs of their cell phone.



When it comes to receiving images, 15% of those ages 12-17 have received a sexually suggestive nude or nearly nude photo or video of someone they know on their cell phone. Older teens ages 14-17 are more likely than younger teens to report receiving such images or videos: 18% of older teens have received an image versus 6% of teens ages 12-13 who have received such content. The data show a steady increase in likelihood of receipt of sexually suggestive images via text by age, with just 4% of 12-year-olds receiving these images or videos compared to 20% of 16-year-olds and 30%

of 17-year-olds. There are no statistically significant differences in reports of receipt of these images by gender.

There are some indications that teens who send and receive suggestive images via text message are likely to be those whose phones are more central to their lives than less intense cell phone users. For instance, teens who send any type of text message are more likely than teens who do not text to say they have received a sexually suggestive image on their cell phone, with 16% of texters receiving these images compared to 7% of teens who do not use text messaging. Teens with unlimited text messaging plans – 75% of teens with cell phones -- are also more likely to report receiving sexually suggestive texts with 18% of teens with unlimited plans receiving nude or nearly nude images or video via their phones, compared to 8% of those with limited plans and 4% of those who pay per message.

Teens who receive sexually suggestive images on their cell phones are more likely to say that they use the phone to entertain themselves when bored; 80% of sexting recipients say they use their phones to combat boredom, while 67% of teens who have not received suggestive images on their phone say the same. Teens who have received these images are also less likely to say that they turn off their phones when it is not otherwise required – 68% of receiving teens say they generally do not turn off their phones when they do not have to, and 46% of teens who have not received suggestive images by text report the same "always on" behavior.

## **Three Basic Sexting Scenarios**

Teens in our focus groups outlined three general scenarios in which sexually suggestive images are shared or forwarded. In one situation, images are shared between two romantic partners, in lieu of, as a prelude to, or as a part of sexual activity.

"[I've sexted] a few times," wrote one 9th/10th grade boy. "Just between my girlfriend and I. Just my girlfriend sending pictures of herself to me and me sending pictures of myself to her."

"Yeah, I've sent them to my boyfriend," said a 9th/10th grade girl. "Everybody does it."

An 11th/12th grade girl talked about sexting as part of an experimental phase for teens who are not yet sexually active.

"I think it was more common in middle school, because kids are afraid to do face-toface contact sexually. In high school, kids don't need the pictures. They'll just hang out with that person romantically."

For other teens, sexting is one part of a sexual relationship.

"Yes, I do. I only do it with my girlfriend b/c we have already been sexually active with each other," wrote one older high school age boy. "It's not really a big deal."

However, these images sent between romantic partners can easily be forwarded (with or without the subject's knowledge) to friends or classmates and beyond.

"This girl sent pictures to her boyfriend," wrote one older high school boy. "Then they broke up and he sent them to his friend, who sent them to like everyone in my school. Then she was supposed to come to my school because she got kicked out of her school because it was a Catholic school....it ruined high school for her."

A middle school boy wrote, "Yeah, [I get sexts] once a year, [from] people who have girlfriends...usually the sender had it sent from his girlfriend and sent it to every-one...it's no big deal and it doesn't happen very often."

Another high school girl explained, "I've heard of people getting these types of pictures and usually its someone's girlfriend but the people that receive them aren't even the person that they are dating – they are sent to like ten other guys, for example, like the guy's friends with something saying 'I can't believe she did this."

Another younger high school-aged girl wrote, "Yeah, it happens a lot, my friends do it all the time, it's not a big deal. Sometimes people will get into fights with their exs, and so they will send the nudes as blackmail, but it's usually when or after you've been dating someone."

But other images are sent between friends, or between two people where at least one of the pair is hoping to become romantically involved.

"If a guy wants to hookup with you, he'll send a pictures of his private parts or a naked picture of him[self]. It happens about 10 times a month," explained one older high school girl. "It's mostly the guys I date or just a guy that...really wants to hook up with you. I'm not really that type of person [who sends sexts], but I have friends who have."

"Almost all the time it's a single girl sending to a single guy," wrote a younger high school boy. "Sometimes people trade pictures like 'hey you send me a pic I'll send you one."

Another younger high school boy wrote, "Yes I have received some pics that include nudity. Girls will send them sometimes, not often. I don't know why they think it's a good idea but I'm not going to stop it. Sometimes a guy will get one and forward it to all his friends."

One middle school boy wrote, "I have not received or sent, but have asked. It's mostly people I know – I've only asked once."

And another middle school boy wrote, "Well one time this crazy girl who had liked me sent me a nude picture of her for no reason. This was the only time. It was someone I knew for a while but we began to not be friends. [Sending the images was] over the line because they were graphic and completely uncalled for." Sexually suggestive images sent to the privacy of the phone have become a form of relationship currency. One senior girl reflected:

"When I was about 14-15 years old, I received/sent these types of pictures. Boys usually ask for them or start that type of conversation. My boyfriend, or someone I really liked asked for them. And I felt like if I didn't do it, they wouldn't continue to talk to me. At the time, it was no big deal. But now looking back it was definitely inappropriate and over the line."

Another older high school girl wrote about the pressure on girls to share such images:

"I haven't, but most of the girls who have are usually pressured by a guy that they like or want to like them, or their boyfriends. It's probably more common than what it seems because most people who get involved in this were probably pressured by someone to do it."

It is important to note that many teens have not sent or received or had sexually suggestive images forwarded to them.

"Um, no...things like that [are] never sent to my phone. And no, I've never done it," wrote one middle school girl.

Another older high school girl wrote, "No, I haven't ever sent or received a picture or video on my phone that involves nudity."

A younger high school boy explained his take on sexting: "I don't do that and I don't ask girls – [it's] not right and they wont like [you] as much – they will think of you as a pervert. So I don't."

## **Attitudes towards sexting**

In the focus groups, we found that teens' attitudes towards sexting vary widely, from those who do not think it is a major issue to others who think it is inappropriate, "slutty," potentially damaging or illegal. On one end of the spectrum are the teens who view sexting as a safer alternative to real life sexual activity.

"No, [it's not a big deal] we are not having sex, we are sexting," wrote one 9th/10th grade boy. "It's not against my religion or anything."

Another younger high school boy added: "Most people are too shy to have sex. Sexting is not as bad."

Another high school boy wrote "I know people think [sexting] is dangerous, but to me, it's no big deal because I get them a lot."

Other teens avoid it because of their concerns about legality and the potential for public release of the images.

"I have never sent or received a picture involving nudity because I do know that it is illegal," wrote an older high school girl. She continued, "Also, I think texting [sexually suggestive images] is too risky – a friend could take your phone and see it. That's not something you want to be in public. And at my school you can get in trouble for it."

Some teens brand these images, particularly images of girls, as inappropriate and make judgments about the people who appear in them. One older high school boy wrote,

"This is common only for girls with 'slut' reputations. They do it to attract attention."

A middle school girl had a similar concern: "I've been asked to send naked pics, but I think that's stupid. You can ruin your reputation. Sometimes I wonder how girls can send naked pics to a boy. I think it's gross. They're disrespecting themselves."

Teens make fine distinctions in what is acceptable and what is unacceptable in transmitted images.

"I like classy girls so I don't like [sexts] as much any more – it makes them look slutty," wrote one younger high school boy. "But [it's] not a big deal if [it's] just a topless photo, but when it's the bottom also it's a lot more serious."

Another middle school girl had a different view of the distinction between "slutty" and nude images. When asked if she had sent sexually suggestive nude or nearly nude images of herself to someone else's cell phone she wrote, "NEVER have and never will. I think I've only sent slutty pics but not naked."

When teens in the focus groups were asked how common they believed sexting to be, the answers covered the spectrum, from infrequent to very common.

"Sexting's not common, but it does happen because girls want everyone to know they 'look good,'" wrote one teen.

"I think it's not very common, but people do it"

"[Sexting's] not common at my school, but I do know a handful of *couples* that do this." [Emphasis hers]

Still, some teens believe sexting is quite prevalent. A high school girl wrote:

"I think it's fairly common in my school for people to do this. They see it as a way of flirting that may possibly lead to more for them."

One high school boy wrote that sexting happens a lot "because if someone is going out wit[h] a hot girl and she sends him a message with a picture, then everyone wants to see it."

A younger high school girl wrote, "Yes, [sexting is pretty common] cuz some of my friends do it. [But it's] no big deal I would let my mom see if she wanted."

Another girl in the same focus group wrote, "yeah, it happens a lot, my friends do it all the time, but its not a big deal."

## **Parents' Role**

What is the role of parents here? One younger high school boy told us that he never sends or receives sexually suggestive images via text because "my mom goes through my phone." However, another high school boy described how he password protected images to keep others from viewing them. He told us that he "get(s) text picture messages from girls because they like me. The picture would have nudity, but I put those on security for my phone." On the Pew Internet telephone survey, teens whose parents said they looked at the contents of their child's cell phone were no more or less likely to send or receive nude or nearly nude images on their phones.

One parental intervention that may relate to a lower likelihood of sending of sexually suggestive images was parental restriction of text messaging. Teens who sent sexually suggestive nude or nearly nude images were less likely to have parents who reported limiting the number of texts or other messages the teen could send. Just 9% of teens who sent sexy images by text had parents who restricted the number of texts or other messages they could send; 28% of teens who didn't send these texts had parents who limited their child's texting.

## **Bibliography**

Bill Analysis, Legislative Service Commission, S.B. 103, 128th Ohio General Assembly (As Introduced). http://www.legislature.state.oh.us/analysis.cfm?ID=128\_SB\_103&ACT=As%20Introduced&hf=analyses128/s0103-i-128.htm

Cox Communications Teen Online & Wireless Safety Survey, in Partnership with the National Center for Missing & Exploited Children<sup>®</sup> (NCMEC) and John Walsh. May 2009. http://www.cox.com/takecharge/safe\_ teens\_2009/media/2009\_teen\_survey\_internet\_and\_wireless\_safety.pdf

Deborah Feyerick and Sheila Steffen, "Sexting' lands teen on sex offender list." 9 April 2009. CNN. http://www.cnn.com/2009/CRIME/04/07/sexting.busts/index.html

House Proposal of Amendment/As Passed by House 2009. S.125. The State of Vermont Legislature. http://www.leg.state.vt.us/docs/2010/bills/House/S-125.pdf

MTV-AP Digital Abuse Study, Executive Summary. AThinLine.org. http://www.athinline.org/MTV-AP\_Digital\_Abuse\_Study\_Executive\_Summary.pdf

Prøitz, Lin 2007 'A Play of Visibility. Performances of Gender and Sexuality in Young Women's and Men's Camphone Images' (Paper 2). in The Mobile Phone Turn: A Study of Gender, Sexuality and Subjectivity in Young People's Mobile Phone Practices. Doctoral thesis. Faculty of Humanities, University of Oslo, Unipub AS 2007. http://www.duo.uio.no/sok/work.html?WORKID=86131

"Sexting Girls Facing Porn Charge Sue D.A." 27 March 2009, CBS.com. http://www.cbsnews.com/stories/2009/03/27/earlyshow/main4896577.shtml

"Teens Face Child Porn Charge In Sexting Incident." Posted 7 April 2009, Updated 8 April 2009. WLWT.com. http://www.wlwt.com/news/19120685/detail.html

Title 76 Utah Criminal Code. Chapter 10 Offenses Against Public Health, Safety, Welfare, and Morals, Section 1204 http://www.le.utah.gov/UtahCode/getCodeSection?code=76-10-1204 and Section 1206 http://www.le.utah.gov/UtahCode/getCodeSection?code=76-10-1206

# Acknowledgements

Thanks to Rich Ling of IT University of Copenhagen and Telenor and Scott Campbell of the University of Michigan, our partners on this project for their hard work and insights. Thanks, too, to Helen Ho, Elliot Panek, Nat Poor and Kathryn Zickuhr and the folks at Resolution Research for their work on the focus groups and graphics in this report.

# About the Pew Research Center's Internet & American Life Project

The Pew Research Center's Internet & American Life Project is one of seven projects that make up the Pew Research Center, a nonpartisan, nonprofit "fact tank" that provides information on the issues, attitudes and trends shaping America and the world. The Project produces reports exploring the impact of the internet on families, communities, work and home, daily life, education, health care, and civic and political life. The Project aims to be an authoritative source on the evolution of the internet through surveys that examine how Americans use the internet and how their activities affect their lives.

The Pew Internet Project takes no positions on policy issues related to the internet or other communications technologies. It does not endorse technologies, industry sectors, companies, nonprofit organizations, or individuals.

## Methodology

This report is based on the findings of a telephone survey on teens' and parents' use of mobile phones and 6 focus groups conducted in 3 U.S. cities in October 2009 with teens between the ages of 12 and 18. The quantitative results in this report are based on data from telephone interviews conducted by Princeton Survey Research International between June 26 and September 24, 2009, among a sample of 800 teens ages 12-17 and a parent or guardian. For results based on the total sample, one can say with 95% confidence that the error attributable to sampling and other random effects is plus or minus 3.8 percentage points for the complete set of weighted data. In addition to sampling error, question wording and practical difficulties in conducting telephone surveys may introduce some error or bias into the findings of opinion polls.

A combination of landline and cellular random digit dial (RDD) samples was used to represent all teens and their parents in the continental United States who have access to either a landline or cellular telephone. Both samples were provided by Survey Sampling International, LLC (SSI) according to PSRAI specifications.

Numbers for the landline sample were selected with probabilities in proportion to their share of listed telephone households from active blocks (area code + exchange + two-digit block number) that contained three or more residential directory listings. The cellular sample was not list-assisted, but was drawn through a systematic sampling from dedicated wireless 100-blocks and shared service 100-blocks with no directory-listed landline numbers.

Interviews were conducted from June 26 to September 24, 2009. As many as 7 attempts were made to contact and interview a parent at every sampled telephone number. After the parent interview, an additional 7 calls were made to interview an eligible teen. Sample was released for interviewing in replicates, which are representative subsamples of the larger sample. Using replicates to control the release of sample ensures that complete call procedures are followed for the entire sample. Calls were staggered over times of day and days of the week to maximize the chance of making contact with potential respondents. Each telephone number received at least one daytime call in an attempt to find someone at home.

Contact procedures were slightly different for the landline and cell samples. For the landline sample, interviewers first determined if the household had any 12 to 17 year-old residents. Households with no teens were screened-out as ineligible. In eligible households, interviewers first conducted a short parent interview with either the father/male guardian or mother/female guardian. The short parent interview asked some basic household demographic questions as well as questions about a particular teen in the household (selected at random if more than one teen lived in the house.)

For the cell phone sample, interviews first made sure that respondents were in a safe place to talk and that they were speaking with an adult. Calls made to minors were screened-out as ineligible. If the person was not in a safe place to talk a callback was scheduled. Interviewers then asked if any 12 to 17 year olds lived in their household. Cases where no teens lived in the household were screened-out as ineligible. If there was an age-eligible teen in the household, the interviewers asked if the person on the cell phone was a parent of the child. Those who were parents went on to complete the parent interview. Those who were not parents were screened-out as ineligible.

For both samples, after the parent interview was complete an interview was completed with the target child. Data was kept only if the child interview was completed.

Weighting is generally used in survey analysis to compensate for patterns of nonresponse that might bias results. The interviewed sample was weighted to match national parameters for both parent and child demographics. The parent demographics used for weighting were: sex; age; education; race; Hispanic origin; and region (U.S. Census definitions). The child demographics used for weighting were gender and age. These parameters came from a special analysis of the Census Bureau's 2008 Annual Social and Economic Supplement (ASEC) that included all households in the continental United States.

Weighting was accomplished using Sample Balancing, a special iterative sample weighting program that simultaneously balances the distributions of all variables using a statistical technique called the Deming Algorithm. Weights were trimmed to prevent individual interviews from having too much influence on the final results. The use of these weights in statistical analysis ensures that the demographic characteristics of the sample closely approximate the demographic characteristics of the national population. Table 1 on the following page compares weighted and unweighted sample distributions to population parameters.

#### Parameter Unweighted Weighted Census Region Northeast 17.8 15.4 17.4 Midwest 21.8 24.6 22.1 South 36.7 36.8 36.9 West 23.7 23.3 23.6 Parent's Sex Male 43.7 36.3 42.4 Female 56.3 63.8 57.6 Parent's Age LT 35 10.0 10.2 11.8 35-39 19.2 16.6 18.8 40-44 26.4 21.3 25.6 45-49 24.8 26.2 25.2 50-54 16.0 13.5 13.1 55+ 6.4 8.1 6.6 Parent's Education Less than HS grad. 7.5 13.1 11.6 HS grad. 34.9 27.6 35.1 Some college 23.2 25.0 23.6 College grad. 29.8 28.8 39.9 Parent's Race/Ethnicity White, not Hispanic 63.6 69.5 65.2 Black, not Hispanic 11.9 14.8 12.3 Hispanic 18.1 10.0 16.1 Other, not Hispanic 6.3 6.4 5.8 Kid's Sex Male 50.9 53.6 51.3 Female 49.1 46.4 48.7 Kid's Age 16.7 16.1 12 14.3 13 16.7 17.0 16.8 14 16.7 15.6 16.6 15 16.7 17.8 16.8 16 16.7 16.3 16.7 17 16.7 19.1 17.0

#### Table 1: Sample Disposition

Table 2 reports the disposition of all sampled callback telephone numbers ever dialed. The response rate estimates the fraction of all eligible respondents in the sample that were ultimately interviewed. At PSRAI it is calculated by taking the product of three component rates:<sup>11</sup>

- Contact rate the proportion of working numbers where a request for interview was made<sup>12</sup>
- Cooperation rate the proportion of contacted numbers where a consent for interview was at least initially obtained, versus those refused
- Completion rate the proportion of initially cooperating and eligible interviews that agreed to the child interview and were completed

Thus the response rate for landline sample was 14 percent and the response rate for the cell sample was 11 percent.

-					
Landline	Cell				
95863	39997	T Total Numbers Dialed			
5185	619	OF Non-residential			
4147	29	OF Computer/Fax			
59	0	OF Cell phone			
39588	14290	OF Other not working			
6206	1145	UH Additional projected not working			
40679	23915	Working numbers			
42.4%	59.8%	Working Rate			
2069	382	UH No Answer / Busy			
7575	5176	UO <sub>NC</sub> Voice Mail			
79	11	UO <sub>NC</sub> Other Non-Contact			
30956	18346	Contacted numbers			
76.1%	76.7%	Contact Rate			
2611	3092	UO <sub>R</sub> Callback			
17958	8644	UO <sub>R</sub> Refusal			
10387	6610	Cooperating numbers			
33.6%	36.0%	Cooperation Rate			
1232	837	IN1 Language Barrier			
	1717	IN1 Child's cell phone			

#### **Table 2: Sample Disposition**

11 PSRAI's disposition codes and reporting are consistent with the American Association for Public Opinion Research standards.

12 PSRAI assumes that 75 percent of cases that result in a constant disposition of "No answer" or "Busy" are actually not working numbers.

8142	3426	IN2 No teen in household
1013	630	Eligible numbers
9.8%	9.5%	Eligibility Rate
260	212	R Parent refused child interview
209	162	R Break-off child or parent
544	256	I Completes
53.7%	40.6%	Completion Rate
13.7%	11.2%	Response Rate

The qualitative data comes from focus groups conducted by the University of Michigan and the Pew Internet & American Life Project. The questions addressed in this report were asked on paper surveys administered during 6 focus groups conducted in 3 cities in October 2009 with teens between the ages of 12 and 18. The groups were single sex – 3 groups with each sex. Two of the groups were with middle schoolers and 4 were with high school-aged students. Every effort was made to secure a diverse group of participants, with a balance of teens from different racial and ethnic backgrounds and socio-economic levels. All teens who participated in the focus groups had a cellular phone. Participants were offered a cash incentive for participation.

Each focus group lasted approximately 90 minutes, and included an individually administered paper questionnaire with additional questions that was completed during the 90 minute session. Recruitment for the focus groups was done by Resolution Research LLC of Denver, Colorado. Focus groups were moderated by Amanda Lenhart of Pew Internet and Scott Campbell of the University of Michigan, usually in teams of two, with one lead moderator and one secondary moderator. University of Michigan graduate students also attended the focus groups.

### Parent/Teen Cell Phone Survey 2009 Final Revised Topline 10/1/09

Data for June 26 – September 24, 2009

Princeton Survey Research Associates International for the Pew Internet & American Life Project

Sample: n= 800 parents of 12-17 year olds (555 parent landline interviews and 245 parent cell phone interviews)

800 teens ages 12-17

Interviewing dates: 06.26.09 - 09.24.09

Margin of error is plus or minus 4 percentage points for results based on total parents [n=800] Margin of error is plus or minus 4 percentage points for results based on total teens [n=800] Margin of error is plus or minus 4 percentage points for results based on teen internet users [n=746] Margin of error is plus or minus 4 percentage points for results based on teen cell phone users [n=625] Margin of error is plus or minus 5 percentage points for results based on teens who text [n=552]

#### K45 Have you ever experienced or done any of the following? (First,) have you ever [INSERT IN ORDER]?

	Items J thru K: Based on teen cell users [N=625]	YES	NO	DON'T KNOW	REFUSED
j.	Sent a sexually suggestive nude or nearly nude photo or video of yourself to someone else using your cell phone	4	95	0	1
k.	Received a sexually suggestive nude or nearly nude photo or video of someone else you know on your cell phone	15	85	0	*