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Social Media and the ‘Spiral of Silence’

Facebook, Twitter, and other platforms did not provide new outlets for the discussion of the Snowden-NSA revelations. In fact, people were less likely to discuss these issues on social media than they were in person and, if people thought their social media friends and followers disagreed with them, they were less likely to want to discuss the issues at all.

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About this Report

An informed citizenry depends on people’s exposure to information on important political issues and on their willingness to discuss these issues with those around them. The rise of social media, such as Facebook and Twitter, has introduced new spaces where political discussion and debate can take place. This report explores the degree to which social media affects a long-established human attribute—that those who think they hold minority opinions often self-censor, failing to speak out for fear of ostracism or ridicule. It is called the “spiral of silence.”

This report is a collaborative effort based on the input and analysis of the following individuals:¹

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Other major reports from the Pew Research Center Internet Project on the social and political impact of social networking sites on social and political activity can be found at:

<http://www.pewinternet.org/2012/10/19/social-media-and-political-engagement/>

<http://www.pewinternet.org/2012/09/04/politics-on-social-networking-sites/>

<http://www.pewinternet.org/2013/04/25/civic-engagement-in-the-digital-age/>

<http://www.pewinternet.org/2012/02/03/why-most-facebook-users-get-more-than-they-give/>

<http://www.pewinternet.org/2011/06/16/social-networking-sites-and-our-lives/>

<http://www.pewinternet.org/2009/11/04/social-isolation-and-new-technology/>

<http://www.pewinternet.org/2004/10/27/the-internet-and-democratic-debate/>

¹ We are grateful to the following individuals for their comments and advice as we developed this work: Pablo Boczkowski (Northwestern University), William Eveland (The Ohio State University), and Rima Wilkes (University of British Columbia).

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Summary of Findings

A major insight into human behavior from pre-internet era studies of communication is the tendency of people not to speak up about policy issues in public—or among their family, friends, and work colleagues—when they believe their own point of view is not widely shared. This tendency is called the “spiral of silence.”²

Some social media creators and supporters have hoped that social media platforms like Facebook and Twitter might produce different enough discussion venues that those with minority views might feel freer to express their opinions, thus broadening public discourse and adding new perspectives to everyday discussion of political issues.

We set out to study this by conducting a survey of 1,801 adults.³ It focused on one important public issue: Edward Snowden’s 2013 revelations of widespread government surveillance of Americans’ phone and email records. We selected this issue because other surveys by the Pew Research Center at the time we were fielding this poll showed that [Americans were divided](#) over whether the NSA contractor’s leaks about surveillance were justified and whether the [surveillance policy itself was a good or bad idea](#). For instance, Pew Research found in one survey that 44% say the release of classified information harms the public interest while 49% said it serves the public interest.

The survey reported in this report sought people’s opinions about the Snowden leaks, their willingness to talk about the revelations in various in-person and online settings, and their perceptions of the views of those around them in a variety of online and off-line contexts.

This survey’s findings produced several major insights:

- **People were less willing to discuss the Snowden-NSA story in social media than they were in person.** 86% of Americans were willing to have an in-person conversation about the surveillance program, but just 42% of Facebook and Twitter users were willing to post about it on those platforms.
- **Social media did not provide an alternative discussion platform for those who were not willing to discuss the Snowden-NSA story.** Of the 14% of Americans unwilling to discuss the Snowden-NSA story in person with others, only 0.3% were willing to post about it on social media.
- **In both personal settings and online settings, people were more willing to share their views if they thought their audience agreed with them.** For instance, at work, those who felt their coworkers agreed with their opinion were about three times more likely to say they would join a workplace conversation about the Snowden-NSA situation.
- **Previous ‘spiral of silence’ findings as to people’s willingness to speak up in various settings also apply to social media users.** Those who use Facebook were

² Noelle-Neumann, E. (1974). "The Spiral of Silence A Theory of Public Opinion." *Journal of Communication* 24(2): 43-51.

³ The survey was conducted between August 7-September 16, 2013 and has a margin of error of plus or minus 2.6 percentage points for the full sample.

more willing to share their views if they thought their followers agreed with them. If a person felt that people in their Facebook network agreed with their opinion about the Snowden-NSA issue, they were about twice as likely to join a discussion on Facebook about this issue.

- **Facebook and Twitter users were also less likely to share their opinions in many face-to-face settings. This was especially true if they did not feel that their Facebook friends or Twitter followers agreed with their point of view.** For instance, the average Facebook user (someone who uses the site a few times per day) was half as likely as other people to say they would be willing to voice their opinion with friends at a restaurant. If they felt that their online Facebook network agreed with their views on this issue, their willingness to speak out in a face-to-face discussion with friends was higher, although they were still only 0.74 times as likely to voice their opinion as other people.

Overall, the findings indicate that in the Snowden case, social media did not provide new forums for those who might otherwise remain silent to express their opinions and debate issues. Further, if people thought their friends and followers in social media disagreed with them, they were less likely to say they would state their views on the Snowden-NSA story online and in other contexts, such as gatherings of friends, neighbors, or co-workers. This suggests a spiral of silence might spill over from online contexts to in-person contexts, though our data cannot definitively demonstrate this causation. It also might mean that the broad awareness social media users have of their networks might make them more hesitant to speak up because they are especially tuned into the opinions of those around them.

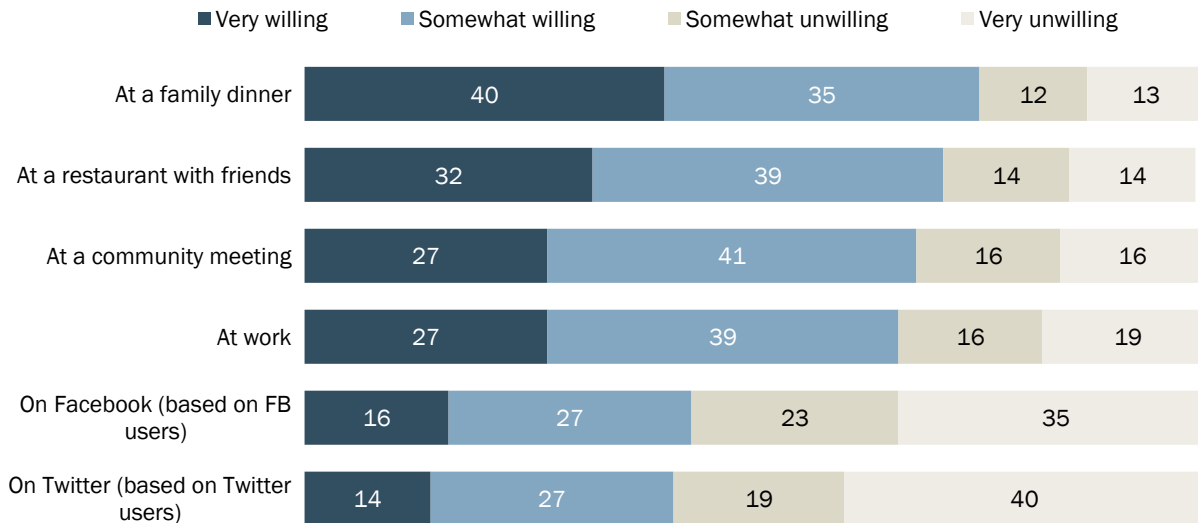
A rundown of the key survey findings:

People reported being less willing to discuss the Snowden-NSA story in social media than they were in person—and social media did not provide an alternative outlet for those reluctant to discuss the issues in person.

Fully 86% of Americans reported in the Pew Research survey they were “very” or “somewhat” willing to have a conversation about the government’s surveillance program in at least one of the physical settings we queried—at a public meeting, at a family dinner, at a restaurant with friends, or at work. Yet, only 42% of those who use Facebook or Twitter were willing to discuss these same issues through social media.

If the topic of the government surveillance programs came up in these settings, how willing would you be to join in the conversation?

% of population



Source, Pew Research Center Internet Project Survey August 7-September 16, 2013. N=1,801 adults.

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Of the 14% of Americans who were not willing to discuss this issue in person, almost none (0.3%) said they were willing to have a conversation about this issue through social media. This challenges the notion that social media spaces might be considered useful venues for people sharing views they would not otherwise express when they are in the physical presence of others.

Not only were social media sites not an alternative forum for discussion, social media users were less willing to share their opinions in face-to-face settings.

We also did statistical modeling allowing us to more fully understand the findings by controlling for such things as gender, age, education levels, race, and marital status—all of which are related to whether people use social media and how they use it. That modeling allowed us to calculate how likely people were to be willing to express their views in these differing settings holding other things constant.⁴

⁴ We report the odds based on a logistic regression. The outcome of a logistic regression tells us the probability that a person will do something based on the relationship to a series of predictor variables. For example, if half of the people in our sample are willing to speak out at a public meeting, but half are not, the probability of doing something is 50%, i.e., a 50-50 percent chance, the odds are equal, 1 to 1. The odds are a ratio of the probability that a person will do something over the probability that they will not. Let's say, hypothetically, that 80% of the people in our sample were willing to speak with family about an issue, this means that 20% were not. The odds that they would speak out are $.8/.2 = 4$. That is to say, the odds that someone would speak with family are 4 to 1, or are 4 times higher, or are 4 times more likely to occur. Throughout this report, we use that language.

The results of our analyses show that, even holding other factors such as age constant, social media users are less likely than others to say they would join a discussion about the Snowden-NSA revelations.

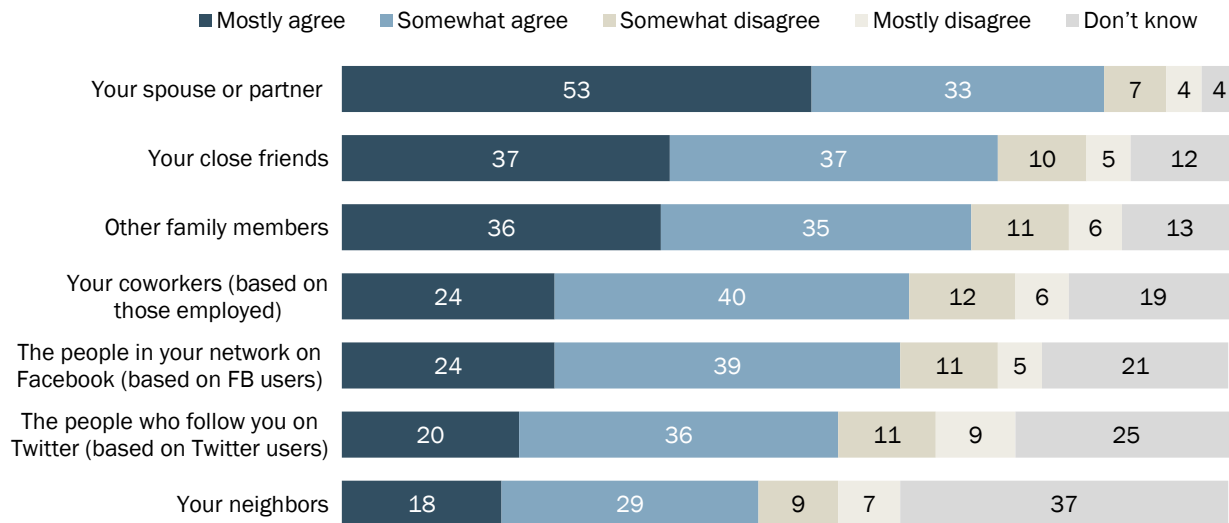
- The typical Facebook user—someone who logs onto the site a few times per day—is half as likely to be willing to have a discussion about the Snowden-NSA issues at a physical public meeting as a non-Facebook user.
- Similarly, the typical Twitter user—someone who uses the site a few times per day—is 0.24 times less likely to be willing to share their opinions in the workplace as an internet user who does not use Twitter.

In both offline and online settings, people said they were more willing to share their views on the Snowden-NSA revelations if they thought their audience agreed with them.

Previous research has shown that when people decide whether to speak out about an issue, they rely on reference groups—friendships and community ties—to weigh their opinion relative to their peers. In the survey, we asked respondents about their sense of whether different groups of people in their lives agreed or disagreed with their positions on the Snowden leaks. There was some notable variance between those who feel they know the views of their peers and those who do not know what others think. Generally, the more socially close people were—e.g. spouses or family members—the more likely it was that the respondents felt their views matched.

To what extent do you think others agree with your views about the Snowden-NSA revelations?

% of population who say various people agree or disagree with their views



Source, Pew Research Center Internet Project Survey August 7-September 16, 2013. N=1,801 adults

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We again calculated how likely it was that someone would be willing to share their views in different settings, depending on their sense of whether their audience agreed with them. We found that, in the case of Snowden's revelations about the NSA, it was clear that if people felt their audience supported them, they were more likely to say they would join a conversation:

- At work, those who felt their coworkers agreed with their opinion on the government's surveillance program were 2.92 times more likely to say they would join a conversation on the topic of Snowden-NSA.
- At a family dinner, those who felt that family members agreed with their opinion were 1.90 times more likely to be willing to discuss the Snowden-NSA issue.
- At a restaurant with friends, if their close friends agreed with their opinion people were 1.42 times more likely to be willing to discuss the Snowden-NSA matter.
- On Facebook, if a person felt that people in their Facebook network agreed with their position on that issue, they were 1.91 times more likely to be willing to join a conversation on the topic of Snowden-NSA.

Those who do not feel that their Facebook friends or Twitter followers agree with their opinion are more likely to self-censor their views on the Snowden-NSA story in many circumstances—in social media and in face-to-face encounters.

In this survey on the Snowden-NSA matter, we found that when social media users felt their opinions were not supported online, they were less likely to say they would speak their minds. This was true not only in social media spaces, but also in the physical presence of others.

- The average Facebook user (someone who uses the site a few times per day) was half as likely as other people to say they would be willing to voice their opinion with friends at a restaurant. If they felt that their online Facebook network agreed with their views on this issue, their willingness to speak out in a face-to-face discussion with friends was higher, although they were still only 0.74 times as likely to voice their opinion.
- The typical Twitter user (who uses the site a few times per day) is 0.24 times as likely to share their opinions with colleagues at work as an internet user who does not use Twitter. However, Twitter users who felt that their online Twitter followers shared their opinion were less reserved: They were only 0.66 times less likely to speak up than other internet users.

The survey did not directly explore why people might remain silent if they felt that their opinions were in the minority. The traditional view of the spiral of silence is that people choose not to speak out for fear of isolation. Other Pew Research studies have found that it is common for social media users to be mistaken about their friends' beliefs and [to be surprised once they discover their friends' actual views via social media](#). Thus, it might be the case that people do not want to disclose their minority views for fear of disappointing their friends, getting into fruitless arguments, or losing them entirely. Some people may prefer not to share their views on social media because their posts persist and can be found later—perhaps by prospective employers or others with high status. As to why the absence of agreement on social media platforms spills over into a spiral of silence in physical settings, we speculate that social media users may have witnessed those with minority opinions experiencing ostracism, ridicule or bullying online, and that this might increase the perceived risk of opinion sharing in other settings.

People also say they would speak up, or stay silent, under specific conditions.

In addition to exploring the impact of agreement/disagreement on whether people were willing to discuss the Snowden-NSA revelations, we asked about other factors that might shape whether people would speak out, even if they suspected they held minority views. This survey shows how the social and political climate in which people share opinions depends on several other things:

- **Their confidence in how much they know.** Those who felt they knew a lot about the issues were more likely than others to say they would join conversations.
- **The intensity of their opinions.** Those who said they had strong feelings about the Snowden-NSA matter were more willing than those with less intense feelings to talk about the subject.

- **Their level of interest.** Those who said they were very interested in the Snowden-NSA story were more likely than those who were not as interested to express their opinions.

People’s use of social media did little to increase their access to information about the Snowden-NSA revelations.

We asked respondents where they were getting information about the debates swirling around the Snowden revelations, and found that social media was not a common source of news for most Americans. Traditional broadcast news sources were by far the most common sources. In contrast, social media sources like Facebook and Twitter were the least commonly identified sources for news on this issue.

- 58% of all adults got at least some information on the topic of Snowden-NSA from TV or radio.
- 34% got at least some information from online sources other than social media.⁵
- 31% got at least some information from friends and family.
- 19% got at least some information from a print newspaper.
- 15% got at least some information while on Facebook.
- 3% got at least some information from Twitter.

There are limits to what this snapshot can tell us about how social media use is related to the ways Americans discuss important political issues. This study focuses on one specific public affairs issue that was of interest to most Americans: the Snowden-NSA revelations. It is not an exhaustive review of all public policy issues and the way they are discussed in social media.

The context of the Snowden-NSA story may also have made it somewhat different from other kinds of public debates. At the time of this study, the material leaked by Edward Snowden related to NSA monitoring of communications dealt specifically with [“meta-data” collected on people’s phone and internet communications](#). For a phone call, the meta-data collected by the NSA was described as including the duration of the call, when it happened, the numbers the call was between, but not a recording of the call. For email, meta-data would have included the sender and recipient’s email addresses and when it was sent, but not the subject or text of the email.

Additional information leaked by Snowden after our study was completed suggests that [Western intelligence agencies monitored and manipulated the content of online discussions](#) and the [NSA recorded the content of foreign phone calls](#). In reaction to these additional revelations, people may have adjusted their use of social media and their willingness to discuss a range of topics, including public issues such as government surveillance. However, given the limited extent of the information leaked by Snowden at the time the survey was fielded, it seems unlikely that the average American had extensively altered their willingness to discuss political issues. Future research may provide insight into whether Americans have become more or less willing to discuss specific issues on-and offline as a result of government surveillance programs. While this study

⁵ In this survey, 80% of adults said they were internet users, 71% of the internet users are Facebook users, and 18% of internet users are Twitter users.

focused on the Snowden-NSA revelations, we suspect that Americans use social media in similar ways to discuss and get news about other political issues.

About this survey

This report contains findings from a nationally representative survey of 1,801 American adults (ages 18+) conducted by the Pew Research Center and fielded August 7-September 16, 2013 by Princeton Research Associates International. It was conducted in English and Spanish on landline (N=901) and cell phones (N=900). The margin of error for the full sample is plus or minus 2.6 percentage points. Some 1,076 respondents are users of social networking sites and the margin of error for that subgroup is plus or minus 3.3 percentage points.

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Main Analysis: Political Issues and the Spiral of Silence

It has long been clear in the research community that people’s willingness to discuss political issues depends on their access to news and on the social climate for discussion. This study explores people’s willingness to share their opinions on and offline about an important political issue. The report is built on Pew Research Center survey findings related to how people use social media, as well as traditional media, to get information on one political issue that dominated the news in the summer of 2013: the revelations by defense contractor Edward Snowden. In June 2013, Snowden leaked classified documents to *The Washington Post* and Britain’s *Guardian* newspaper about surveillance by the U.S. National Security Agency and some allied governments into the phone calling records and email exchanges of untold numbers of persons.⁶

Where people got news about the Snowden-NSA surveillance story

We asked people where they were getting information about the debates swirling around the Snowden revelations, and found that social media was not a common source of news for most Americans. Traditional broadcast news sources were by far the most common sources. In contrast, social media sources (Facebook and Twitter) were the least commonly identified sources for news on this issue.

- 58% of all adults got at least some information about this topic from TV or radio.
- 34% got at least some information from online sources other than social media.⁷
- 31% got at least some information from friends and family.
- 19% got at least some information from a print newspaper.
- 15% got at least some information while on Facebook.
- 3% got at least some information from Twitter.

Looking only at those Americans who use either Facebook or Twitter, 26% of Facebook users and 22% of Twitter users reported being exposed to at least some information about the government’s surveillance program on these platforms.

A relatively small number of Americans—12%—reported receiving no information about the debates over the government’s telephone and digital surveillance program. Some 15% of Americans said they relied on a single source of information about this issue. The majority relied on at least three information sources.

This reported use of Facebook and Twitter for news about the Snowden revelations is substantively lower than what has been reported previously for use of these platforms to access news more broadly. Data from the Pew Research Center’s (2013) report on “[News Use across Social Media Platforms](#),” conducted over the same time period as our survey, found that 47% of

⁶ We also asked about people’s use of mobile devices, Facebook, Twitter, Instagram, Pinterest, and LinkedIn and that material is a core part of the analysis. In this survey, 80% of adults say they are internet users and 89% said they have cell phones. A detailed demographic breakdown of the demographics of users of various social media platforms in this survey can be found [here](#).

⁷ In this survey, 80% of adults said they were internet users, 71% of the internet users are Facebook users, and 18% of internet users are Twitter users.

Facebook users and 52% of Twitter users use these platforms to consume news. One explanation for the difference in our findings likely relates to the fact that in this survey we were asking about a single public issue, while the other Pew Research survey included broader types of news, including entertainment, sports, and politics.⁸

- Some might expect that internet users in general and social media users in particular are less likely to rely on traditional media sources for news on political issues because they have alternative sources. But, for internet users in general, and for most social media users, we find the opposite to be true. Using regression analysis to control for demographic characteristics, we find: **Internet users are more likely than non-users to get news on the surveillance story from TV and radio.** An internet user is 1.63 times more likely to have obtained even a little news on the Snowden-NSA revelations from radio and television than a non-internet user.
- **Twitter users are more likely than non-Twitter users to get news on the surveillance story from TV and radio.** A typical Twitter user (someone who uses the site a few times per day) is 2.25 times more likely to have obtained news on this issue through TV and radio than an internet user who does not use this platform, and 3.67 times more likely than a non-internet user.
- **Instagram users were also more likely to get news on the surveillance story from traditional broadcast sources.** A typical user of Instagram (someone who uses the site a few times per day) was 2.46 times more likely to have received television and radio news on this topic in comparison with an internet users who does not use Instagram, and 4.02 times more likely than a non-internet user.

This contrasts with the situation that applies to users of some other social media platforms:

- The typical Pinterest user (who uses the site a couple of times per week) is 0.92 times less likely to get news about the government’s surveillance program from TV and radio in comparison with an internet user who does not use this platform, but he or she is still 1.51 times more likely to get news from TV and radio than a non-internet user.
- Similarly, someone who uses LinkedIn a couple of times per week is 0.87 times less likely to get news on this issue from television and radio compared to an internet user who does not use LinkedIn, but still 1.41 times higher than for a non-internet user.

Facebook users are no more or less likely to obtain news through TV and radio than other internet users.

While some social media do seem to distract from traditional media sources, on the whole, these effects are relatively small. Someone who uses multiple social media sites at a typical level of use—Facebook, Twitter, Instagram, Pinterest, and LinkedIn—is about 8 times more likely than non-

⁸ See for instance: “Low marks for the 2012 election” available at: <http://www.people-press.org/2012/11/15/section-4-news-sources-election-night-and-views-of-press-coverage/>

Also: “Internet Gains Most as Campaign News Source but Cable TV Still Leads” available at: <http://www.journalism.org/2012/10/25/social-media-doubles-remains-limited/>

Also: “Internet Gains on Television as Public’s Main News Source” available at: <http://www.people-press.org/2011/01/04/internet-gains-on-television-as-publics-main-news-source/>.

internet users and 5 times more likely than internet users who do not use social media to get information about the government’s surveillance program through TV and radio (See Appendix, Table A).⁹ For the most part, social media users did not get their news through social media, they got it through television and radio.

Controlling for other factors, internet and social media use do not account for any of the difference in use of print newspapers to find information on the topic of the government’s surveillance program. Internet users, including those who use Facebook, Twitter, Instagram, Pinterest, and LinkedIn, are as likely as anyone else to use newspapers for news about the government’s surveillance program.

Social media did not provide an alternative outlet for the 14% of Americans who were not willing to discuss the Snowden-NSA issue in person

While it has been suggested that social media might provide new channels for communication about important political issues, our survey suggests that few people are willing to deliberate online who would not also do so in person. Almost everyone in our sample who reported that they would be willing to discuss something on Twitter or Facebook also indicated that they would be willing to have a conversation on this topic in an offline setting. Only 0.3% of Americans reported that they were not willing to have a conversation about the government surveillance program when people were physically present, but were willing to have such a conversation through social media.

People’s overall willingness to share their views

There are many social situations where people might have the opportunity to discuss political issues. We asked respondents to tell us how willing they would be to join a conversation “if the topic of the government’s surveillance programs came up” in a variety of settings, online and offline. We asked them how willing they would be to join in the conversation at a community meeting, at work, at a restaurant with friends, at a family dinner, on Facebook, and on Twitter.

In most social settings, the majority of Americans reported that they would be willing to join a conversation about the Snowden-NSA revelations. The only settings where most people were not willing to discuss their opinion was on Facebook and Twitter.

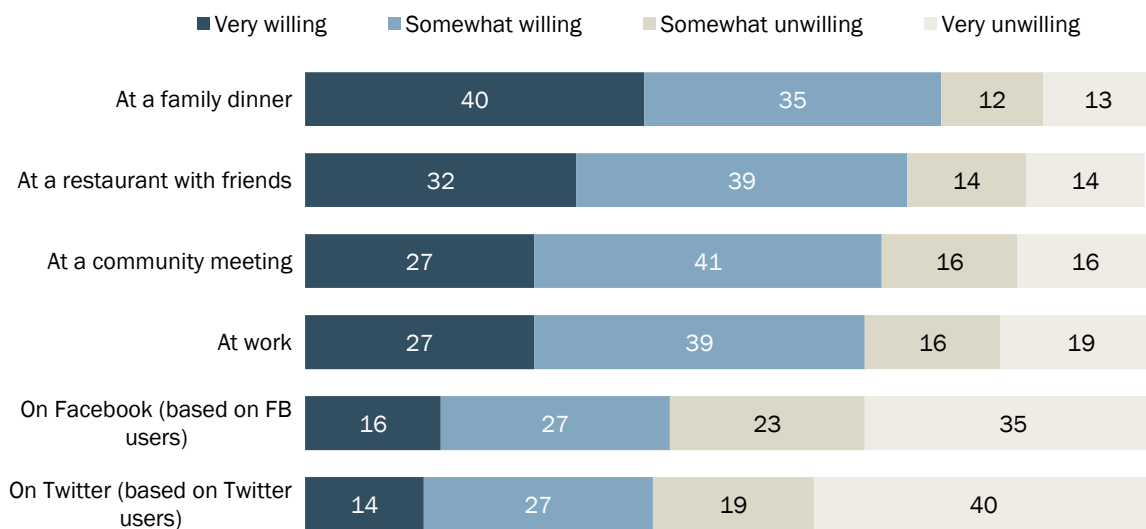
- 74% of all adults said they would be “very” or “somewhat” willing to join the conversation if the Snowden-NSA story came up at a **family dinner**.
- 74% of all adults said they would be “very” or “somewhat” willing to join the conversation if the Snowden-NSA story came up at a **restaurant with friends**.
- 66% of all adults said they would be “very” or “somewhat” willing to join the conversation if the Snowden-NSA story came up at a **community meeting**.

⁹ Typical use of the social media in this example includes logging into the Twitter and Instagram platforms a few times a day, using Pinterest a half dozen times per month, and using LinkedIn a couple of times per month (frequency of Facebook use was not statistically significant).

- 65% of employed adults said they would be “very” or “somewhat” willing to join the conversation if the Snowden-NSA story came up **at work**.
- 42% of Facebook users said they would be “very” or “somewhat” willing to join the conversation **on Facebook**.¹⁰
- 41% of Twitter users said they would be “very” or “somewhat” willing to join the conversation if the Snowden-NSA story came up **on Twitter**.

If the topic of the government surveillance programs came up in these settings, how willing would you be to join in the conversation?

% of population



Source, Pew Research Center Internet Project Survey August 7-September 16, 2013. N=1,801 adults.

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In all, 86% of Americans were willing to have a conversation in the physical presence of others—that is, at a public meeting, at a family dinner, at a restaurant with friends, or at work on the topic of the government’s surveillance program. Only 42% of those who use Facebook and 41% of Twitter users felt comfortable discussing this same issue through social media.

¹⁰ This figure does not match the figure in the chart below because of rounding.

Exploring the conditions under which people are willing to speak

Previous research showed that when people decide whether to speak out about an issue, they rely on reference groups—friendships and community ties—and weigh their opinion relative to these groups before speaking out in a setting. Other factors also play a role in people’s willingness to discuss issues. Our survey found that if people had a strong interest in the topic of the Snowden-NSA revelations, held a strong opinion, and felt knowledgeable about it, they were generally more willing to join a conversation about this issue.

What follows is our detailed exploration of the various circumstances that might affect someone’s willingness to speak about issues—in this case, the Snowden-NSA revelations.

In most settings, people’s level of interest in the Snowden-NSA revelations was related to their willingness to discuss this topic

In the summer of 2013, interest in information leaked by Edward Snowden about the U.S. government’s telephone and digital surveillance programs was high.

In our survey, respondents were asked how interested they were in debates about “a government program with the aim of collecting information about people’s telephone calls, emails, and other online communications.” Some 60% of American adults reported they were very or somewhat interested in this topic. Only 20% of Americans reported that they were not interested at all.

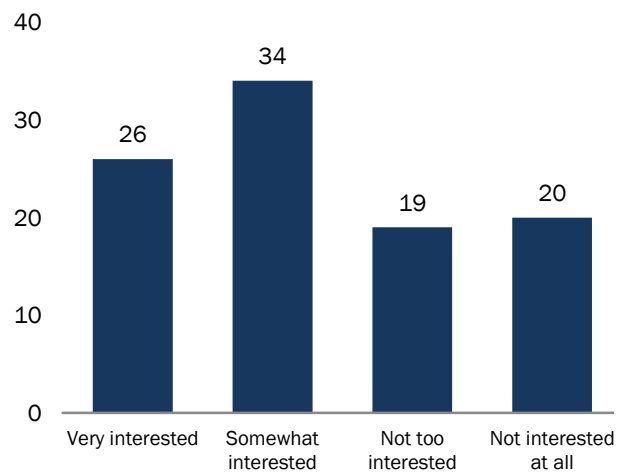
Using regression analysis to control for demographic differences, we found that someone who was “very interested” in the government surveillance program was 1.78 times more likely to be willing to join a conversation at a community meeting than someone who has no interest at all (See Appendix, Table B).

Similarly, compared with someone who was uninterested in this topic, someone who was very interested was 2.64 times more likely to speak up during a conversation with friends at a restaurant, and 2.88 times more likely to speak up when talking with family at dinner.

People’s level of interest in the Snowden-NSA story was not related to willingness to speak up in the workplace or on Facebook. The regression analyses showed that the interested and the

The level of interest in the NSA surveillance story was relatively high

% of adults who say they were interested in the revelations about government surveillance programs



Source, Pew Research Center Internet Project Survey August 7-September 16, 2013. N=1,801 adults

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uninterested were equally as likely to say they would voice their opinions on Facebook and at work.¹¹

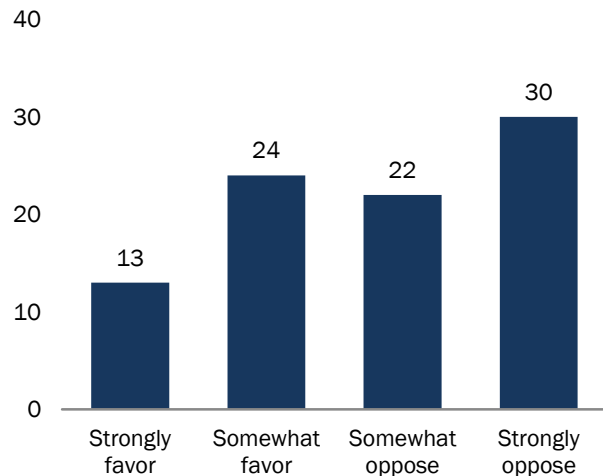
Those with more fervent opinions about the Snowden-NSA story were more likely to say they would speak out

In addition to asking about their interest in the Snowden-NSA story, we asked whether respondents favored or opposed “a government program to collect nearly all communications in the U.S. as part of anti-terrorism efforts?” Some 37% of Americans strongly or somewhat favored the surveillance programs and 52% strongly or somewhat opposed them. Another 10% said they didn’t know or refused to answer the question.¹²

We found that those who had stronger opinions on the topic of the Snowden-NSA revelations were more willing to speak out on this issue at public meetings, with family over dinner, and on Facebook (See Appendix, Table B). In comparison with those with less intense opinions, someone who either “strongly” favors or opposes the collection of domestic communications as part of government surveillance program was 1.56 times more likely to be willing to speak out at a public meeting, 1.35 times more likely to be would willingly discuss the issue with family over dinner, and 2.40 times more likely to have said they would join a conversation on Facebook.

Americans are split on whether they support or oppose government surveillance programs

% of adult responses to the question: Do you favor or oppose a government program to collect nearly all communications in the U.S. as part of anti-terrorism efforts?



Source, Pew Research Center Internet Project Survey August 7-September 16, 2013. N=1,801 adults

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¹¹ We were unable to perform a regression analysis on willingness to discuss the government’s surveillance program on Twitter because of the small number of Twitter users in our sample, and the even smaller number who expressed a willingness to discuss public affairs on this platform.

¹² When designing a question about the government’s surveillance program, we based the question on the findings of the Pew Research report on [“Government Surveillance: A Question Wording Experiment”](#) that was conducted in the weeks prior to our survey. We designed our question with the intent that roughly equal numbers of Americans would agree and disagree. It was important to pick a topic about which Americans were likely to be split in their opinions, so that we could observe variation in people’s behavior as they considered sharing their views with those around them.

Those who felt more knowledgeable were more willing to discuss the Snowden-NSA story

When a new, potentially important issue appears in the news, those who feel knowledgeable tend to show greater willingness to have a conversation with others. Indeed, feeling knowledgeable about this issue increased the likelihood that someone would be willing to join a conversation about the government’s surveillance program in all of the settings we explored.

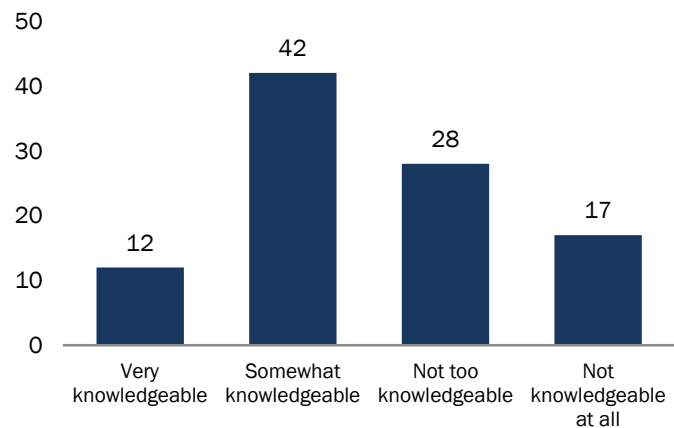
In this survey, participants were asked to report on how knowledgeable they felt about the debate surrounding “government programs aimed at collecting information about people’s calls, emails and other online communication.”

Some 54% of adults reported that they felt very or somewhat knowledgeable about the government surveillance programs and 45% said they felt they had little or no knowledge of this topic.

Compared with someone who did not feel that they had any knowledge about the topic, those who described themselves as “very knowledgeable” were 2.68 times more likely to join a conversation at a public meeting, 3.19 times more likely in the workplace, 2.01 times more likely with friends at a restaurant, 1.79 times more likely over dinner with family, and 2.36 times more likely on Facebook (See Appendix, Table B).

The level of knowledge Americans felt they had about the debates surrounding government surveillance programs

% of internet users who give these answers



Source, Pew Research Center Internet Project Survey August 7-September 16, 2013. N=1,801 adults

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People’s awareness of the opinions of those around them: Those who use social media tend to be more aware of others’ views

The level of awareness that people have of other people’s opinions plays a significant role in how willing they are to share their opinions. It has long been established that when people are surrounded by those who are likely to disagree with their opinion, they are more likely to self-censor.

We examined the awareness that people felt they had about the opinions of family, friends, coworkers, and others about the Snowden-NSA story—and the degree to which people think these other connections agree or disagree with them. We find that people were most likely to say they were aware of others’ views when it involved a very close relationship, such as a spouse/partner or close friends. Fully 96% of those who are married or living with a partner believe they know their spouse’s/partner’s opinion on the topic of the government’s surveillance program.

For other kinds of relationships, though, there was more variance in respondents' answers.

- 96% of people who are married or living with a partner report that they know their partner's opinion.
- 88% of people reported knowing the opinions of their close friends.
- 87% of people feel they know the opinions of their family members.
- 80% of people who are employed reported knowing the opinions of their coworkers.
- 62% of people feel they know their neighbors' opinions on this issue.

The awareness that people have of the opinions of their followers on social media tends to be lower than for most other types of relationships.

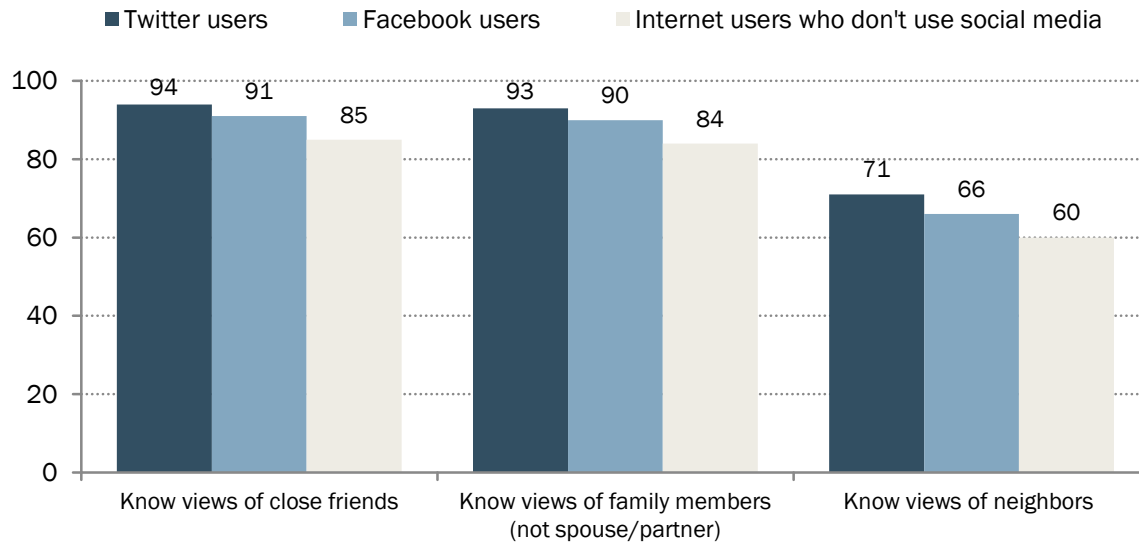
- Of Facebook users, 76% felt they knew the opinions of people in their network.
- Of Twitter users, 68% felt they knew the opinions of those who followed them.

Interestingly enough, social media users are more likely than others to report they are aware of the opinions of different people in their lives.

- 93% of Twitter users and 90% of Facebook users say they know the opinions of family members on the Snowden-NSA issue. This compares with 82% of non-internet users and 84% of internet users who do not use social media.
- 94% of Twitter users and 91% of Facebook users say they are aware of their close friends' opinions on the Snowden-NSA topic. This compares with 82% of non-internet users and 85% of internet users who do not use these social media sites.
- 66% of Facebook users, and 71% of Twitter users say they know their neighbors' opinions about the government's surveillance programs. This compares with 60% of internet users who are not social media users.

Social media users were more likely than other internet users to say they knew the views of those around them about the Snowden-NSA story

% who say they know the opinions of others



Source, Pew Research Center Internet Project Survey August 7-September 16, 2013. N=1,801 adults.

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The more social media platforms people use, the greater their awareness of opinions in their extended network. When asked to report on the opinions of the people in their Facebook network, 79% of Facebook users say they know the opinions of their Facebook friends. Of those who use Twitter and Facebook, 86% say they know the opinions of their Facebook friends.

One exception to the trend of internet users knowing more about those in their social networks is coworkers. Employed non-internet users tend to be a bit more aware of colleagues' opinions than internet users. Some 85% of employed non-internet users say they are aware of their coworkers' opinions, compared with 78% of internet users who do not use social media, 82% of Facebook users, and 84% of Twitter users who say they know the opinions of coworkers.

How much people think they agree with the views of family members, friends, and colleagues

A crucial issue affecting whether someone will be willing to discuss a controversial subject is the degree to which a speaker feels his or her views line up with their audience. Some research has found that people have a tendency to associate with those who share their opinions. That is, even though broad public opinion may be divided on an issue, people are more likely to believe that their acquaintances support their position on that issue. Some of this similarity is a result of homophily, the penchant for people to associate with people like themselves; some is a result of

the influence of opinion leaders; and some is a result of the tendency for people to assume more agreement than there is in reality.¹³

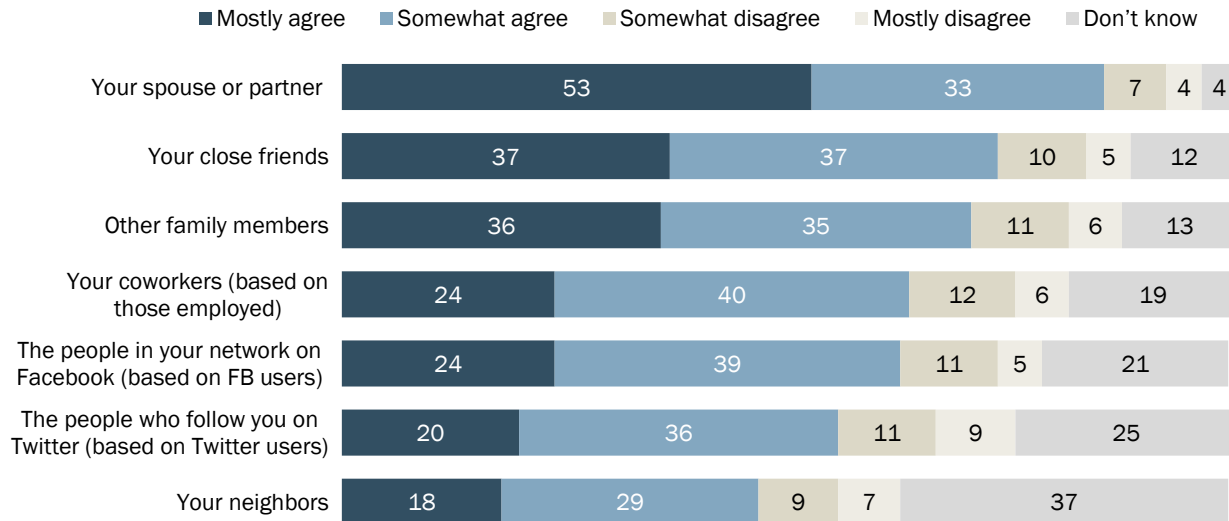
This survey shows that people have different notions about how much agreement they have with close family and friends, compared with associates that are less close, including those in their Facebook and Twitter networks. In addition, the more socially distant an audience is, the more likely it is that respondents did not know the views of their potential audience.

- 86% of those who are **married or living with a partner** believe their spouse's/partner's views "mostly" or "somewhat" agree with theirs about the Snowden-NSA revelations.
- 74% of all adults believe their **close friends** "mostly" or "somewhat" agree with their views about the Snowden-NSA revelations.
- 70% of all adults believe their **family members** "mostly" or "somewhat" agree with their views about the Snowden-NSA revelations. (This includes family members who are not a spouse or partner.)
- 64% of those who are employed think that their coworkers agree with their position on the government's surveillance program.
- 63% of **Facebook users** believe that the people in their Facebook network "mostly" or "somewhat" agree with their views about the Snowden-NSA revelations.
- 56% of **Twitter users** believe that the people who follow them on Twitter "mostly" or "somewhat" agree with their views.
- 47% of all adults believe their **neighbors** "mostly" or "somewhat" agree with their views.

¹³ Goel, S., W. Mason, et al. (2010). "Real and Perceived Attitude Agreement in Social Networks." *Journal of Personality and Social Psychology* 99(4): 611-621.

To what extent do you think others agree with your views about the Snowden-NSA revelations?

% of population who say various people agree or disagree with their views



Source, Pew Research Center Internet Project Survey August 7-September 16, 2013. N=1,801 adults

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Facebook users were more likely to feel that friends, family and acquaintances share their opinion. Regression analysis was used to control for demographic characteristics, interest in the topic, knowledge of the topic, strength of opinion on this issue, and social media use when predicting agreement with different types of acquaintances. We find that Facebook use is related to perceived agreement with the opinions of friends, family, and other acquaintances (See Appendix, Table C). Users who contribute content and read other people's content on Facebook are more likely to believe that other people agree with their opinions.

- Someone who frequently uses the "like button" on Facebook content contributed by other Facebook users (they use it a few times per day) is 1.88 times more likely to feel that their family members share their views, and they are 1.72 times more likely to feel they share the opinions of people in their Facebook network, when compared to those who do not use the like button.
- Someone who updates their status on Facebook a half dozen times per month, compared to someone who does not update at all, is 1.10 times more likely to feel they share the opinions of family members, and 1.13 times more likely to share the opinions of their close friends.

It is not immediately clear from our study why Facebook activities are related to perceptions of higher levels of agreement with Facebook friends. Two possible explanations are related to “cyberbalkanization.”¹⁴ Facebook friendship networks may be more likely to consist of similar people, or their opinions may become more similar over time. However, we expect that a third option is most likely. Reading content contributed by other users, actively clicking the like button, as well as receiving feedback in response to status updates, provides for enhanced observation of others and confirmatory feedback from friends and family. In addition to people choosing to associate with people on Facebook who are similar to them, Facebook makes people more aware of existing opinion similarity.

The spiral of silence persists online and offline: People are less likely to speak when they think their audiences disagree with them

In many settings, it is not well understood how much people self-censor in response to such social pressures. Some early research has shown that the rate of self-censorship on Facebook is very high. One study found that people on Facebook start to write, but ultimately fail to share, 33% of posts and 13% of comments.¹⁵ This self-censorship has been described as a response to “context collapse”¹⁶—that is, people deciding not to share content that is of personal interest, but is unlikely to appeal to a social media audience that focuses on narrow topics.

However, there is another possibility. Some self-censorship might be the result of feeling that social media followers are likely to object or disagree with their opinion. In other words, a user might know the content is relevant to some followers, but decide not to share it on social media for fear of inviting disagreement among their followers.

- At work, those who felt their coworkers agreed with their opinion were 2.92 times more likely to say they would join a conversation on the Snowden-NSA topic than for those who did not feel they would agree with their coworkers’ opinion on the government’s surveillance program.
- At a family dinner, those who felt that family members agreed with their opinion were 1.90 times more likely to speak out about Snowden-NSA issue.
- At a restaurant with friends, those who felt that their close friends agreed with their opinion were 1.42 times more likely to share their opinions.
- On Facebook, if the person felt that people in their Facebook network agreed with their position on this issue, they were 1.91 times more likely to join a conversation about Snowden-NSA.

However, the social pressure from some types of relationships carried across multiple settings. For example, when at a restaurant with friends, people’s willingness to speak out was tied to the

¹⁴ Sunstein, C. R. (2001). [Republic.com](http://www.Republic.com). Princeton, N.J., Princeton University Press.

¹⁵ Das, S. and A. Kramer (2013). "Self-censorship on Facebook." *Proc. of ICWSM 2013*: 120-127.

¹⁶ Marwick, A. E. and d. boyd (2010). "I Tweet Honestly, I Tweet Passionately: Twitter Users, Context Collapse, and the Imagined Audience." *New Media & Society* 13(1): 114-133.

opinions of their family members. That might possibly be the case because close friends and family tend to have similar opinions. Or it might be the case because a meal with friends at a restaurant may include family. Additionally, it might be the case because people felt they knew they had supportive family members kind of “standing by” them. Whatever the reason, those who had family that shared their opinions were 1.42 times more likely to join a conversation about this issue at a restaurant with friends, even when friends did not agree.

When social media followers disagree, people are more likely to self-censor offline

In some offline settings, we found that when compared to non-internet users, online Americans in general were more willing to join a conversation about the Snowden-NSA story. An internet user was 2.41 times more likely to be willing to have a conversation at work, and 1.49 times more likely to have a conversation with family about the government’s surveillance program. A typical LinkedIn user, who accesses the site a half dozen times per month, was 1.20 times more likely to discuss this political issue in a restaurant with friends than other internet users or non-internet users.

However, we found many more examples to suggest that social media use is associated with a lower likelihood that people would have a conversation on a political issue in physical settings. When controlling for demographic traits such as gender, age, race, educational attainment, and marital status, as well as variation in interest, opinion strength, knowledge, and other sources of information exposure we found:

Facebook users were less willing to discuss the government’s surveillance program at a public meeting. Someone who uses Facebook several times per day is 0.53 times less likely to be willing to discuss the Snowden-NSA topic at a public meeting than someone who does not use the Facebook platform at all.

Instagram users were less likely to say they would discuss the government’s surveillance program at a family dinner or at a restaurant with friends. A typical Instagram user (who uses the platform several times per day) is 0.49 times less likely to be willing to join a conversation about the government’s surveillance program with family at dinner, and 0.44 times less likely with friends at a restaurant, than for people who do not use Instagram.

It is not completely clear why some users of social media would be less willing to share an opinion in physical settings. However, since we have controlled for demographic differences, and variation in interest, opinion strength, knowledge, and other sources of information exposure, it is possible that this heightened self-censorship might be tied to social media users’ greater awareness of the opinions of others in their network (on this and other topics). Thus, they could be more aware of views that oppose their own.

If their use of social media gives them broader exposure to the views of friends, family, and workmates, this might increase the likelihood that people will choose to withhold their opinion because they know more about the people who will object to it.

There are two additional examples from our data that most clearly demonstrate this relationship.

Twitter users were less willing to engage in a conversation in the workplace, especially if they felt those following them on Twitter did not agree with their opinion on the government’s surveillance program. A typical Twitter user, who uses the platform several times per day, was 0.24 times less likely to be willing to join a conversation on the Snowden-NSA story at work than other internet users. However, if they felt their Twitter followers agreed with their opinion, then they were only 0.69 times less likely to be willing to engage in a discussion at work. This relationship was in addition to the lower likelihood that someone would speak out at work if they felt their coworkers did not share their opinions.

Facebook users and those who do not feel their Facebook friends agree with their opinion were less willing to engage in an in-person discussion with friends on this issue. A typical Facebook user, someone who accesses the platform several times per day, is 0.53 times less likely to be willing to discuss the government’s surveillance program with friends at a restaurant than those who do not use Facebook. If they feel that people in their Facebook network agree with their opinion, they are only 0.74 times less likely to discuss this topic in-person with friends when compared with those who do not use Facebook at all. This relationship is in addition to the lower likelihood that people have of speaking out when at a restaurant if they do not believe their close friends agree with their opinion. Facebook likely increases awareness of the diversity of opinions in people’s friendship network beyond their closest friends. This awareness reduces certainty in the similarity of opinions between friends and increases the fear of isolation or ostracism that might result from sharing a divergent point of view.

Social media use does encourage more discussion among some groups

While social media use may be linked to a muting effect on discussions of political issues in some physical settings, for some it is associated with new opportunities for discussion.

Unsurprisingly, the heaviest users of Facebook, in terms of frequency of commenting and private messaging, were also those who were most likely to be willing to discuss the government’s surveillance program on the Facebook platform. However, for all but the most intensive users, the relationship to discussing political issues is relatively small. Someone who comments on other people’s Facebook statuses, photos, links, and other content about twice per week was only 1.04 times more likely to be willing to discuss the Snowden-NSA story on Facebook in comparison with someone who does none of these things.

One type of social media use was associated with a lower level of willingness to join a conversation about public affairs on Facebook. Possibly as a result of the diversity they observed through images contributed to Instagram, Instagram users were less willing than other Facebook users to use the Facebook platform to discuss the government’s surveillance program. A typical Instagram user, someone who uses the platform several times per day, was 0.49 times less likely to be willing to discuss the government’s surveillance program on Facebook.

There are some indications that Facebook may democratize discussion of political issues in at least some respects. Unlike many physical settings, on Facebook, those with fewer years of formal

education were the most likely to speak up about an important political issue. When discussing political issues with friends at a restaurant, and family over dinner, it is those with the most education who are most willing to join in on a conversation. The opposite is true on Facebook. Those with the most years of formal education are more likely to fall silent when discussing the Snowden-NSA issue. Someone with only a high school diploma was 1.34 times less likely to be willing to join a conversation on Facebook about the government's surveillance program when compared to someone with an undergraduate university degree. Similarly, on Facebook, women are as likely as men to feel comfortable discussing an important political issue. This contrasts with discussions at community meetings and at work where women tend to feel less comfortable discussing a political issue such as the government's surveillance program.

Appendix: Regressions

Table A: Likelihood of getting information from news sources—logistic regression

	Newspaper (N=1763)	Radio & TV (N=1763)
Independent Variables	Odds Ratio	Odds Ratio
Constant	0.073***	0.092***
Demographics		
Female	0.839	0.780
Age	1.024***	1.033***
Education	1.064**	1.053
Married or living with a partner	1.324**	1.614***
Black/African-American	1.219	0.803
Media Use		
Internet user	0.958	1.634**
Cell phone user	0.722	1.400
Internet Activities		
Facebook visits per month (0-90)	0.996	1.002
LinkedIn visits per month (0-90)	0.996	0.982**
Twitter visits per month (0-90)	1.003	1.009*
Instagram visits per month (0-90)	1.000	1.010**
Pinterest visits per month (0-90)	1.001	0.990*
Facebook Activities		
Number of Facebook friends	1.000	1.000
Status update per month (0-90)	0.998	0.995
'Like' per month (0-90)	1.003	0.998
Comment per month (0-90)	1.002	0.997
Sending message per month (0-90)	1.002	1.002
Other variables		
Interest in this topic (0-3)	1.287***	1.643***
R-squared (Nagelkerke)	0.099***	0.178***

Notes: N is smaller than 1801 (total sample size) because some respondents did not answer questions about their demographics or media use.

*p<.05 **p<.01 ***p<.001

Table B: Likelihood of being willing to join a conversation about the government surveillance program in various contexts—logistic regression

	Community Meeting (N=1763)	At Work (N=982)	With Friends (N=1763)	At Family Dinner (N=1763)	On Facebook (N=948)
Independent Variables	Odds Ratio	Odds Ratio	Odds Ratio	Odds Ratio	Odds Ratio
Constant	0.457	0.168**	0.333*	0.151***	0.459
Demographics					
Female	0.695**	0.664**	0.806	1.079	0.801
Age	1.002	0.999	0.986***	0.996	0.992
Education	0.976	0.992	1.102***	1.081**	0.929*
Married or living with a partner	1.257*	1.455*	1.070	1.097	1.158
Black/African-American	0.909	0.720	0.873	0.769	1.185
Government Surveillance Topic					
Interest in this topic (0-3)	1.211***	1.099	1.382***	1.422***	1.052
Knowledge of this topic (0-3)	1.390***	1.472***	1.262**	1.215*	1.331**
Strong opinion on this topic	1.560***	1.112	1.227	1.353*	2.397***
Source of Information					
Newspaper (0-3)	1.114	1.137	1.002	0.971	1.148
Radio & TV (0-3)	0.999	1.067	1.025	1.166*	0.858*
Friends & family (0-3)	1.101	1.135	1.151*	1.167*	0.992
Facebook (0-3)	1.106	0.761**	0.984	0.873	1.272**
Twitter (0-3)	0.692*	0.948	0.714	0.956	1.192
Other online source (0-3)	1.123	0.956	1.000	1.111	1.059
Media Use					
Internet user	1.290	2.414**	1.269	1.485*	-
Cell phone user	0.844	1.278	0.717	0.840	1.502
Internet Activities					
Facebook visits per month (0-90)	0.993**	0.998	0.993**	1.000	1.001
LinkedIn visits per month (0-90)	1.010	1.013	1.030*	1.001	0.990
Twitter visits per month (0-90)	0.995	0.985**	1.005	1.000	0.991
Instagram visits per month (0-90)	0.996	1.005	0.991**	0.992*	0.992*
Pinterest visits per month (0-90)	1.005	1.011	1.007	1.011	1.004

Table B. (Cont.)

	Community Meeting (N=1763)	At Work (N=982)	With Friends (N=1763)	At Family Dinner (N=1763)	On Facebook (N=948)
Independent Variables	Odds Ratio	Odds Ratio	Odds Ratio	Odds Ratio	Odds Ratio
Facebook Activities					
Number of Facebook friends	1.000	1.000	1.000	1.000	1.000
Status update per month (0-90)	1.007	1.002	1.004	0.993	1.009
'Like' per month (0-90)	1.003	1.000	1.001	1.005	0.999
Comment per month (0-90)	1.001	1.003	1.003	0.997	1.007*
Sending messages per month (0-90)	1.001	0.996	0.999	1.003	1.007*
Perceived Opinion Congruence (Agree = 1)					
Family members	1.291	1.283	1.418*	1.898***	0.880
Friends	1.307	0.854	1.417*	1.182	0.662
Coworkers	1.074	2.916***	0.990	1.013	1.188
Neighbors	1.220	0.781	1.063	0.909	1.184
Facebook friends	1.167	1.095	1.390*	0.876	1.911***
Twitter followers	1.480	2.805**	0.986	1.518	1.686
R-squared (Nagelkerke)	0.195***	0.210***	0.209***	0.230***	0.232***

Notes: N is smaller than 1801 (total sample size) because some respondents did not answer questions about their demographics or media use; the analysis for at work is limited to participants who reported having a full or part-time job; the analysis of Facebook is limited to participants who use Facebook.

*p<.05 **p<.01 ***p<.001

**Table C: Likelihood of perceiving opinion congruence in various contexts—
logistic regression**

	Spouse (N=999)	Family Members (N=1763)	Friends (N=1763)	Co-Workers (N=982)	Neighbors (N=1417)	Facebook (N=948)
Independent Variables	Odds Ratio	Odds Ratio	Odds Ratio	Odds Ratio	Odds Ratio	Odds Ratio
Constant	2.175	1.308	1.022	2.095	1.348	1.460
Demographics						
Female	0.705	0.916	0.741**	0.601***	0.835	0.992
Age	0.999	0.990**	0.990**	0.990	0.983***	0.975***
Education	1.006	1.023	1.041	0.977	0.997	0.984
Married or living with a partner	-	1.110	1.115	1.092	1.368**	1.092
Black/African-American	0.297***	0.675*	0.788	0.974	1.436*	0.956
Government Surveillance Topic						
Interest in this topic (0-3)	1.002	1.097	1.213***	1.154*	1.096	1.119
Knowledge of this topic (0-3)	1.275*	1.221**	1.153*	1.031	1.019	1.043
Strong opinion on this topic (0-1)	1.973**	1.455***	1.342*	1.478**	1.216	1.215
Media Use						
Internet user	1.596	1.203	1.399*	1.443	1.144	-
Cell phone user	1.287	0.881	1.023	0.840	0.806	1.905*
Internet Activities						
Facebook visits per month (0-90)	1.001	0.998	0.998	0.996	0.996	1.002
LinkedIn visits per month (0-90)	1.005	1.001	1.003	0.989	0.986*	0.999
Twitter visits per month (0-90)	1.009	0.999	1.005	1.002	1.000	0.997
Instagram visits per month (0-90)	0.992	1.000	1.001	0.997	1.003	1.001
Pinterest visits per month (0-90)	1.001	0.999	0.998	1.004	1.004	0.994
Facebook Activities						
Number of Facebook friends	1.000	1.000	1.000	1.000*	1.000	1.000
Status update per month (0-90)	1.036	1.016*	1.020**	0.996	1.001	1.008
'Like' per month (0-90)	1.004	1.007*	1.002	1.005	1.003	1.006*
Comment per month (0-90)	0.994	0.997	0.997	0.996	0.997	0.994
Sending messages per month (0-90)	1.002	1.004	1.002	1.005	1.004	1.006
R-squared (Nagelkerke)	0.125***	0.081***	0.109***	0.074***	0.067***	0.108***

Notes: N is smaller than 1801 (total sample size) because some respondents did not answer questions about their demographics or media use; the analysis of co-workers is limited to participants who reported having a full or part-time job; the analysis of Facebook is limited to participants who use Facebook.

*p<.05 **p<.01 ***p<.001

Survey questions

August Tracking 2013 / Facebook Survey

Final Topline

9/18/2013

Data for August 7-September 16, 2013

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

Sample: n=1,801 national adults, age 18 and older, including 900 cell phone interviews
Interviewing dates: 08.07.2013—09.16.2013

Margin of error is plus or minus 2.6 percentage points for results based on Total [n=1,801]
Margin of error is plus or minus 2.9 percentage points for results based on all internet users [n=1,445]
Margin of error is plus or minus 2.7 percentage points for results based on all cell phone owners [n=1,636]
Margin of error is plus or minus 3.3 percentage points for results based on all SNS or Twitter users [n=1,076]
Margin of error is plus or minus 3.5 percentage points for results based on Facebook users [n=960]
Margin of error is plus or minus 7.2 percentage points for results based on Twitter users [n=223]

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

INTMOB Do you access the internet on a cell phone, tablet or other mobile handheld device, at least occasionally?¹⁷

	USES INTERNET	DOES NOT USE INTERNET
Current	80	20
May 2013	85	15
December 2012 ⁱ	81	19
November 2012 ⁱⁱ	85	15
September 2012	81	19
August 2012 ⁱⁱⁱ	85	15
April 2012	82	18
February 2012	80	20
	USES INTERNET	DOES NOT USE INTERNET

¹⁷ The definition of an internet user varies from survey to survey. Prior to January 2005, internet users were defined as those who said yes to “Do you ever go online to access the Internet or World Wide Web or to send and receive email?” From January 2005 thru February 2012, an internet user is someone said yes to either “Do you use the internet, at least occasionally?” (INTUSE) OR “Do you send or receive email, at least occasionally?” (EMLOCC). From April 2012 thru December 2012, an internet user is someone said yes to any of three questions: INTUSE, EMLOCC or “Do you access the internet on a cell phone, tablet or other mobile handheld device, at least occasionally?” (INTMOB). In May 2013, half the sample was asked INTUSE/EMLOCC/INTMOB and half was asked EMINUSE/INTMOB. Those May 2013 trend results are for both forms combined.

December 2011	82	18
August 2011	78	22
May 2011	78	22
January 2011 ^{iv}	79	21
December 2010 ^v	77	23
November 2010 ^{vi}	74	26
September 2010	74	26
May 2010	79	21
January 2010 ^{vii}	75	25
December 2009 ^{viii}	74	26
September 2009	77	23
April 2009	79	21
December 2008	74	26
November 2008 ^{ix}	74	26
August 2008 ^x	75	25
July 2008 ^{xi}	77	23
May 2008 ^{xii}	73	27
April 2008 ^{xiii}	73	27
January 2008 ^{xiv}	70	30
December 2007 ^{xv}	75	25
September 2007 ^{xvi}	73	27
February 2007 ^{xvii}	71	29
December 2006 ^{xviii}	70	30
November 2006 ^{xix}	68	32
August 2006 ^{xx}	70	30
April 2006 ^{xxi}	73	27
February 2006 ^{xxii}	73	27
December 2005 ^{xxiii}	66	34
September 2005 ^{xxiv}	72	28
June 2005 ^{xxv}	68	32
February 2005 ^{xxvi}	67	33
January 2005 ^{xxvii}	66	34
Nov 23-30, 2004 ^{xxviii}	59	41
November 2004 ^{xxix}	61	39
July 2004 ^{xxx}	67	33
June 2004 ^{xxxi}	63	37
March 2004 ^{xxxii}	69	31
February 2004 ^{xxxiii}	63	37
November 2003 ^{xxxiv}	64	36
August 2003 ^{xxxv}	63	37
June 2003 ^{xxxvi}	62	38
May 2003 ^{xxxvii}	63	37
March 3-11, 2003 ^{xxxviii}	62	38
February 2003 ^{xxxix}	64	36
December 2002 ^{xl}	57	43
November 2002 ^{xli}	61	39
October 2002 ^{xlii}	59	41

September 2002 ^{xliii}	61	39
July 2002 ^{xliv}	59	41
March/May 2002 ^{xlv}	58	42
January 2002 ^{xlvi}	61	39
December 2001 ^{xlvii}	58	42
November 2001 ^{xlviii}	58	42
October 2001 ^{xlix}	56	44
September 2001 ^l	55	45
August 2001 ^{li}	59	41
February 2001 ^{lii}	53	47
December 2000 ^{liii}	59	41
November 2000 ^{liv}	53	47
October 2000 ^{lv}	52	48
September 2000 ^{lvi}	50	50
August 2000 ^{lvii}	49	51
June 2000 ^{lviii}	47	53
May 2000 ^{lix}	48	52

WEB1-A 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 ITEM; RANDOMIZE; ALWAYS ASK ABOUT FACEBOOK LAST]?¹⁸

Based on all internet users [N=1,445]

	TOTAL HAVE EVER DONE THIS	----- DID YESTERDAY	HAVE NOT DONE THIS	DON'T KNOW	REFUSED
Use Twitter					
Current	18	n/a	82	*	0
May 2013	18	n/a	82	*	*
December 2012	16	n/a	84	*	*
August 2012	16	n/a	84	*	0
February 2012	15	8	85	*	0
August 2011	12	5	88	*	0
May 2011	13	4	87	*	0
January 2011	10	n/a	90	*	*
December 2010	12	n/a	88	*	0
November 2010	8	2	92	0	*
Current	58	n/a	42	*	*
July 2008	46	n/a	54	*	--
August 2006	37	5	63	*	--

¹⁸ 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...[ITEM]?" Unless otherwise noted, trends are based on all internet users for that survey.

Use Instagram

Current	17	n/a	82	*	0
December 2012	13	n/a	87	*	0
August 2-5, 2012 ^{ix}	12	n/a	88	1	0

Use Pinterest

Current	21	n/a	77	2	*
December 2012	15	n/a	83	2	0
August 2-5, 2012	12	n/a	87	1	*

Use LinkedIn

Current	22	n/a	77	1	*
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Use Facebook¹⁹

Current	71	n/a	29	0	0
December 13-16, 2012 ^{ixi}	67	n/a	33	0	*

Q5 Recently, a government program with the aim of collecting information about people's telephone calls, emails and other online communications has been in the news. How interested are you, if at all, in this topic? [READ]

Current	
%	26
	Very interested
	34
	Somewhat interested
	19
	Not too interested
	20
	Not interested at all
	1
	(VOL.) Don't know
	*
	(VOL.) Refused

Q6 Overall, how KNOWLEDGEABLE would you say you are about the debate surrounding these government programs aimed at collecting information about people's calls, emails and other online communications? Would you say you are... [READ]

Current	
%	12
	Very knowledgeable
	42
	Somewhat knowledgeable
	28
	Not too knowledgeable
	17
	Not knowledgeable at all
	*
	(VOL.) Don't know
	*
	(VOL.) Refused

¹⁹ December 13-16, 2012 trend was asked of all internet users as a standalone question: "Do you ever use Facebook?"

Q7 How much information, if any, have you gotten about this debate from the following sources? (First,/Next,) how about from [INSERT ITEMS IN ORDER]?

[READ AS NECESSARY: Have you gotten a lot, some, a little, or no information about this debate from (ITEM)?]

	A LOT	SOME	A LITTLE	NONE AT ALL	DON'T KNOW	REFUSED
a. Your local print newspaper	6	14	19	60	1	*
b. TV and radio	31	27	19	22	*	*
c. Friends and family	9	22	25	42	1	*
<i>Item D: Based on Facebook users [N=960]</i>						
d. Facebook	10	16	19	54	*	*
<i>Item E: Based on Twitter users [N=223]</i>						
e. Twitter	9	13	13	65	0	0
<i>Item F: Based on all internet users [N=1,445]</i>						
f. Online news sources other than Facebook or Twitter	22	21	12	44	*	*

Q8 Thinking about the debate over the U.S. government's surveillance programs... Do you FAVOR or OPPOSE a government program to collect nearly all communications in the U.S. as part of anti-terrorism efforts?

[IF FAVOR/OPPOSE, PROBE:] Do you strongly (favor/oppose) or only somewhat (favor/oppose) these programs?

	Current	
%	13	Strongly favor
	24	Somewhat favor
	22	Somewhat oppose
	30	Strongly oppose
	7	Don't know
	3	Refused

- Q9** If the topic of the government's surveillance programs came up [INSERT FIRST ITEM; RANDOMIZE], would you be very willing, somewhat willing, somewhat unwilling, or very unwilling to join in the conversation?

What if this topic came up...[INSERT NEXT ITEM]? [READ AS NECESSARY: Would you be very willing, somewhat willing, somewhat unwilling, or very unwilling to join in the conversation?]

	VERY WILLING	SOME-WHAT WILLING	SOME-WHAT UNWILLING	VERY UNWILLING	DON'T KNOW	REFUSED
a. At a community meeting	26	39	16	16	2	1
<i>Item B: Based on those employed full or part-time [N=1015]</i>						
b. At work	26	38	15	18	1	1
c. At a restaurant with friends	32	38	14	14	1	1
d. At a family dinner	39	34	12	12	1	1
<i>Item E: Based on Facebook users [N=960]</i>						
e. On Facebook	15	26	23	34	1	*
<i>Item F: Based on Twitter users [N=223]</i>						
f. On Twitter	14	26	18	38	1	2

- Q10** Still thinking about the current debate about the government's surveillance programs... To what extent do you think [INSERT ITEMS IN ORDER] agree with your views about this issue? Do you think they mostly agree, somewhat agree, somewhat disagree, or mostly disagree with your views?

How about [INSERT NEXT ITEM]? [READ AS NECESSARY: Do you think they mostly agree, somewhat agree, somewhat disagree, or mostly disagree with your views?]

	MOSTLY AGREE	SOMEWHAT AGREE	SOMEWHAT DISAGREE	MOSTLY DISAGREE	(VOL.) DOESN'T APPLY	DON'T KNOW	REFUSED
<i>Item A: Based on those who are married or living with a partner [N=1,017]</i>							

a. Your spouse or partner	53	32	7	4	*	3	1
b. Other family members	35	34	11	6	*	13	2
c. Your close friends	36	36	9	4	1	12	2
<i>Item D: Based on those employed full or part-time [N=1015]</i>							
d. Your coworkers	20	29	9	5	19	15	3
e. Your neighbors	17	27	9	6	2	35	3
<i>Item F: Based on Facebook users [N=960]</i>							
f. The people in your network on Facebook	22	38	10	5	1	20	3
<i>Item G: Based on Twitter users [N=223]</i>							
g. The people who follow you on Twitter	18	32	10	8	9	22	1

Methods

This report is based on the findings of a Pew Research Center 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 August 7 to September 16, 2013, among a sample of 1,801 adults, age 18 and older. Telephone interviews were conducted in English and Spanish by landline (901) and cell phone (900, including 482 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 2.6 percentage points. For results based on Internet users²⁰ (n=1,445), the margin of sampling error is plus or minus 2.9 percentage points, and for those on Facebook or Twitter (n=1,076), plus or minus 3.3 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 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 drawn with equal probabilities 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 seven 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 corrected for different probabilities of selection associated with

²⁰ Internet user definition includes those who use the internet or email at least occasionally or access the internet on a mobile handheld device at least occasionally.

the number of adults in each household and each respondent's telephone usage patterns.²¹ This weighting also adjusts for the overlapping landline and cell sample frames and the relative sizes of each frame and each sample.

The second stage of weighting balances sample demographics to population parameters. The sample is balanced to match national population parameters for sex, age, education, race, Hispanic origin, region (U.S. Census definitions), population density, and telephone usage. The Hispanic origin was split out based on nativity; U.S. born and non-U.S. born. The White, non-Hispanic subgroup was also balanced on age, education and region. The basic weighting parameters came from the US Census Bureau's 2011 American Community Survey data.²² The population density parameter was derived from Census 2010 data. The telephone usage parameter came from an analysis of the July-December 2012 National Health Interview Survey.²³

Following is the full disposition of all sampled telephone numbers:

Sample Disposition

Landline	Cell	
40,985	27,000	Total Numbers Dialed
1,669	346	Non-residential
1,458	94	Computer/Fax
15	---	Cell phone
24,589	10,375	Other not working
1,994	427	Additional projected not
11,260	15,758	Working numbers
27.5%	58.4%	Working Rate
665	142	No Answer / Busy
3,332	5,501	Voice Mail
27	16	Other Non-Contact
7,236	10,099	Contacted numbers
64.3%	64.1%	Contact Rate
328	1,793	Callback
5,898	6,776	Refusal
1,010	1,530	Cooperating numbers
14.0%	15.2%	Cooperation Rate

²¹ i.e., whether respondents have only a landline telephone, only a cell phone, or both kinds of telephone.

²² ACS analysis was based on all adults excluding those living in institutional group quarters (GCs).

²³Blumberg SJ, Luke JV. Wireless substitution: Early release of estimates from the National Health Interview Survey, July-December, 2012. National Center for Health Statistics. June 2013.

53	67	Language Barrier
----	540	Child's cell phone
957	923	Eligible numbers
94.8%	60.3%	Eligibility Rate
56	22	Break-off
901	901	Completes
94.1%	97.6%	Completion Rate
8.4%	9.5%	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 8 percent. The response rate for the cellular sample was 10 percent.

REFERENCES

- Boczkowski, P. and E. Mitchelstein (2013). The news gap : when the information preferences of the media and the public diverge. Cambridge, MIT Press.
- Das, S. and A. Kramer (2013). "Self-censorship on Facebook." Proc. of ICWSM 2013: 120-127.
- Goel, S., W. Mason, et al. (2010). "Real and Perceived Attitude Agreement in Social Networks." Journal of Personality and Social Psychology **99**(4): 611-621.
- Jacobs, L. R., F. L. Cook, et al. (2009). Talking Together: Public Deliberation and Political Participation in America. Chicago, University of Chicago Press.
- Marwick, A. E. and d. boyd (2010). "I Tweet Honestly, I Tweet Passionately: Twitter Users, Context Collapse, and the Imagined Audience." New Media & Society **13**(1): 114-133.
- Mitchell, A., J. Holcomb, et al. (2013). News Use across Social Media Platforms. Washington, Pew Research Center.
- Noelle-Neumann, E. (1974). "The Spiral of Silence A Theory of Public Opinion." Journal of Communication **24**(2): 43-51.
- Oshagan, H. (1996). "Reference Group Influence on Public Expression." International Journal of Public Opinion Research **8**(4): 335-354.
- Sunstein, C. R. (2001). Republic.com. Princeton, N.J., Princeton University Press.
- Wyatt, R. O., E. Katz, et al. (2000). "Bridging the Spheres: Political and Personal Conversation in Public and Private Spaces." Journal of Communication **50**(1): 71-92.
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- ⁱ December 2012 trends based on the 2012 Post-Election Tracking Survey, conducted November 14–December 9, 2012 [N=2,261, including 908 cell phone interviews].
- ⁱⁱ November 2012 trends based on the Gates Library Services Survey, conducted October 15 – November 10, 2012 among those age **16 or older** [N=2,252, including 1,125 cell phone interviews].
- ⁱⁱⁱ August 2012 trends based on the “Civic Engagement Tracking Survey” conducted July 16–August 7, 2012 [N=2,253, including 900 cell phone interviews].
- ^{iv} January 2011 trends based on the Pew Internet Project/Project for Excellence in Journalism/Knight Foundation “Local News survey,” conducted January 12-25, 2011 [N=2,251, including 750 cell phone interviews].
- ^v December 2010 trends based on the Social Side of the Internet survey, conducted November 23–December 21, 2010 [N=2,303, including 748 cell phone interviews].
- ^{vi} November 2010 trends based on the Post-Election Tracking Survey 2010, conducted November 3-24, 2010 [N=2,257, including 755 cell phone interviews].

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- vii January 2010 trends based on the Online News survey, conducted December 28, 2009 – January 19, 2010 [N=2,259, including 562 cell phone interviews].
- viii December 2009 trends based on the Fall Tracking “E-Government” survey, conducted November 30 – December 27, 2009 [N=2,258, including 565 cell phone interviews].
- ix November 2008 trends based on the Post-Election 2008 Tracking survey, conducted November 20–December 4, 2008 [N=2,254].
- x August 2008 trends based on the August Tracking 2008 survey, conducted August 12–31, 2008 [N=2,251].
- xi July 2008 trends based on the Personal Networks and Community survey, conducted July 9–August 10, 2008 [N=2,512, including 505 cell phone interviews].
- xii May 2008 trends based on the Spring Tracking 2008 survey, conducted April 8–May 11, 2008 [N=2,251].
- xiii April 2008 trends based on the Networked Workers survey, conducted March 27–April 14, 2008. Most questions were asked only of full- or part-time workers [N=1,000], but trend results shown here reflect the total sample [N=2,134].
- xiv January 2008 trends based on the Networked Families survey, conducted December 13, 2007–January 13, 2008 [N=2,252].
- xv December 2007 trends based on the Annual Gadgets survey, conducted October 24–December 2, 2007 [N=2,054, including 500 cell phone interviews].
- xvi September 2007 trends based on the Consumer Choice survey, conducted August 3–September 5, 2007 [N=2,400, oversample of 129 cell phone users].
- xvii February 2007 trends based on daily tracking survey conducted February 15–March 7, 2007 [N=2,200].
- xviii December 2006 trends based on daily tracking survey, conducted November 30 – December 30, 2006 [N=2,373].
- xix November 2006 trends based on Post-Election tracking survey, conducted Nov. 8–Dec. 4, 2006 [N=2,562]. This includes an RDD sample [N=2,362] and a cell phone only sample [N=200]. Results reflect combined samples, where applicable.
- xx August 2006 trends based on daily tracking survey, conducted August 1–31, 2006 [N=2,928].
- xxi April 2006 trends based on the Annual Gadgets survey, conducted Feb. 15–Apr. 6, 2006 [N=4,001].
- xxii February 2006 trends based on the Exploratorium Survey, conducted Jan. 9–Feb. 6, 2006 [N=2,000].
- xxiii December 2005 trends based on daily tracking survey conducted Nov. 29–Dec. 31, 2005 [N=3,011].
- xxiv September 2005 trends based on daily tracking survey conducted Sept. 14–Oct. 13, 2005 [N=2,251].
- xxv June 2005 trends based on the Spyware Survey, conducted May 4–June 7, 2005 [N=2,001].
- xxvi February 2005 trends based on daily tracking survey conducted Feb. 21–March 21, 2005 [N=2,201].
- xxvii January 2005 trends based on daily tracking survey conducted Jan. 13–Feb. 9, 2005 [N=2,201].
- xxviii November 23–30, 2004 trends based on the November 2004 Activity Tracking Survey, conducted November 23–30, 2004 [N=914].
- xxix November 2004 trends based on the November Post-Election Tracking Survey, conducted Nov 4–Nov 22, 2004 [N=2,200].
- xxx July 2004 trends based on the “Selective Exposure” survey, conducted June 14–July 3, 2004 [N=1,510].
- xxxi June 2004 trends based on daily tracking survey conducted May 14–June 17, 2004 [N=2,200].
- xxxii March 2004 trends based on “Weak Ties” survey conducted February 17–March 17, 2004 [N=2,200].
- xxxiii February 2004 trends based on daily tracking survey conducted February 3–March 1, 2004 [N=2,204].
- xxxiv November 2003 trends based on daily tracking survey conducted November 18–December 14, 2003 [N=2,013].
- xxxv August 2003 trends based on ‘E-Government’ survey conducted June 25–August 3, 2003 [N=2,925].
- xxxvi June 2003 trends based on ‘Internet Spam’ survey conducted June 10–24, 2003 [N=2,200].
- xxxvii May 2003 trends based on daily tracking survey conducted April 29–May 20, 2003 [N=1,632].
- xxxviii March 3–11, 2003 trends based on daily tracking survey conducted March 3–11, 2003 [N=743].
- xxxix February 2003 trends based on daily tracking survey conducted February 12–March 2, 2003 [N=1,611].
- xl December 2002 trends based on daily tracking survey conducted Nov. 25–Dec. 22, 2002 [N=2,038].
- xli November 2002 trends based on daily tracking survey conducted October 28–November 24, 2002 [N=2,745].
- liii October 2002 trends based on daily tracking survey conducted October 7–27, 2002 [N=1,677].

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- xliii September 2002 trends based on daily tracking survey conducted September 9-October 6, 2002 [N=2,092].
- xliv July 2002 trends based on 'Sept. 11th-The Impact Online' survey conducted June 26-July 26, 2002 [N=2,501].
- xliv March/May 2002 trends based on daily tracking surveys conducted March 1-31, 2002 and May 2-19, 2002.
- xlvi January 2002 trends based on a daily tracking survey conducted January 3-31, 2002.
- xlvii December 2001 trends represent a total tracking period of December 1-23, 2001 [N=3,214]. This tracking period based on daily tracking surveys conducted December 17-23, 2001 and November 19-December 16, 2001.
- xlviii November 2001 trends represent a total tracking period of November 1-30, 2001 [N=2,119]. This tracking period based on daily tracking surveys conducted October 19 – November 18, 2001 and November 19 – December 16, 2001.
- xlx October 2001 trends represent a total tracking period of October 1-31, 2001 [N=1,924]. This tracking period based on daily tracking surveys conducted September 20 – October 1, 2001, October 2-7, 2001, October 8-18, 2001, and October 19 – November 18, 2001.
- ¹ September 2001 trends represent a total tracking period of September 1-30, 2001 [N=742]. This tracking period based on daily tracking surveys conducted August 13-September 10, 2001, September 12-19, 2001 and September 20 – October 1, 2001.
- li August 2001 trends represent a total tracking period of August 13-31, 2001 [N=1,505]. This tracking period based on a daily tracking survey conducted August 13-September 10, 2001.
- lii February 2001 trends based on a daily tracking survey conducted February 1, 2001-March 1, 2001 [N=2,096].
- liii December 2000 trends based on a daily tracking survey conducted December 2-22, 2000 [N=2,383].
- liv November 2000 trends based on a daily tracking survey conducted November 2 – December 1, 2000 [N=6,321].
- lv October 2000 trends based on a daily tracking survey conducted October 2 – November 1, 2000 [N=3,336].
- lvi September 2000 trends based on a daily tracking survey conducted September 15 – October 1, 2000 [N=1,302].
- lvii August 2000 trends based on a daily tracking survey conducted July 24 – August 20, 2000 [N=2,109].
- lviii June 2000 trends based on a daily tracking survey conducted May 2 – June 30, 2000 [N=4,606].
- lix May 2000 trends based on a daily tracking survey conducted March 1 – May 1, 2000 [N=6,036].
- lx August 2-5, 2012 trends based on an omnibus survey conducted August 2-5, 2012 [N=1,005, including 405 cell phone interviews]. Omnibus survey not conducted as a tracking survey.
- lxi December 13-16, 2012 trends based on an omnibus survey conducted December 13-16, 2012 [N=1,006, including 405 cell phone interviews]. Omnibus survey not conducted as a tracking survey.