

Appendix A: Methodology

Sampling and Weighting

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 October 20 to November 28, 2010, among a sample of 2,255 adults, age 18 and older. Interviews were conducted in English. For results based on the total sample, one can say with 95% confidence that the error attributable to sampling is plus or minus 2.5 percentage points. For results based on internet users (n=1,787), the margin of sampling error is plus or minus 2.8 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. The final data also included callback interviews with respondents who had previously been interviewed for 2008 Personal Networks and Community survey. In total, 610 callback interviews were conducted – 499 from landline sample and 111 from cell sample.

A 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. The introduction and screening procedures differed depending on the sample segment. For the landline RDD sample, half of the time interviewers first asked to speak with the youngest adult male currently at home. If no male was at home at the time of the call, interviewers asked to speak with the youngest adult female. For the other half of the contacts interviewers first asked to speak with the youngest adult female currently at home. If no female was available, interviewers asked to speak with the youngest adult male at home. For the cellular RDD 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. For landline or cell callback sample, interviewers started by asking to talk with the person in the household who had previously completed a telephone interview in the 2008 survey. The person was identified by age and gender. 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 2009 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 July-December 2009 National Health Interview Survey.¹

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 17.3 percent. The response rate for the cellular sample was 19.9 percent.

Following is the full disposition of all sampled telephone numbers:

¹ Blumberg SJ, Luke JV. Wireless substitution: Early release of estimates from the National Health Interview Survey, July-December, 2009. National Center for Health Statistics. May 2010.

Table A1: Sample Disposition

Landline Fresh	Landline Callback	Landline Total	Cell Fresh	Cell Callback	Cell Total	
22057	1996	24053	12685	476	13299	T Total Numbers Dialed
1078	28	1106	198	6	204	OF Non-residential
959	19	978	32	0	32	OF Computer/Fax
12	1	13	0	0	0	OF Cell phone
9930	372	10302	4856	84	4940	OF Other not working
1331	37	1368	163	4	167	UH Additional projected not working
8747	1539	10286	7436	382	7957	Working numbers
39.7%	77.1%	42.8%	58.6%	80.3%	59.8%	Working Rate
444	12	456	54	1	56	UH No Answer / Busy
1874	222	2096	1780	71	1851	UO_{NC} Voice Mail
53	113	166	9	1	10	UO_{NC} Other Non-Contact
6376	1192	7568	5593	309	6040	Contacted numbers
72.9%	77.4%	73.6%	75.2%	80.8%	75.9%	Contact Rate
276	85	361	592	44	636	UO_R Callback
4774	585	5359	3631	140	3771	UO_R Refusal
1326	522	1848	1370	125	1633	Cooperating numbers
20.8%	43.8%	24.4%	24.5%	40.5%	27.0%	Cooperation Rate
263	15	278	262	11	273	IN1 Language Barrier
		0	447	1	448	IN2 Child's cell phone
1063	507	1570	661	113	912	Eligible numbers
80.2%	97.1%	85.0%	48.2%	90.4%	55.8%	Eligibility Rate
53	8	61	26	2	28	R Break-off
1010	499	1509	635	111	884	I Completes
95.0%	98.4%	96.1%	96.1%	98.2%	96.9%	Completion Rate
14.4%	33.4%	17.3%	17.7%	32.1%	19.9%	Response Rate

Analyses

In this report, we are trying to understand how technology and other factors are related to the size, diversity and character of people’s social networks. But we face a challenge. If we were simply to compare the social networks of people who are heavy users of technology with those who do not use technology, we would have no way of knowing whether any differences we observe were associated with demographic or other differences between these groups, rather than with their differing patterns of technology use. That’s because some demographic traits, such as more years of education, are associated with larger and more diverse social networks. And those with more formal education are also more likely to use technology.

To deal with this challenge, we use a statistical technique called regression analysis, which allows us to examine the relationship between technology use and network size while holding constant other factors such as education, age or gender. Thus, many of the results reported here are not shown as simple comparisons of the behavior of groups on our key measures, which is the typical approach of Pew Internet reports. Rather, the findings compare the social networks of people who use certain technologies with demographically similar people who do not use the technologies. For example, we use regression analysis to compare the average size of the social network of a demographically typical American who uses the internet and has a cell phone with an American who shares the same demographic characteristics but does not use the internet or a cell phone.

Another common type of analysis in the report estimates how much more likely a certain outcome is (such as having at least one person of a different race or ethnic group in a social network) for people who use certain technology compared with people who do not, all other things being equal. For example, holding demographic characteristics constant, the regression analysis finds that a person who blogs is nearly twice as likely as a demographically similar person (e.g., the same sex, age, education and marital status) who does not blog to have someone of a different race in their core discussion network.

As with all studies that use data collected at only one point in time, none of the results we report should be interpreted as explanations of cause and effect. We cannot say from these findings that internet and mobile-phone use cause people to have bigger, more diverse networks. We can and do say that technology use is often strongly associated with larger and more diverse social networks.

Appendix B: Additional Tables

Table B1: Average size of people’s overall social networks by use of different technologies.

Total Network Size	Sample	Internet User	Not an Internet User	Cell Phone User	SNS User	Mobile Internet User
Mean	634	669	506	664	636	717
SD	697	733	527	738	625	764
N (weighted)	2237	1754	483	1700	1037	684

Source: Pew Research Center’s Internet & American Life Social Network Site survey conducted on landline and cell phone between October 20-November 28, 2010. N for full sample 2,255 and margin of error is +/- 2.3 percentage points. N for Facebook users=877 and margin of error is +/- 3.6 percentage points.

Table B2: Average size of people’s overall social networks by use of social networking sites.

Total Network Size	MySpace	Facebook	LinkedIn	Twitter	Other SNS
Mean	694	648	786	838	737
SD	736	635	595	876	677
N (weighted)	304	947	181	138	98

Source: Pew Research Center’s Internet & American Life Social Network Site survey conducted on landline and cell phone between October 20-November 28, 2010. N for full sample 2,255 and margin of error is +/- 2.3 percentage points. N for Facebook users=877 and margin of error is +/- 3.6 percentage points.

Table B3: Size of core discussion networks: 2008 and 2010.

Size	Sample		Internet User		Not an Internet User		Cell Phone User		SNS User		Mobile Internet User	
	2008	2010	2008	2010	2008	2010	2008	2010	2008	2010	2008	2010
0	12.0	8.9	9.7	7.3	19.0	15.0	11.1	8.7	8.9	4.6		6.0
1	34.9	29.7	32.8	27.8	41.5	36.7	32.8	28.5	27.5	25.8		26.5
2	23.1	26.5	23.5	27.0	21.9	24.6	24.2	27.0	26.1	25.2		30.8
3	15.4	16.6	17.7	17.8	8.0	11.9	16.4	17.2	19.5	21.0		16.7
4	7.8	8.5	8.7	9.1	4.9	6.2	8.1	8.1	9.6	10.6		9.2
5	6.8	9.8	7.4	11.0	4.7	5.7	7.4	10.4	8.4	12.7		10.9
Mean	1.9	2.2	2.1	2.3	1.5	1.7	2.0	2.2	2.2	2.5		2.3
Mode	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		2.0
SD	1.4	1.4	1.4	1.4	1.0	1.3	1.4	1.4	1.4	1.4		1.4
N	2162	2006	1642	1577	520	429	1671	1532	495	947		631

Source: Pew Research Center’s Internet & American Life Social Network Site survey conducted on landline and cell phone between October 20-November 28, 2010. N for full sample 2,255 and margin of error is +/- 2.3 percentage points. N for Facebook users=877 and margin of error is +/- 3.6 percentage points.

Table B4: Diversity of total social network 2008 and 2010.

Network Diversity	Sample		Internet User		Not an Internet User		Cell Phone User		SNS User		Mobile Internet User	
	2008	2010	2008	2010	2008	2010	2008	2010	2008	2010	2008	2010
Mean	42.0	41.9	45.4	43.0	31.2	37.8	44.3	42.6	44.8	38.5		43.4
SD	24.1	22.6	23.1	22.0	24.0	24.4	23.3	22.3	22.4	20.0		21.5
N	2511	2250	1921	1767	590	483	2047	1712	652	1046		689

Source: Pew Research Center’s Internet & American Life Social Network Site survey conducted on landline and cell phone between October 20-November 28, 2010. N for full sample 2,255 and margin of error is +/- 2.3 percentage points. N for Facebook users=877 and margin of error is +/- 3.6 percentage points.

Table B5: Diversity of total social network 2008 and 2010.

Network Diversity	MySpace	Facebook	LinkedIn	Twitter	Other SNS
Mean	36.8	39.1	46.9	42.0	38.0
SD	19.3	20.1	18.7	21.9	21.5
N (weighted)	305	955	184	138	99

Source: Pew Research Center’s Internet & American Life Social Network Site survey conducted on landline and cell phone between October 20-November 28, 2010. N for full sample 2,255 and margin of error is +/- 2.3 percentage points. N for Facebook users=877 and margin of error is +/- 3.6 percentage points.

Table B6: Perspective taking (0-100) by technology use.

Perspective Taking	Sample	Internet User	Not an Internet User	Cell Phone User	SNS User	Mobile Internet User
Mean	63.8	63.6	64.4	63.9	63.1	62.9
Mode	71.4	71.4	71.4	71.4	71.4	60.7
SD	16.4	14.6	21.8	15.5	14.2	13.6
N (weighted)	2249	1769	480	1712	1048	689

Source: Pew Research Center’s Internet & American Life Social Network Site survey conducted on landline and cell phone between October 20-November 28, 2010. N for full sample 2,255 and margin of error is +/- 2.3 percentage points. N for Facebook users=877 and margin of error is +/- 3.6 percentage points.

Table B7: Social support (0-100) by technology use.

	Sample	Internet User	Not an Internet User	Cell Phone User	SNS User	Mobile Internet User
Total Social Support						
Mean	75.3	77.4	67.7	76.2	79.0	78.5
SD	20.3	18.8	23.5	19.6	17.2	18.2
N (weighted)	2252	1769	483	1714	1048	689
Emotional Support						
Mean	74.8	76.9	67.1	76.0	79.2	78.6
SD	21.8	20.3	25.0	21.0	18.0	19.5
N (weighted)	2252	1769	483	1714	1048	689
Tangible Support						
Mean	75.4	77.2	69.0	75.9	77.7	78.2
SD	25.3	23.8	29.2	24.7	23.1	23.0
N (weighted)	2252	1769	483	1713	1048	689
Companionship						
Mean	76.4	78.9	67.2	77.3	80.2	78.8
SD	22.8	21.0	26.5	22.4	20.0	21.2
N (weighted)	2251	1769	482	1714	1048	689

Source: Pew Research Center’s Internet & American Life Social Network Site survey conducted on landline and cell phone between October 20-November 28, 2010. N for full sample 2,255 and margin of error is +/- 2.3 percentage points. N for Facebook users=877 and margin of error is +/- 3.6 percentage points.

Appendix C: Regression Tables

Table C1: OLS Regression on total social network size (N=2166)

Independent Variables	Coefficient
Constant	498.983 ***
Demographics	
Female	-124.168 ***
Age	-1.354
Education	12.110 *
Married or living with a partner	-9.932
Black/African-American (compared with White)	-67.301
Other Race (compared with White)	-5.325
Hispanic	-82.250
Media Use	
Internet user	37.234
Cell phone user	72.654 *
Internet Activities	
MySpace visits per month (0-90)	-4.260
Facebook visits per month (0-90)	0.907
LinkedIn visits per month (0-90)	1.891
Twitter visits per month (0-90)	0.949
Other SNS visits per month (0-90)	2.281
Blogging	38.594
Sharing digital photos online	-32.051
Instant Messaging	85.093 *
R-squared (adjusted)	0.027***

Note: N is smaller than 2255 (total sample size) because some respondents did not answer questions about their discussion network, demographics, or media use.

Note: Social network site use= visits per month

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

Table C2. Core discussion network size – Poisson regression (N=1909)

Independent Variables	IRR
Constant	1.003
Demographics	
Female	1.154 ***
Age	1.002 *
Education	1.029 ***
Married or living with a partner	1.012
Black/African-American (compared with White)	0.926
Other Race (compared with White)	0.898
Hispanic	1.036
Media Use	
Internet user	1.138 *
Cell phone user	0.990
Internet Activities	
MySpace visits per month (0-90)	0.995
Facebook visits per month (0-90)	1.001 *
LinkedIn visits per month (0-90)	1.003
Twitter visits per month (0-90)	1.002
Other SNS visits per month (0-90)	1.005 **
Blogging	0.966
Sharing digital photos online	1.046
Instant Messaging	1.120 **

Note: N is smaller than 2255 (total sample size) because some respondents did not answer questions about their discussion network, demographics, or media use.

Note: Social network site use= visits per month

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

Table C3. OLS Regression on social network diversity (N=2177)

Independent Variables	Coefficient
Constant	9.081 **
Demographics	
Female	-1.094
Age	0.144 ***
Education	1.493 ***
Married or living with a partner	4.947 ***
Black/African-American (compared with White)	0.147
Other Race (compared with White)	-1.002
Hispanic	0.017
Media Use	
Internet user	3.261 *
Cell phone user	1.744
Internet Activities	
MySpace visits per month (0-90)	-0.104
Facebook visits per month (0-90)	-0.022
LinkedIn visits per month (0-90)	0.049
Twitter visits per month (0-90)	0.045
Other SNS visits per month (0-90)	-0.170
Blogging	3.437 *
Sharing digital photos online	-1.926
Instant Messaging	0.710
R-squared (adjusted)	0.076***

Note: N is smaller than 2255 (total sample size) because some respondents did not answer questions about their discussion network, demographics, or media use.

Note: Social network site use= visits per month

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

Table C4. Likelihood of being trusting of others - logistic regression (N=2176)

Independent Variables	Odds Ratio
Constant	0.033 ***
Demographics	
Female	0.728 **
Age	1.016 ***
Education	1.162 ***
Married or living with a partner	0.976
Black/African-American (compared with White)	0.297 ***
Other Race (compared with White)	0.653 *
Hispanic	0.862
Media Use	
Internet user	2.143 ***
Cell phone user	0.952
Internet Activities	
MySpace visits per month (0-90)	0.985
Facebook visits per month (0-90)	1.004 *
LinkedIn visits per month (0-90)	1.003
Twitter visits per month (0-90)	1.006
Other SNS visits per month (0-90)	0.994
Blogging	1.126
Sharing digital photos online	0.837
Instant Messaging	1.046
R-squared (Nagelkerke)	0.154***

Note: N is smaller than 2255 (total sample size) because some respondents did not answer questions about their discussion network, demographics, or media use.

Note: Social network site use= visits per month

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

Table C5: OLS Regression on tolerance of diverse ideas/points of view (N=2175)

Independent Variables	Coefficient
Constant	60.482 ***
Demographics	
Female	5.424 ***
Age	-0.103 ***
Education	0.465 **
Married or living with a partner	1.248
Black/African-American (compared with White)	1.026
Other Race (compared with White)	-0.050
Hispanic	-1.865
Media Use	
Internet user	1.675
Cell phone user	0.354
Internet Activities	
MySpace visits per month (0-90)	1.390 *
Facebook visits per month (0-90)	0.005
LinkedIn visits per month (0-90)	0.067
Twitter visits per month (0-90)	-0.008
Other SNS visits per month (0-90)	-0.090 *
Blogging	0.923
Sharing digital photos online	-1.175
Instant Messaging	-0.758
R-squared (adjusted)	0.043***

Note: N is smaller than 2255(total sample size) because some respondents did not answer questions about their discussion network, demographics, or media use.

Note: Social network site use= visits per month

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

Table C6. OLS Regression on social support

	<i>Total Social Support (N=2178)</i>	<i>Emotional Support (N=2178)</i>	<i>Companionship (N=2177)</i>	<i>Instrumental Support (N=2178)</i>
	Coefficient	Coefficient	Coefficient	Coefficient
Constant	62.397 ***	60.735 ***	65.147 ***	63.765 ***
Demographics				
Female	2.375 **	4.589 ***	0.063	-0.359
Age	-0.051 *	-0.074 **	-0.044	-0.011
Education	0.255	0.424 *	0.118	0.009
Married/partner	10.590 ***	8.731 ***	10.431 ***	14.549 ***
Black (comp. to White)	-1.358	-2.037	-4.464 **	2.367
Other Race (comp. to White)	-2.223	-2.528	-2.463	-1.584
Hispanic	-4.865 ***	-5.528 ***	-4.380 **	-3.417 *
Media Use				
Internet user	3.437 **	2.246	6.197 ***	3.802 *
Cell phone user	0.254	1.282	-0.198	-1.488
Internet Activities				
MySpace visits/month (0-90)	-0.034	-0.043	-0.065	0.003
Facebook visits/month (0-90)	0.051 **	0.060 **	0.056 **	0.030
LinkedIn visits/month (0-90)	0.068	0.078	0.019	0.086
Twitter visits/month (0-90)	0.076	0.064	0.063	0.113
Other SNS visits/month (0-90)	-0.049	-0.084	-0.031	0.007
Blogging	2.806 *	2.539	3.506 *	2.764
Sharing digital photos online	1.503	1.738	0.172	2.084
Instant Messaging	1.019	1.435	1.264	0.039
R-squared (adjusted)	0.122***	0.110***	0.102***	0.093***

Note: N is smaller than 2255 (total sample size) because some respondents did not answer questions about their discussion network, demographics, or media use.

Note: Social network site use= visits per month

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

Table C7: Likelihood of knowing at least some neighbors - logistic regression (N=2173)

Independent Variables	Odds Ratio
Constant	0.221 ***
Demographics	
Female	0.939
Age	1.014 **
Education	1.131 ***
Married or living with a partner	1.945 ***
Black/African-American (compared with White)	0.542
Other Race (compared with White)	0.568 **
Hispanic	0.478 ***
Residential Status	
Years of residency	1.071 ***
Living in an apartment	0.503 ***
Media Use	
Internet user	1.088
Cell phone user	1.182
Internet Activities	
MySpace visits per month (0-90)	0.985
Facebook visits per month (0-90)	0.999
LinkedIn visits per month (0-90)	1.021
Twitter visits per month (0-90)	0.995
Other SNS visits per month (0-90)	1.001
Blogging	1.168
Sharing digital photos online	1.211
Instant Messaging	0.992
R-squared (Nagelkerke)	0.247***

Note: N is smaller than 2255 (total sample size) because some respondents did not answer questions about their discussion network, demographics, or media use.

Note: Social network site use= visits per month

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

Table C8: OLS Regression on Volunteering (N=2178)

Independent Variables	Coefficient
Constant	0.159 **
Demographics	
Female	0.022
Age	0.003 ***
Education	0.028 ***
Married or living with a partner	0.035
Black/African-American (compared with White)	0.044
Other Race (compared with White)	-0.002
Hispanic	-0.089 **
Media Use	
Internet user	0.023
Cell phone user	-0.023
Internet Activities	
MySpace visits per month (0-90)	-0.004 *
Facebook visits per month (0-90)	0.000
LinkedIn visits per month (0-90)	0.003
Twitter visits per month (0-90)	-0.001
Other SNS visits per month (0-90)	0.002
Blogging	0.040
Sharing digital photos online	-0.008
Instant Messaging	0.015
R-squared (adjusted)	0.062***

Note: N is smaller than 2255 (total sample size) because some respondents did not answer questions about their discussion network, demographics, or media use.

Note: Social network site use= visits per month

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

Table C9. Likelihood of political participation - logistic regression

Independent Variables	<i>Attend Meetings</i>	<i>Influence Vote</i>	<i>Voted</i>
	<i>(N=2167)</i>	<i>(N=2167)</i>	<i>(N=2148)</i>
	Odds Ratio	Odds Ratio	Odds Ratio
Constant	0.001 ***	0.014 ***	0.010 ***
Demographics			
Female	0.710 *	0.723 **	0.915
Age	1.029 ***	1.021 ***	1.043 ***
Education	1.196 ***	1.124 ***	1.240 ***
Married/partner	1.007	1.119	1.601 ***
Black (comp. to White)	0.670	1.282	1.513 **
Other Race (comp.to White)	0.698	0.575 *	0.467 ***
Hispanic	1.626 *	0.773	0.762
Media Use			
Internet user	2.390 **	1.782 **	1.526 **
Cell phone user	0.804	0.853	0.927
Internet Activities			
MySpace visits month (0-90)	0.967	0.967	0.995
Facebook visits/month (0-90)	1.010 ***	1.005 *	1.004 *
LinkedIn visits/month (0-90)	0.980	1.021	1.046
Twitter visits/month (0-90)	1.006	1.008	1.001
Other SNS visits/month (0-90)	0.995	0.993	0.988 *
Blogging	1.265	1.296	0.931
Sharing digital photos online	0.913	1.232	0.834
Instant Messaging	0.948	1.118	1.139
R-squared (Nagelkerke)	0.112***	0.101***	0.252***

Note: N is smaller than 2255(total sample size) because some respondents did not answer questions about their discussion network, demographics, or media use.

Note: Social network site use= visits per month

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

Appendix D: The scale-up method of social network analysis

The approach we used is based on a method that was first published in the late 1990s to measure the size of personal networks [8]. In this early work, the researchers selected 12 first names that ranged in popularity. The opinion of the authors of this work and others was that it was a sound approach, but both the method and list of first names needed refinement.

Since this early work, much has been done to refine the method and the list of first names. Initially, as work on this method advanced, much emphasis was placed on statistical corrections that could be done to improve the method. A 2006 article published in the *Journal of the American Statistical Association*, using 12 first names used in the original approach found an average network size of 610 [9].

In 2006, confidence in this approach reached the point that it was adopted by the General Social Survey, among the most reliable and widely embraced surveys used by social scientists and statisticians. The GSS used a different and “improved” list of first names. Again, much of the analysis of this data focused on more complicated statistical adjustments that could be done to improve the accuracy of the estimate. They came out with an estimated network size of 550 [10].

The most recent work on this approach was published in 2010, also in the *Journal of the American Statistical Association* [5]. This paper accomplished three important things: 1) created a complex statistical procedure to try and improve the method, 2) created an even better list of first names, and 3) compared the extremely complex statistical approach to a simpler approach based on choosing an “ideal list” of first names. Their conclusion was that this method works best with a relatively simple statistical method, but a very well-chosen list of first names. They identified 12 names in particular, and these are the names we used in the Pew Internet survey. This paper came up with a network size, based on the 12 ideal first names, of 611.

We consulted with the authors of the original method, as well as the authors of the 2010 paper throughout the design and analysis of the survey. The Pew Internet survey found a total network size of 634.

There are very few competing approaches to measuring network size. This approach has emerged, we believe, as the gold standard.