Questions

Teens and Privacy Management Survey 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

KINTUSE Do you use the internet or email, at least occasionally?

KINTMOB Do you access the internet on a cell phone, tablet or other mobile device, at least occasionally?[1]

	USES INTERNET	DOES NOT USE INTERNET
Current Teens	95	5
July 2011	95	5
Sept 2009[i]	93	7
Feb 2008[ii]	93	7
Nov 2007	94	6
Nov 2006	93	7
Nov 2004	87	13

K2 As I read the following list of items, please tell me if you happen to have each one, or not. Do you have...[INSERT ITEMS IN ORDER]?

	YES	NO	DON'T KNOW	REFUSED

[1] Trend question prior to 2006 was "Do you ever go online to access the Internet or World Wide Web or to send and receive email?" Trend question from Nov 2006 thru Sept 2009 was "Do you use the internet, at least occasionally? / Do you send or receive email, at least occasionally?" Trend question in July 2011 was "Do you use the internet, at least occasionally, for example on either a computer or a cell phone? / Do you send or receive email, at least occasionally?"

a.	A cell phone... or an Android, iPhone or other device that is also a cell phone[2]				
	Current Teens	78	22	0	0
	July 2011	77	23	0	0
	September 2009	75	25	0	0
	February 2008	71	29	0	--
	November 2007	71	29	0	--
	November 2006	63	37	0	--
	November 2004	45	55	0	--
b.	A desktop or laptop computer[3]				
	Current Teens	80	20	0	0
	July 2011	74	26	0	0
	September 2009	69	31	0	0
	February 2008	60	40	0	--
	November 2007	59	41	0	--
	November 2006	79	21	0	--
	November 2004	75	24	1	--
c.	A tablet computer like an iPad, Samsung Galaxy, Motorola Xoom, or Kindle Fire				
	Current Teens	23	77	0	0

K2a_1 Some cell phones are called "smartphones" because of certain features they have. Is your cell phone a smartphone, such as an iPhone or Android, or are you not sure?[4]

Based on teen cell phone owners

CURRENT TEENS		JULY 2011
%		
47	Yes, smartphone	30
49	No, not a smartphone	56
4	Not sure/Don't know	14
0	Refused	0
[n=637]		[n=642]

[2] Prior to 2009, trend wording was "A cell phone". Item wording in September 2009 and July 2011 was: "A cell phone... or a Blackberry, iPhone or other device that is also a cell phone"

[3] In November 2004 and November 2006, "desktop computer" and "laptop computer" were asked as separate items. Results shown here have been recalculated to combine the two items.

[4] July 2011 wording was: "Is that a smartphone or not... or are you not sure?"

K2b_1 Is there a computer that you can use at home?

Based on teens who do not have a computer

	CURRENT TEENS		JULY 2011
%	67	Yes	63
	33	No	37
	0	Don't know	0
	0	Refused	0
	[n=161]		[n=175]

K3 Thinking about the computer you use most often, do your parents, siblings or other members of your family share that computer with you?

Based on teens who have a computer or have access to one [N=764]

	CURRENT TEENS	
%		
	71	Yes
	29	No
	0	Don't know
	0	Refused

Methodology

2012 Teens and Privacy Management Survey

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

October 2012

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

Segment	# of ints.
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 n1 is the number of respondents having only one kind of phone (landline or cell, but not both) and n2 is the number of respondents have both a landline and a cell phone.

$$PUA = \frac{2(n1 + n2)}{2n1 + n2} \quad if\ respondent\ has\ only\ one\ kind\ of\ phone$$

$$PUA = \frac{(n1 + n2)}{2n1 + n2} \quad if\ respondent\ has\ both\ kinds\ of\ phone$$

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

	Parameter	Unweighted	Weighted
Census Region			
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
Parent's Sex			
Male	43.3	35.5	41.2
Female	56.7	64.5	58.8
Parent's Age			
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
Parent's Education			
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
Parent's Race/Ethnicity			
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
Parent's Phone Use			
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
# of 12-17 Kids in HH			
One	70.2	64.5	69.0
Two	25.2	27.4	25.9
Three+	4.6	8.1	5.1
# of adults in HH			
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)

	Parameter	Unweighted	Weighted
Kid's Sex			
Male	51.3	50.5	51.0
Female	48.7	49.5	49.0
Kid's Age			
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:

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

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:

$$\hat{p} \pm \left(\sqrt{deff} \times 1.96 \sqrt{\frac{\hat{p}(1-\hat{p})}{n}}\right) \qquad \textit{formula 2}$$

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*$UHUO_{NC}$]]**

[i] September 2009 trends based on the "Parents and Teens Cell Phone Use Survey" conducted June 26 – September 24, 2009 [n=800 parents of 12-17 year-olds, n=746 internet teens ages 12-17 and 54 offline teens ages 12-17].

[ii] February 2008 trends based on the "Gaming & Civic Engagement Survey of Teens/Parents" conducted November 1, 2007 – February 5, 2008 [n=1,102 parents of 12-17 year-olds, n=1,033 internet teens ages 12-17 and 69 offline teens ages 12-17].