

Pew Internet Pew Internet & American Life Project Pew Research Center

FEBRUARY 24, 2012

Privacy management on social media sites

Most users choose restricted privacy settings while profile "pruning" and unfriending people is on the rise

Mary Madden

Senior Research Specialist, Pew Internet Project

Pew Research Center's Internet & American Life Project 1615 L St., NW - Suite 700 Washington, D.C. 20036 Phone: 202-419-4500

http://pewinternet.org/Reports/2012/Privacy-management-on-social-media.aspx

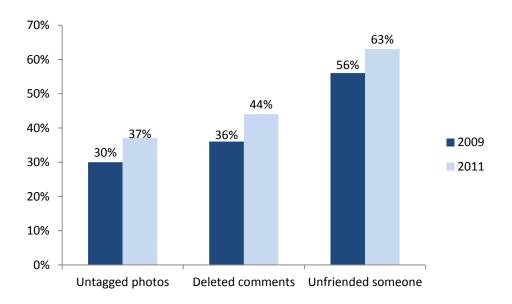
Summary of findings

Social network users are becoming more active in pruning and managing their accounts. Women and younger users tend to unfriend more than others.

About two-thirds of internet users use social networking sites (SNS) and all the major metrics for profile management are up, compared to 2009: 63% of them have deleted people from their "friends" lists, up from 56% in 2009; 44% have deleted comments made by others on their profile; and 37% have removed their names from photos that were tagged to identify them.

More privacy and reputation management on social networking sites

% of social networking site users who have taken these steps on their profile



Source: The Pew Research Center's Internet & American Life Project, April 26 – May 22, 2011 Spring Tracking Survey; n=2,277 adults ages 18 and older, including 755 cell phone interviews. Interviews were conducted in English and Spanish. Margin of error is +/-3 percentage points for SNS users (n=1,015)

Some 67% of women who maintain a profile say they have deleted people from their network, compared with 58% of men. Likewise, young adults are more active unfrienders when compared with older users.

A majority of social network site users – 58% – restrict access to their profiles and women are significantly more likely to choose private settings.

More than half of social networking site users (58%) say their main profile is set to private so that only friends can see it; 19% set their profile to partially private so that friends of friends can view it; and 20%

say their main profile is set to be completely public. Women who use SNS are more likely than men to set the highest restrictions (67% vs. 48%).

Half of SNS users say they have some difficulty in managing privacy controls, but just 2% say it is "very difficult" to use the controls. Those with the most education report the most trouble.

In all, 48% of social media users report some level of difficulty in managing the privacy controls on their profile, while 49% say that it is "not difficult at all." Very few users (2%) describe their experiences as "very difficult," while 16% say they are "somewhat difficult" and another 30% say the controls are "not too difficult" to manage.

Social media users who are college graduates are significantly more likely than those with lower levels of education to say that they experience some difficulty in managing the privacy controls on their profiles.

11% of SNS users have posted content they regret.

Male profile owners are almost twice as likely as female profile owners to profess regret for posting content (15% vs. 8%). Young adults are also more prone to say they regret some of their social media postings; 15% of profile owners ages 18-29 say they have posted content they later regret, compared with just 5% of profile owners ages 50 and older.

Overview

Social media has changed the public discussion about managing "privacy" online.

As social media use has become a mainstream activity, there has been an increasingly polarized public debate about whether or not "privacy" can be dismissed as a relic in the information age. On one side of the debate is what might be called the privacy-is-dead camp. Its adherents take the view that if people are willing to share all manner of personal details about their lives on social networking sites — their physical location, photos of their children, intimate accounts of personal struggles and triumphs — then surely they must have abandoned any reasonable expectation of privacy. Some researchers have suggested that social network users are uniquely unconcerned about privacy; that over time, regular use of social media without any major negative experiences may lessen their concerns about sharing information. Other threads of the privacy-is-dead argument point to the relative ease with which people's digital footprints and physical whereabouts can now be tracked and the great lengths to which someone must go to protect their anonymity online — or offline.

On the other side, some advocates and scholars argue that the public <u>still cares</u> deeply about their privacy online but those sensitivities have been ill-served by technology companies that stand to profit from more widespread sharing and availability of personal information. Users may be more open with what they share because they don't adequately understand enough about how their data is stored and used. And just because they are comfortable posting some information publicly does not mean they have quietly surrendered all control over the information they choose to share online.

Yet, social science researchers have long noted a major disconnect in attitudes and practices around information privacy online. When asked, people say that privacy is important to them; when observed, people's actions seem to suggest <u>otherwise</u>.

"Privacy" has become a powerful keyword, a shorthand tag that gets used to reference a constellation of public attitudes, technical affordances and legal arguments. Yet, the concept is so laden with multiple meanings that any use of the term begs for added specificity and context.¹

This report addresses several questions about the privacy settings people choose for their social networking profiles, and provides new data about the specific steps users take to *control the flow of information* to different people within their networks. Because Facebook is by far the most popular social networking platform and the language of "privacy settings" is part and parcel of the Facebook

pewinternet.org Page 4

-

¹ For a more detailed discussion of the myriad definitions of "privacy" in the legal literature, see, for instance, Understanding Privacy by Daniel J. Solove and Privacy in Context: Technology, Policy and the Integrity of Social Life by Helen Nissenbaum.

experience, the term "privacy" is used throughout this report to refer to the choices users make to restrict the information they share through their profile.²

Main findings

Two-thirds of online adults have a profile on a social networking site, and most restrict access to friends only.

Two in three online adults (63%) say they currently maintain a profile on a social networking site, up from just 20% who said they had ever created a profile in 2006.³ When asked to think about the profile they use most often, 58% say their main profile is set to be private so that only friends can see it. Another 19% say they have their profile set to be partially private so that friends of friends or networks can view it and 20% say their main profile is set to be completely public.⁴

A notable portion of those who already restrict access to their SNS profile take further steps to limit what certain friends can see. Some 26% of those whose profile is at least partially private say they use additional privacy settings to limit what certain friends can and cannot see. This finding is consistent across all core demographic groups.

Women who maintain social media profiles are significantly more likely than men to keep their profiles private.

However, there is a significant gender gap when it comes to the way male and female social media users choose to manage their profiles. Women are much more conservative in the basic settings they choose; 67% of female profile owners restrict access to friends only compared with 48% of male profile owners. Likewise, men are more apt than women to choose partially private (23% vs. 16%) or fully public (26% vs. 14%) settings.

pewinternet.org Page 5

-

² The survey questions covered in this report probe the steps users take, and not the resulting level of protection those settings afford. Similarly, as danah boyd and Eszter Hargittai have noted: "Familiarity with and decisions to adjust privacy settings are not equivalent to actual privacy protection." See: "Facebook privacy settings: Who cares?" Full article available at:

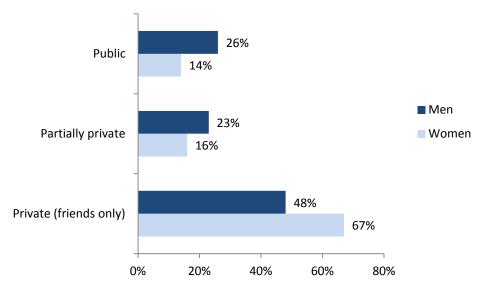
http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/3086/2589

³ The May 2011 Survey asks: "How many social networking sites do you currently have a profile on?" December 2006 question wording was as follows: "Have you ever created your own profile online that others can see, like on a social networking site like MySpace or Facebook?"

⁴ At the time of this survey (April and May 2011), the basic privacy settings for a profile on Facebook included, "Everyone," "Friends of Friends" or "Friends Only." Users could further restrict who could see certain types of information through the "Custom" settings.

The privacy gender gap on social media

% of social networking site users in each group who have chosen various privacy settings



Source: The Pew Research Center's Internet & American Life Project, April 26 – May 22, 2011 Spring Tracking Survey; n=2,277 adults ages 18 and older, including 755 cell phone interviews. Interviews were conducted in English and Spanish. Margin of error is +/-3 percentage points for SNS users (n=1,015)

Young and old alike choose private settings for their profiles.

When looking at social media usage patterns, age tends to be one of the strongest variables. For instance, younger users have long been the most active users of the sites and the most active managers of their online reputations. However, when it comes to basic privacy settings, users of all ages are equally likely to choose a private, semi-private or public setting for their profile. There are no significant variations across age groups.

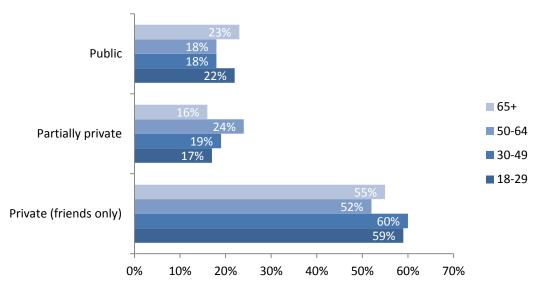
pewinternet.org Page 6

⁵ For specific examples, see "Reputation Management and Social Media" which found that young adults were the most active online reputation managers in several dimensions. http://www.pewinternet.org/Reports/2010/Reputation-Management/Summary-of-Findings.aspx

⁶ While young adults do not stand out as being *more* likely to choose restricted settings, these findings still run counter to assumptions that young people care less about privacy when compared with older adults. It also echoes other work that suggests that young adults largely agree with older adults on issues of information privacy. See Chris Jay Hoofnagle, et al., "How Different are Young Adults from Older Adults When it Comes to Information Privacy Attitudes and Policies?" http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1589864

Private settings are the norm, regardless of age

% of social networking site users in each age group who have chosen various privacy settings



Source: The Pew Research Center's Internet & American Life Project, April 26 – May 22, 2011 Spring Tracking Survey; n=2,277 adults ages 18 and older, including 755 cell phone interviews. Interviews were conducted in English and Spanish. Margin of error is +/-3 percentage points for SNS users (n=1,015)

The choices that adults make regarding their privacy settings are also virtually identical to those of teenage social media users. Close to two-thirds (62%) of teens who have a social media profile say the profile they use most often is set to be private so that only their friends can see the content they post. One in five (19%) say their profile is partially private so that friends of friends or their networks can see some version of their profile. Just 17% say their profile is set to public so that everyone can see it. This distribution is consistent regardless of how often a teen uses social network sites.

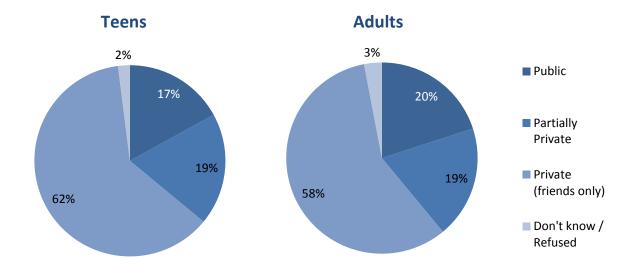
pewinternet.org Page 7

⁷ This represents a departure from previous data that suggested teens chose more restricted settings for their profiles. See: http://www.pewinternet.org/Reports/2007/Digital-Footprints/5-Measuring-Our-Online-Footprint-The-Trails-of-20/6-Social-Networking-Profiles-With-adults-transparency-is-the-norm.aspx

⁸ This figure is consistent with what we have found in the past. In a similar question asked in 2006, 59% of teens with "active profiles" said that their profile was visible only to friends. See: http://pewinternet.org/Reports/2007/Teens-Privacy-and-Online-Social-Networks/5-Online-Privacy--What-Teens-Share-and-Restrict-in-an-Online-Environment/05-Teens-walk-the-line-between-openness-and-privacy.aspx

Teens' and adults' privacy settings on social media sites

Based on teen SNS or Twitter users (n=623) and adult SNS or Twitter users who have an SNS profile (n=975)



Source: The Pew Research Center's Internet & American Life Project, April 26 – May 22, 2011 Spring Tracking Survey; n=2,277 adults ages 18 and older, including 755 cell phone interviews. Interviews were conducted in English and Spanish. Margin of error is +/-3 percentage points for SNS users (n=1,015) Teen data from Pew Internet's Teen-Parent survey, April 19-July 14, 2011. n=799 for teens and parents, including oversample of minority families. Interviews were conducted in English and Spanish.

Half of social media users report some difficulty in managing the privacy controls on their profile, but few describe their experience as "very difficult."

The complexity of privacy settings varies greatly across different social media sites, and in the case of Facebook, the default settings have changed significantly over time. In all, 48% of social media users report some level of difficulty in managing the privacy controls on their profile, while 49% say that it is "not difficult at all." Few users (2%) describe their experiences as "very difficult," while 16% say they are "somewhat difficult" and another 30% say the controls are "not too difficult" to manage. Young adults are considerably more likely than any other age group to feel fully confident in their privacy controls; 57% of social media users ages 18-29 say it is "not difficult at all" to manage them, compared with 48% of those ages 30-49, 41% of those ages 50-64 and 31% of those ages 65 and older.

Social media users with the highest levels of education report the most difficulty in managing the privacy controls on their profiles.

Social media users who are college graduates are significantly more likely than those with lower levels of education to say that they experience some difficulty in managing the privacy controls on their profiles.

pewinternet.org Page 8

⁹ For an infographic showing how Facebook's default privacy settings have changed over time, see: http://mattmckeon.com/facebook-privacy/

For those in the highest education bracket, the majority (62%) report some level of difficulty, compared with just 42% of those with some college education. However, again, few college graduates who are social media users (2%) describe their experiences as "very difficult." Instead, they are more likely to report that managing the privacy settings on their profile is "somewhat difficult" (21%) or "not too difficult" (39%). Those with only some college education report less trouble; 12% describe their experiences as somewhat difficult and 29% say that managing their controls is "not too difficult." ¹⁰

Profile "pruning" is on the rise. Deleting unwanted friends, comments and photo tags grows in popularity.

Over time, as social networking sites have become a mainstream communications channel in everyday life, profile owners have become more active managers of their profiles and the content that is posted by others in their networks. Two-thirds of profile owners (63%) have deleted people from their networks or friend lists, up from 56% in 2009. Another 44% say they have deleted comments that others have made on their profile, up from just 36% two years prior. And as photo tagging has become more automated on sites like Facebook, users have become more likely to remove their names from photos that were tagged to identify them; 37% of profile owners have done this, up from 30% in 2009.

¹⁰ Those who have higher levels of education are more likely to be employed full-time and may be more concerned with the intersection of personal and professional contacts and content on social media. Previous research from Pew Internet has shown that that those with the highest education levels are also more likely to have a job that specifically requires them to self-promote or market themselves online. These "public personae" may be especially cautious about avoiding any privacy missteps on social media. See:

http://www.pewinternet.org/Reports/2007/Digital-Footprints/4-Searching-for-Self-Curiouser-and-Curiouser/2-11-of-internet-users-have-a-job-that-requires-them-to-selfpromote-or-market-their-name-online.aspx

Social media profile management, by age

Based on SNS or Twitter users who have an SNS profile

	2009	2011
Delete people from your network or frie	nds list	
18-29	64	71
30-49	52	63
50-64	41	56
65+	47	41
Delete comments that others have made	e on your profile	
18-29	47	56
30-49	29	40
50-64	26	34
65+	15	26
Remove your name from photos that ha	ve been tagged to	identify you
18-29	41	49
30-49	24	36
50-64	18	22
65+	2	16
Post updates, comments, photos or vide	os that you later i	egret sharing
18-29	19	15
30-49	9	11
50-64	5	4
65+	*	6

^{*}indicates a value that is less than 1%.

Source: The Pew Research Center's Internet & American Life Project, April 26 – May 22, 2011 Spring Tracking Survey; n=2,277 adults ages 18 and older, including 755 cell phone interviews. Interviews were conducted in English and Spanish. Margin of error is +/-3 percentage points for SNS users (n=1,015)

Women and young adults are the unfriend-liest.

Female social media users are more apt than male users to cull their list of friends and delete any unwanted contacts: 67% of women who maintain a profile say they have deleted people from their network, compared with just 58% of men. Likewise, young adults are more active unfrienders when compared with older users. Seven in ten (71%) young adult social media users say they have deleted

contacts from their friends list, compared with 63% of users ages 30-49, 56% of those ages 50-64 and only 41% of those ages 65 and older.

Deleting social media comments is part of the reputation management work of being a young adult.

All users have become more likely to delete comments on their profiles over time, but this is especially true of young adults. It is now the case that 56% of social media users ages 18-29 say they have deleted comments that others have made on their profile, compared with 40% of those ages 30-49, 34% of those ages 50-64 and 26% of social media users ages 65 and older. In contrast to the gender differences with unfriending, male and female social media users are equally as likely to say that they have deleted comments that others have made on their profile (44% of men and women report this).

The task of removing photo tags is also much more common among young adults.

Whether because there are simply more photos being shared or there is more sensitivity to their content, young adult social media users are the most likely age group to report removal of photo tags. Fully half of young adult social media users (49%) say they have deleted their name from photos that were tagged to identify them. That compares to 36% of social media users ages 30-49, 22% of those ages 50-64 and only 16% of those ages 65 and older. As with comments, there are no significant gender differences; male and female users are equally likely to delete photo tags (36% vs. 38%).

While users manage the content that others post, one in ten profile owners voices regrets about their *own* posts.

Even as social media users become more active curators of their profile, a small group of what might be described as trigger-happy users say they post updates, comments, photos or videos that they later regret sharing. One in ten profile owners (11%) say they have posted regrettable content to a social networking site, virtually the same number as reported this activity in 2009 (12%). Male profile owners are almost twice as likely as female profile owners to profess regret for posting content (15% vs. 8%). Young adults are also considerably more prone to regret; 15% of profile owners ages 18-29 say they have posted content they later regret, compared with just 5% of profile owners ages 50 and older.

Most social networking users are on Facebook and manage their social media presence through one account.

More than nine in ten (93%) profile owners say that they have a profile on Facebook, up from 73% in 2009. Over the same period, the popularity of MySpace has continued to wane; 48% maintained a presence there in 2009, while just 23% of profile owners said they used MySpace in the latest survey. At the same time, use of Twitter has grown almost twofold, such that 11% of profile owners say they have a presence there, up from just 6% in 2009.

Whether due to the influx of new social media users in recent years or to those who are simplifying their online identity management, users have become more likely to maintain a profile on just one site. More than half (55%) of social networking and Twitter users say this, up from 45% in 2009.

Survey questions

Spring Change Assessment Survey 2011

EXCERPT

5/25/2011

Data for April 26-May 22, 2011

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

Sample: n = 2,277 national adults, age 18 and older, including 755 cell phone interviews Margin of error is plus or minus 2 percentage points for results based on Total [n=2,277]

Margin of error is plus or minus 3 percentage points for results based on internet users [n=1,701]

Form B (the form used for online phone calling question) [n=846]

Margin of error is plus or minus 3 percentage points for results based on cell phone users [n=1,914] Margin of error is plus or minus 3 percentage points for results based on SNS or Twitter users [n=1,015]

WEB1 Next... Please tell me if you ever use the internet to do any of the following things. Do you ever use the internet to...[INSERT; RANDOMIZE]? / Did you happen to do this **yesterday**, or not?¹¹

Based on all internet users [N=1,701]

	TOTAL HAVE				
	EVER DONE THIS	DID YESTERDAY	HAVE NOT DONE THIS	DON'T KNOW	REFUSED
Use a social networking site like		TESTERDAT	DOIL THIS	DON'T KNOW	KEI OSED
MySpace, Facebook or LinkedIn ¹²					
Current	65	43	35	*	0
January 2011	61	n/a	39	0	0
December 2010	62	n/a	38	*	0
November 2010	61	37	39	*	*
September 2010	62	39	38	*	0
May 2010					-
•	61	38	39	0	0
January 2010	57	32	43	4	0
December 2009	56	33	44	0	*
September 2009	47	27	52	*	*
April 2009	46	27	54	*	*
December 2008	35	19	65	*	
November 2008	37	19	63	0	0
July 2008	34	n/a	66	*	
May 2008	29	13	70	*	
August 2006	16	9	84	*	
September 2005	11	3	88	1	

¹¹ Prior to January 2005, question wording was "Please tell me if you ever do any of the following when you go online. Do you ever...?/Did you happen to do this yesterday, or not?" Unless otherwise noted, trends are based on all internet users for that survey.

¹² In December 2008, item wording was "Use a social networking site like MySpace or Facebook." In August 2006, item wording was "Use an online social networking site like MySpace, Facebook or Friendster". Prior to August 2006, item wording was "Use online social or professional networking sites like Friendster or LinkedIn"

February 2005 8 2 91 1 --

SNS2 About how often do you visit social networking sites? (READ 1-6)¹³ Based on SNS or Twitter users

	current		Sept 2009	May 2008
%	31	Several times a day	22	18
	21	About once a day	21	19
	15	3 to 5 days a week	18	23
	17	1 to 2 days a week	13	15
	8	Every few weeks	n/a	n/a
	8	Less often	24	23
	*	(DO NOT READ) Don't know	1	1
	*	(DO NOT READ) Refused	*	2
	[n=1,01			
	5]		[n=680]	[n=328]

SNS3 How many social networking sites do you currently have a profile on?¹⁴ Based on SNS or Twitter users

current		Sept 2009	May 2008
2	None	n/a	n/a
55	One	45	54
25	Two	36	29
10	Three	10	8
7	Four or more	6	5
1	Don't know	1	2
*	Refused	1	2
[n=1,015]		[n=680]	[n=328]
	2 55 25 10 7 1	 None One Two Three Four or more Don't know Refused 	2 None n/a 55 One 45 25 Two 36 10 Three 10 7 Four or more 6 1 Don't know 1 * Refused 1

¹⁴ Prior to May 2011, question was asked of SNS users only.

¹³ Prior to May 2011, question was asked of SNS users only and wording was "How often do you visit [the social networking web site where you have a profile / the social networking web site with the profile you use most often] – several times a day, about once a day, every few days, once a week or less often?" Results for "3-5 days a week" reflect trend category "Every few days" and "1-2 days a week" reflect trend category "Once a week."

sns4 [IF HAVE PROFILE ON ONE SNS SITE:] On which social networking site do you currently have a profile? / [IF HAVE PROFILES ON MULTIPLE SITES:] On which social networking sites do you currently have a profile? [PRECODED OPEN-END]¹⁵

Based on SNS or Twitter users who have an SNS profile

	current		SEPT 2009
%	93	Facebook	73
	23	MySpace	48
	11	Linked In	14
	11	Twitter	6
	2	Tagged	1
	2	Yahoo / Yahoo Messenger	1
	2	YouTube	1
	9	Other (SPECIFY)	10
	1	Don't know	1
	2	Refused	3
	[n=975]		[n=680]

Note: Total may exceed 100% due to multiple responses.

swss [IF HAVE PROFILE ON ONE SNS SITE:] Do you have multiple profiles on this site, or do you have only one profile? / [IF HAVE PROFILES ON MULTIPLE SITES:] Do you have multiple profiles on any social networking sites, or do you have only one profile on each site?

Based on SNS or Twitter users who have an SNS profile [N=975]

current

8 Multiple profiles
92 One profile
0 Don't know
* Refused

 $^{^{15}}$ September 2009 question was asked of SNS users only and wording was "On which social networking site do you have a profile?"

SNS5a Thinking now just about the profile you use most often, on which site is that profile located? [PRECODED OPEN-END]

Based on SNS or Twitter users who have an SNS profile on multiple sites [N=383]

cı	ır	re	n	+
υı	41	1 5	: I I	ι

%	79	Facebook
	5	Twitter
	3	Linked In
	3	MySpace
	1	My Yearbook
	1	YouTube
	*	Google Buzz
	*	Tagged
	0	Bebo
	0	Digg
	0	Flickr
	0	Last.FM
	0	Tumblr
	0	Ustream
	4	Other (SPECIFY)
	2	Don't know
	2	Refused

snse Thinking just about the profile you use most often... Is your profile set to PUBLIC so that everyone can see it... is it PARTIALLY PRIVATE, so that friends of friends or your networks can see it... or is it PRIVATE, so that only your friends can see?

Based on SNS or Twitter users who have an SNS profile [N=975]

current

%	20	Public

19 Partially private

58 Private (friends only)

3 Don't know

* Refused

SNS7 On this private profile, do you limit what certain friends can and cannot see, or can all your friends see the same thing?

Based on SNS or Twitter users whose profile is at least partially private [N=756]

current

% 26 Limit what certain friends can see

72 All friends see the same thing

2 Don't know

* Refused

SNS8 Overall, how difficult is it to manage the privacy controls on your profile? Is it very difficult, somewhat difficult, not too difficult or not difficult at all?

Based on SNS or Twitter users who have an SNS profile [N=975]

	current	
%	2	Very difficult
	16	Somewhat difficult
	30	Not too difficult
	49	Not difficult at all
	1	Do not use privacy settings (VOL.)
	2	Don't know
	*	Refused

SNS9 Thinking about the ways people might use social networking sites... Do you ever... [INSERT IN ORDER]?¹⁶

Based on SNS or Twitter users who have an SNS profile

	yes, do this	no, do not	don't know	refUSED
Delete people from your network or				
friends' list				
Current [N=975]	63	37	*	0
September 2009 [N=680]	56	43	1	*
Remove your name from photos that				
have been tagged to identify you				
Current	37	61	1	0
September 2009	30	69	*	*
Delete comments that others have made	9			
on your profile				
Current	44	56	*	0
September 2009	36	64	*	*
Post updates, comments, photos or				
videos that you later regret sharing				
Current	11	89	0	*
September 2009	12	87	*	*
Set up your account so that it				
automatically includes your location on				
your posts				
Current	14	84	2	0

pewinternet.org Page 17

 $^{^{16}}$ Prior to May 2011, question was asked of SNS users only. September 2009 question wording was "Thinking about the ways you use social networking sites... Do you ever [INSERT IN ORDER]?"

Methodology

This report is based on the findings of a survey on Americans' use of the Internet. The results in this report are based on data from telephone interviews conducted by Princeton Survey Research Associates International from April 26 to May 22, 2011, among a sample of 2,277 adults, age 18 and older. Telephone interviews were conducted in English and Spanish by landline (1,522) and cell phone (755, including 346 without a landline phone). For results based on the total sample, one can say with 95% confidence that the error attributable to sampling is plus or minus 2.4 percentage points. For results based Internet users (n=1,701), the margin of sampling error is plus or minus 2.7 percentage points. 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 adults 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.

New sample was released daily and was kept in the field for at least five days. The sample was released in replicates, which are representative subsamples of the larger population. This ensures that complete call procedures were followed for the entire sample. At least 7 attempts were made to complete an interview at a sampled telephone number. The calls were staggered over times of day and days of the week to maximize the chances of making contact with a potential respondent. Each number received at least one daytime call in an attempt to find someone available. For the landline sample, interviewers asked to speak with the youngest adult male or female currently at home based on a random rotation. If no male/female was available, interviewers asked to speak with the youngest adult of the other gender. For the cellular sample, interviews were conducted with the person who answered the phone. Interviewers verified that the person was an adult and in a safe place before administering the survey. Cellular sample respondents were offered a post-paid cash incentive for their participation. All interviews completed on any given day were considered to be the final sample for that day.

Weighting is generally used in survey analysis to compensate for sample designs and patterns of non-response that might bias results. A two-stage weighting procedure was used to weight this dual-frame sample. The first-stage weight is the product of two adjustments made to the data – a Probability of Selection Adjustment (PSA) and a Phone Use Adjustment (PUA). The PSA corrects for the fact that respondents in the landline sample have different probabilities of being sampled depending on how many adults live in the household. The PUA corrects for the overlapping landline and cellular sample frames.

The second stage of weighting balances sample demographics to population parameters. The sample is balanced by form to match national population parameters for sex, age, education, race, Hispanic origin, region (U.S. Census definitions), population density, and telephone usage. The White, non-Hispanic subgroup is also balanced on age, education and region. The basic weighting parameters came from a special analysis of the Census Bureau's 2010 Annual Social and Economic Supplement (ASEC) that included all households in the continental United States. The population density parameter was derived from Census 2000 data. The cell phone usage parameter came from an analysis of the January-June 2010 National Health Interview Survey. Following is the full disposition of all sampled telephone numbers:

Table 2:Sample Disposition

Table 2:5	ampie ווע	sposition
Landline	Cell	
32,909	19,899	Total Numbers Dialed
1,416	364	Non-residential
1,428	35	Computer/Fax
32		Cell phone
16,833	8,660	Other not working
1,629	287	Additional projected not working
11,571	10,553	Working numbers
35.2%	53.0%	Working Rate
543	96	No Answer / Busy
3,091	3,555	Voice Mail
53	10	Other Non-Contact
7,884	6,892	Contacted numbers
68.1%	65.3%	Contact Rate
489	1,055	Callback
5,757	4,618	Refusal
1,638	1,219	Cooperating numbers
20.8%	17.7%	Cooperation Rate
56	33	Language Barrier
	426	Child's cell phone
1,582	760	Eligible numbers
96.6%	62.3%	Eligibility Rate
60	5	Break-off
1,522	755	Completes
96.2%	99.3%	Completion Rate
13.6%	11.5%	Response Rate

The disposition reports all of the sampled telephone numbers ever dialed from the original telephone number samples. 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:

- Contact rate the proportion of working numbers where a request for interview was made
- 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 were completed

Thus the response rate for the landline sample was 13.6 percent. The response rate for the cellular sample was 11.5 percent.