

PewResearchCenter



Berkman

The Berkman Center for Internet & Society
at Harvard University

AUGUST 15, 2013

Where Teens Seek Online Privacy Advice

Teens often rely on themselves and the guidance they get from the websites they use to figure out how to manage their privacy online—but when they do seek advice, they go primarily to peers and parents.

Amanda Lenhart

Senior Researcher, Director of Teens and Technology Initiatives, Pew Internet Project

Mary Madden

Senior Researcher, Pew Internet Project

Sandra Cortesi

Fellow, Director of the Youth and Media Project, Berkman Center for Internet & Society

Urs Gasser

Executive Director, Berkman Center for Internet & Society

Aaron Smith

Senior Researcher, Pew Internet Project

<http://pewinternet.org/Reports/2013/Where-Teens-Seek-Privacy-Advice.aspx>

FOR FURTHER INFORMATION, CONTACT:

Pew Research Center's Internet & American Life Project
1615 L St., N.W., Suite 700
Washington, D.C. 20036

Media Inquiries:
202.419.4500

Summary

Many teens ages 12-17 report that they generally draw on their own wits, observations and knowledge to manage their privacy online and on social media. Focus group interviews with teens show that for their day-to-day privacy management, many teens figure out sharing and settings on their own, either by walking through their choices in the app or platform when they sign up, or through their own searching and use of their preferred platform.

At the same time, a nationally representative survey of teen internet users shows that, at some point, 70% of them have sought outside advice about how to manage some aspect of their privacy online. When they do seek outside help, teens most often turn to friends, parents or other close family members:

- 42% have talked to friends or peers
- 41% have talked to a parent
- 37% have asked a sibling or cousin

Girls are more likely than boys to have asked for help. In addition, those ages 12 and 13 are more likely than older teens to have asked for help and are more likely to have talked with their parents.

The majority of teens who use Facebook set their profile to either fully or partially private—regardless of whether or not they have sought out advice on how to manage their privacy online. However, online privacy advice seekers are more likely to limit what certain friends can see within their own friend networks, while those who have not sought out privacy advice are somewhat more likely to say that all of their friends can see the same things.

This research was undertaken because there is ongoing concern among parents and advocates about how teenagers develop online privacy management skills and where they turn to get advice when they feel they need help. This report is the fourth in a series of reports issued in collaboration with the Berkman Center for Internet & Society at Harvard.

About the Survey

These findings are based on a nationally representative phone survey of 802 parents and their 802 teens ages 12-17. It was conducted between July 26 and September 30, 2012. Interviews were conducted in English and Spanish and on landline and cell phones. The margin of error for the full sample is ± 4.5 percentage points. In collaboration with the Berkman Center for Internet & Society at Harvard, this report also includes insights and quotes gathered through a series of in-person focus group interviews about privacy and digital media, with a focus on social networking sites (in particular Facebook), conducted by the Berkman Center's Youth and Media Project between February and April 2013. The team conducted 24 focus group interviews with a total of 156 participants across the greater Boston area, Los Angeles, Santa Barbara (California), and Greensboro (North Carolina).

Main Findings

American teenagers ages 12 to 17 care about their privacy. Even as youth share increasing amounts of information online (and have information about them shared by others), they also take steps to manage what can be seen and who can access it. This report asks the questions: Who do teens rely on when working their way through the privacy choices that confront them each time they go online? And when they reach a point where they need outside help, where do teens turn for advice about how to manage their privacy online? These questions have great relevance for those who want to understand who or what influences teens as they make choices about what to share and what not to share online.

In order to fully understand how teens are managing their privacy online, this project collected data in two modes – first, through a nationally-representative telephone survey fielded in the summer of 2012, and second, through a series of focus group interviews with adolescents around the country. As our focus groups show, for their day-to-day privacy management, teens generally rely on themselves to figure out the practical aspects of sharing and settings on their own. The bulk of teens are figuring out how to manage their privacy themselves, whether by being walked through their choices by the app or platform when they first sign up, or through search and use of their preferred platform. However, the national survey shows that, at some point, the majority of teens have found themselves in a situation where they needed some outside advice about how to manage their privacy online.

70% of teen internet users have asked for or sought out advice on managing their privacy online. Teens are just as likely to reach out to their friends and peers as they are to reach out to their parents for advice.

When they do seek advice, teens rely on a range of sources for advice about managing their privacy online, with peers and close relatives being—by a substantial margin—the most common sources to which they turn for this type of information. Among teen internet users:

- 42% have asked a **friend or peer** for advice on managing their privacy online
- 41% have asked a **parent**
- 37% have asked a **sibling or cousin**
- 13% have gone to a **website** for advice¹
- 9% have asked a **teacher**
- 3% have gone to some **other** person or resource

In total, some 70% of teen internet users have asked for advice or looked for resources on how to manage their privacy online, with the remaining 30% saying that they have not specifically asked for or sought out this type of advice in the past.²

¹ Note the question wording is as noted in the text; it does not distinguish between using resources on the website where the privacy settings are being managed or resources on a separate site.

² In our 2011 report “Teens, Kindness and Cruelty on Social Network Sites,” we asked teens who had witnessed or experienced cruelty on social media whether they had ever sought advice about how to manage those experiences online. And though the

Overall, younger teens (those ages 12-13) are a bit more likely to seek out privacy management advice from any source than are 14-17 year olds (77% of younger teens have done so, compared with 67% of older teens). In looking at the specific people or sources that teens of different ages turn to for this type of advice, younger teens are especially likely to seek out advice from a parent (58% vs. 33%) and from a teacher (17% vs. 5%) compared with their older peers.

Similarly, girls are a bit more likely than boys to seek out advice on managing their privacy online from any source (75% have done so, compared with 66% of boys), and are also more likely to specifically seek out such advice from siblings or cousins (42% vs. 32%) and from friends or other peers (48% vs. 36%).

Although teens of all racial and socio-economic backgrounds are equally likely to seek out or ask for advice on privacy management generally, white teens and those from high-income and high-education households, are particularly likely to turn to their parents for advice.

questions were asked somewhat differently from the questions on this survey, 36% of teens who had these experiences said they had asked for advice. And when they sought advice about managing online meanness, these teens turned first to friends and peers (53%) and then to parents (36%). For more, read the full report: <http://www.pewinternet.org/Reports/2011/Teens-and-social-media.aspx>

Advice on managing privacy online

% of teen internet users in each group who seek advice on managing privacy online from...

		% who seek advice from any source (including parent)	% who seek advice from parent
All teen internet users (n=778)		70%	41%
Teen Gender			
a	Boys (n=395)	66	39
b	Girls (n=383)	75 ^a	44
Age of Teen			
a	12-13 (n=234)	77 ^b	58 ^b
b	14-17 (n=544)	67	33
Teen Gender and Age			
a	Boys, 12-13 (n=118)	74	57 ^{bd}
b	Boys, 14-17 (n=277)	62	30
c	Girls, 12-13 (n=116)	80 ^b	58 ^{bd}
d	Girls, 14-17 (n=267)	72	37
Parent Race/ethnicity			
a	White, Non-Hispanic (n=535)	70	46 ^{bc}
b	Black, Non-Hispanic (n=115)	61	25
c	Hispanic (n=84)	73	33
Parent Education			
a	Less than High School/High school grad (n=227)	67	33
b	Some College (n=189)	69	45 ^a
c	College + (n=359)	76 ^a	48 ^a
Parent Household Income			
a	Less than \$30,000/yr (n=142)	65	33
b	\$30,000-\$49,999 (n=150)	70	36
c	\$50,000-\$74,999 (n=108)	75	45
d	\$75,000+ (n=332)	72	48 ^{ab}

Source: Pew Internet Teens and Privacy Management Survey, July 26-September 30, 2012. N=802 parents of teens ages 12-17 and 802 teens ages 12-17. Margin of error is +/- 4.6 percentage points for teen internet users.

Note: Columns marked with a superscript letter (^a) or another letter indicate a statistically significant difference between that row and the row designated by that superscript letter. Statistical significance is determined inside the specific section covering each demographic trait.

In focus groups, teens indicate a high level of self-reliance when seeking information on how to manage specific privacy choices and settings online.

While a majority of teens say they have asked someone else for advice about privacy at some point along the way, our focus groups show that in day-to-day use, many teens rely on themselves and the resources provided by the platforms they use.³

Most focus group participants indicate a heavy self-reliance for information about privacy settings on social media, although some seek the advice of others including parents and other adults. They are aware that privacy settings change and it requires some effort to keep up with the changes:

Male (age 13): "The [privacy settings] are straightforward. And I think they [Facebook] change them a lot. And they sort of reset or something. So you just have to constantly, you know, update them."

Most teens in the focus groups reported teaching themselves about privacy settings online. This "self-learning" is accomplished through trial and error, or, on some platforms such as Facebook, through pop-up messages and tutorials. Although there are myriad strategies for learning about privacy settings, the majority of focus group participants rely on themselves for establishing their privacy settings:

Male (age 16): "I found it myself, just under settings, I looked for it."

Others followed the instructions provided for choosing privacy settings when creating their social media account.

Interviewer: "So where or when did you learn about Facebook Account Settings and how to use them? Where and when? What do you think?"

Male (age 16): "Probably when you apply, when you're signing up for it, because there are steps. Step one, you upload your pictures; Step two, you set your settings the way you want them; Step three, you add friends."

Although there are many resources available for young people to learn how to manage a social networking site's privacy settings, the majority of focus group participants cited themselves or the site's Help Page as their primary source of information. Some were very comfortable searching for information about privacy settings online through a search engine like Google, while others said they "just explore" the site. These focus group findings dovetail with the 13% of teens who sought advice from "websites" in the quantitative survey.

³ Note: The quantitative survey question did not offer "myself" as a response option, as the question is about external sources of advice, though a number of youth did volunteer that as a response.

A few focus group participants relied on parents or other adults for information about privacy settings. Some had parents who created their privacy settings for them, while other youth asked their parents for advice:

Female (age 14): "Yeah, my mom's the one who set my privacy for my account."

Female (age 13): "I would ask probably my parents [if I had a question about privacy settings]."

A few, predominately low-income, focus group participants mentioned teachers as a reliable source of advice about privacy on social media:

Male (age 17): "Teachers could tell you like all these true things about Facebook, how to use Facebook, and how to like have your privacy more private and stuff like that. So probably I would ask like an adult that has more experience and stuff like that."

However, when asked a broader question about seeking privacy-related advice, the majority of focus group participants said that if and when they needed it, they would not seek advice from parents, teachers or other adults:

Male (age 18): "Usually I'd just ask a friend. Parents are a no-go... My parents are pretty old school, like, they don't really use the Internet. And teacher wise, I wouldn't really want to ask my teachers. Also, I wouldn't really think that they would know."

Male (age 16): "Parents, they don't know how computers work. My dad does, but he doesn't know how the Internet works.... And teachers, not really. I remember in my old school... We'd had a couple classes about Internet safety, but that was about it. I haven't asked teachers specific questions about it."

One focus group participant captured a primary reason that parents, teachers, and other adults are not seen as a go-to resource for information about Internet privacy:

Female (age 16): "I think parents don't understand that we can apply life skills onto the Internet, whereas it's a little more confusing, maybe, for them, that switch. But because we've grown up with it, we can easily see, OK, stranger in real life, stranger on the computer, same thing."

Friends and, occasionally, siblings were the secondary source for advice about online privacy for some focus group participants:

Female (age 17): "I'll try to figure it out myself or just ask friends."

Female (age 13): "But if it was something that was really, really different, I feel like I would ask that kid at our school who's really smart with technology."

Male (age 13): "Probably one of my friends. I don't really associate my Facebook with my parents or teachers."

Male (age 16): "Friends really help you figure out how to maneuver websites."

Male (age 16): “I either learned it on my own, or the couple of questions I've had about privacy I've asked my sister who's a junior in college right now.”

However, there are some perceived drawbacks for relying on others for advice about online privacy. Some focus group participants feel that parents expect them to just “figure it out,” while others feel that peers don’t care about or don’t understand privacy well enough and that this can affect the quality of their advice:

Female (age 13): “No, because I feel like they [parents] don't really care as much and they would just be like, you should figure it out yourself.”

Female (age 16): “Yeah, I just kind of figured out, like...my friends don't particularly care that much.”

Male (age 17): “Friends can be telling you other things that is not right and not – it cannot be like – friends can tell you a lot of stuff about Facebook that’s not true.”

With some exceptions, teen “online privacy advice seekers” take similar steps to manage and maintain their online social networking profiles compared with teens who have not sought out privacy advice from others.

For the most part, the 70% of teen internet users who are online privacy advice seekers in the survey are quite similar to those who do not seek out this type of information in terms of their behaviors and actions on social networking sites. The two exceptions: the teens who seek advice are more likely than non-seekers to block other people and to delete or deactivate a profile entirely.

Privacy advice and reputation management on social networking sites

% of teen social media users in each group who take the following actions on SNS

	Privacy advice seekers N=444 (a)	Don't seek privacy advice N=188 (b)
Delete people from your network	76	68
Share inside jokes or coded messages	57	61
Delete or edit something you previously posted	60	55
Block people	62 ^b	48
Delete comments others make on your profile	56	46
Untag a picture	48	39
Delete or deactivate an account	34 ^b	22
Post fake information to help protect privacy	27	24

Source: Pew Internet Teens and Privacy Management Survey, July 26-September 30, 2012. N=802 parents of teens ages 12-17 and 802 teens ages 12-17. Margin of error is +/- 5.1 percentage points for results based on teen social media users.

Note: Columns marked with a superscript letter (^a) or another letter indicate a statistically significant difference between that column and the column designated by that superscript letter.

On the other hand, there are no differences between these two groups when it comes to the specific content that they post on their social networking profiles. This is true even for relatively “sensitive” information such as one’s email address, cell phone number, real name, or birth date—teens are equally likely to post this information regardless of whether they have sought out advice from others on how to manage their privacy online.

In terms of the privacy settings on their Facebook profiles, the majority of teens set their profile to either fully or partially private—regardless of whether or not they have sought out advice on how to manage their privacy online. However, online privacy advice seekers are more likely to limit what certain friends can see within their own friend networks, while those who have not sought out privacy advice are a bit more likely to say that all of their friends can see the same content.

Privacy advice and Facebook profile settings

% of teen Facebook users in each group who...

	Privacy advice seekers N=411 (a)	Don't seek privacy advice N=177 (b)
Facebook profile settings		
Public (everyone can see it)	12	19
Partially private	25	24
Private (only friends can see it)	61	56
What friends can see on Facebook profile		
Limit what certain friends can see	21 ^b	11
All friends see the same things	78	89 ^a

Source: Pew Internet Teens and Privacy Management Survey, July 26-September 30, 2012. N=802 parents of teens ages 12-17 and 802 teens ages 12-17. Margin of error is +/- 5.3 percentage points for results based on teen Facebook users.

Note: Columns marked with a superscript letter (^a) or another letter indicate a statistically significant difference between that column and the column designated by that superscript letter.

Survey Questions

Teens and Privacy Management Survey 2012

Final Topline

10/9/2012

Data for July 26–September 30, 2012

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

Sample: n= 802 parents of 12-17 year olds and 802 teens ages 12-17
Interviewing dates: 07.26.2012 – 09.30.2012

Margin of error is plus or minus 4.5 percentage points for results based on total parents [n=802]
Margin of error is plus or minus 4.5 percentage points for results based on total teens [n=802]
Margin of error is plus or minus 4.6 percentage points for results based on total teens [n=781]
Margin of error is plus or minus 4.6 percentage points for results based on teen internet users [n=778]
Margin of error is plus or minus 5.1 percentage points for results based on teen SNS or Twitter users [n=632]
Margin of error is plus or minus 5.3 percentage points for results based on teens with a Facebook account [n=588]
Margin of error is plus or minus 9.4 percentage points for results based on teens with a Twitter account [n=180]

TEEN INTERVIEW

K14 Now thinking specifically about online privacy... Have you ever turned to any of the following people or places for advice about how to manage your privacy online? (First,/Next,) [INSERT ITEM; RANDOMIZE; ITEM f ALWAYS LAST]? [READ IF NECESSARY: Have you ever turned there for advice about how to manage privacy online?]

Based on teen internet users [N=778]

	YES	NO	(VOL.) DOESN'T APPLY	DON'T KNOW	REFUSED
a. A friend or peer	42	58	n/a	*	0
b. Your brother, sister or cousin	37	62	1	1	0
c. Your parent	41	58	n/a	1	0
d. A teacher	9	91	n/a	0	0
e. A website	13	87	n/a	*	0
f. Someone or something else? (SPECIFY)	3	96	n/a	1	*

This question is from a larger survey – more of the survey may be viewed by accessing the PDFs of the Teens, Social Media and Privacy Report:

http://pewinternet.org/~media//Files/Reports/2013/PIP_TeensSocialMediaandPrivacy.pdf. In the fall of 2013, the full survey will be posted to our Data sets page: <http://pewinternet.org/Static-Pages/Data-Tools/Download-Data/Data-Sets.aspx>.

Methods

Focus Groups

In collaboration with the Berkman Center for Internet & Society at Harvard, this report includes quotes gathered through a series of exploratory in-person focus group interviews about privacy and digital media, with a focus on social media sites, conducted by the Berkman Center's Youth and Media Project between February and April 2013. The team conducted 24 focus group interviews with a total of 156 participants across the greater Boston area, Los Angeles, Santa Barbara (California), and Greensboro (North Carolina) beginning in February 2013. Each focus group interview lasted 90 minutes, including a 15-minute questionnaire completed prior to starting the interview, consisting of 20 multiple-choice questions and 1 open-ended response.

Although the research sample was not designed to constitute representative cross-sections of particular population(s), the sample includes participants from diverse ethnic, racial and economic backgrounds. Participants ranged in age from 11 to 19. The mean age of participants is 14.5. Groups of three to eight participants were divided into age cohorts of 11-14, 14-16, and 16-19 for interviews. Females comprised 55% of participants, males 41%, and 4% chose not to reply. Half of the focus group participants (50%) were Hispanic, Latino, or of Spanish origin; 33% were white; 13% were black or African-American; 2% were Asian or Asian-American; 1% were American Indian or Alaskan Native; and 1% self-identified as other. Although we tried to assess participants' socioeconomic status based on self-identification of their parents' highest educational achievement, too many participants indicated uncertainty or no knowledge of this to allow for confidence in this metric. However, as we recruited from schools serving students primarily of lower socio-economic status in Los Angeles and Boston, we estimate that at least half of our sample draws from underserved populations.

In addition, two online focus groups of teenagers ages 12-17 were conducted by the Pew Internet Project from June 20-27th, 2012 to help inform the survey design. The first group was with 11 middle schoolers ages 12-14, and the second group was with 9 high schoolers ages 14-17. Each group was mixed gender, with some racial, socio-economic and regional diversity. The groups were conducted as an asynchronous threaded discussion over three days using the Qualboard platform and the participants were asked to log in twice per day. All references to these findings are referred to as "online focus groups" throughout the report.

2012 Teens and Privacy Management Survey

Prepared by Princeton Survey Research Associates International
for the Pew Research Center's Internet and American Life Project

SUMMARY

The 2012 Teens and Privacy Management Survey sponsored by the Pew Research Center’s Internet and American Life Project obtained telephone interviews with a nationally representative sample of 802 teens aged 12 to 17 years-old and their parents living in the United States. The survey was conducted by Princeton Survey Research Associates International. The interviews were done in English and Spanish by Princeton Data Source, LLC from July 26 to September 30, 2012. Statistical results are weighted to correct known demographic discrepancies. The margin of sampling error for the complete set of weighted data is ± 4.5 percentage points.

Details on the design, execution and analysis of the survey are discussed below.

DESIGN AND DATA COLLECTION PROCEDURES

Sample Design

A combination of landline and cellular random digit dial (RDD) samples was used to represent all teens and their parents in the 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.

Both samples were disproportionately stratified to increase the incidence of African Americans and Latinos. The same stratification scheme was used for both sample frames and was based on the estimated incidence of minority groups at the county level. All counties in the United States were divided into ten strata based on the estimated proportion of African American and Latino populations. Strata with higher minority densities were oversampled relative to strata with lower densities. Phone numbers were drawn with equal probabilities within strata. The disproportionate sample design was accounted for in the weighting.

To supplement the fresh RDD sample, interviews were also completed among a sample of parents who recently participated in the PSRAI Weekly Omnibus survey. Table 1 shows a breakdown of the number of interviews completed by sample segment.

Table 1. Sample Segments

<u>Segment</u>	<u># of ints.</u>
Fresh RDD landline	267
Fresh RDD cell	134
Callback landline	265
Callback cell	136

Contact Procedures

Interviews were conducted from July 26 to September 30, 2012. As many as 7 attempts were made to contact and interview a parent at every sampled landline telephone number and as many as five attempts were made to contact and interview a parent at every sampled cell number. After the parent interview, an additional 10 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 complete an interview.

Contact procedures were slightly different for the landline and cell samples. For the landline samples, 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 samples, 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 all 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 AND ANALYSIS

Weighting is generally used in survey analysis to compensate for patterns of nonresponse and disproportionate sample designs that might bias survey estimates. This sample was weighted in three stages. The first stage of weighting corrected for the disproportionate RDD sample designs. For each stratum the variable WT1 was computed as the ratio of the size of the sample frame in the stratum divided by the amount of sample ordered in the stratum. For the callback samples, the weights from the original surveys was brought in and used as WT1.

The second stage of weighting involved correcting for different probabilities of selection based on respondents' phone use patterns. Respondents who have both a landline and a cell phone have a greater chance of being sampled than respondents with access to only one kind of phone. To correct for this we computed a variable called PUA (Phone Use Adjustment). The PUA was computed using the

following formula where n_1 is the number of respondents having only one kind of phone (landline or cell, but not both) and n_2 is the number of respondents have both a landline and a cell phone.

$$PUA = \frac{2(n_1 + n_2)}{2n_1 + n_2} \text{ if respondent has only one kind of phone}$$

$$PUA = \frac{(n_1 + n_2)}{2n_1 + n_2} \text{ if respondent has both kinds of phone}$$

WT1 and PUA were then multiplied together to use as an input weight (WT2) for post-stratification raking

The interviewed sample was raked to match national parameters for both parent and child demographics. The parent demographics used for weighting were: sex; age; education; race; Hispanic origin; number of 12-17 year olds in household; number of adults in the household; phone use and region (U.S. Census definitions). The child demographics used for weighting were gender and age. The parameters came from a special analysis of the Census Bureau's 2011 Annual Social and Economic Supplement (ASEC) that included all households in the United States. The phone use parameter was derived from recent PSRAI survey data.

Raking 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 2 compares weighted and unweighted sample distributions to population parameters.

Table 2: Sample Demographics

	<u>Parameter</u>	<u>Unweighted</u>	<u>Weighted</u>
<u>Census Region</u>			
Northeast	17.8	13.8	17.1
Midwest	22.2	21.2	21.0
South	36.0	36.9	36.8
West	24.0	28.1	25.1
<u>Parent's Sex</u>			
Male	43.3	35.5	41.2
Female	56.7	64.5	58.8
<u>Parent's Age</u>			
LT 35	10.3	6.5	9.9
35-39	18.1	12.7	17.7
40-44	25.6	21.4	24.6
45-49	24.4	24.2	25.0
50-54	14.6	21.1	15.0
55+	7.1	14.2	7.8
<u>Parent's Education</u>			
Less than HS grad.	12.7	6.4	11.7
HS grad.	33.5	24.2	31.8
Some college	23.3	24.0	24.2
College grad.	30.5	45.4	32.2
<u>Parent's Race/Ethnicity</u>			
White~Hispanic	63.0	68.0	63.3
Black~Hispanic	11.2	15.3	12.0
Hispanic, native born	6.7	4.5	6.4
Hispanic, foreign born	12.5	7.0	11.8
Other~Hispanic	6.5	5.1	6.6
<u>Parent's Phone Use</u>			
Landline only	7.8	6.7	8.0
Dual Users	59.8	78.4	62.4
Cell Phone only	33.1	14.8	29.6
<u># of 12-17 Kids in HH</u>			
One	70.2	64.5	69.0
Two	25.2	27.4	25.9
Three+	4.6	8.1	5.1
<u># of adults in HH</u>			
One	10.5	13.0	11.5
Two	58.6	58.6	57.7
Three+	30.9	28.4	30.8

(Continued...)

Table 2: Sample Demographics (continued)

	<u>Parameter</u>	<u>Unweighted</u>	<u>Weighted</u>
<u>Kid's Sex</u>			
Male	51.3	50.5	51.0
Female	48.7	49.5	49.0
<u>Kid's Age</u>			
12	16.7	14.1	15.6
13	16.7	16.6	17.1
14	16.7	15.6	16.0
15	16.7	16.8	17.3
16	16.7	19.3	17.4
17	16.7	17.6	16.6

Effects of Sample Design on Statistical Inference

Post-data collection statistical adjustments require analysis procedures that reflect departures from simple random sampling. PSRAI calculates the effects of these design features so that an appropriate adjustment can be incorporated into tests of statistical significance when using these data. The so-called "design effect" or *deff* represents the loss in statistical efficiency that results from systematic non-response. The total sample design effect for this survey is 1.69.

PSRAI calculates the composite design effect for a sample of size n , with each case having a weight, w_i as:

$$deff = \frac{n \sum_{i=1}^n w_i^2}{\left(\sum_{i=1}^n w_i \right)^2} \quad \text{formula 1}$$

In a wide range of situations, the adjusted *standard error* of a statistic should be calculated by multiplying the usual formula by the square root of the design effect (\sqrt{deff}). Thus, the formula for computing the 95% confidence interval around a percentage is:

$$\hat{p} \pm \left(\sqrt{deff} \sqrt{\frac{\hat{p}(1-\hat{p})}{n}} \right) \quad \text{formula 2}$$

where \hat{p} is the sample estimate and n is the unweighted number of sample cases in the group being considered.

The survey's *margin of error* is the largest 95% confidence interval for any estimated proportion based on the total sample— the one around 50%. For example, the margin of error for the entire sample is ± 4.5 percentage points. This means that in 95 out every 100 samples drawn using the same methodology, estimated proportions based on the entire sample will be no more than 4.5 percentage points away from their true values in the population. It is important to remember that sampling fluctuations are only one possible source of error in a survey estimate. Other sources, such as respondent selection bias, questionnaire wording and reporting inaccuracy, may contribute additional error of greater or lesser magnitude.

Response Rate

Table 3 reports the disposition of all sampled callback telephone numbers ever dialed. The response rate is calculated according to American Association of Public Opinion Research standards.

Table 3: Sample Disposition

Landline Fresh RDD	Cell Fresh RDD	LL Callback	Cell Callback	
267	134	265	136	I=Completes
17	9	9	10	R=Refusal known to be eligible
11197	14226	501	448	UO _R =Refusal eligibility status unknown
4733	8666	56	63	NC=Non contact known working number
211	108	2	3	O=Other
54721	17757	126	98	OF=Business/computer/not working/child's cell phone
4960	1043	10	1	UHUO _{NC} =Non-contact - unknown household/unknown other
3383	3475	89	101	SO=Screenout
0.31	0.61	0.88	0.89	e1=(I+R+UO _R +NC+O+SO)/(I+R+UO _R +NC+O+SO+OF) - Assumed working rate of non-contacts
0.08	0.04	0.75	0.59	e2=(I+R)/(I+R+SO) - Assumed eligibility of unscreened contacts
16.1%	12.4%	37.7%	30.2%	AAPOR RR3=I/[I+R+[e2*(UOR+NC+O)]+[e1*e2*UHUO_{NC}]]