

Pew Internet & American Life Project

a project of the
PewResearchCenter

Search and email still top the list of most popular online activities

Two activities nearly universal among adult internet users

Kristen Purcell, Associate Director for Research, Pew Internet Project

August 9, 2011

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

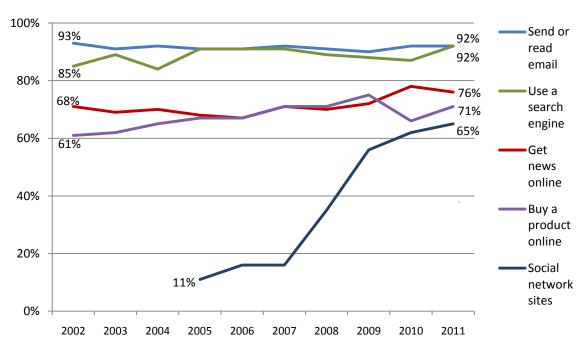
http://pewinternet.org/Reports/2011/Search-and-email.aspx

Search and email remain the top online activities

Over time, search and email are most popular online activities

A May 2011 Pew Internet survey finds that 92% of online adults use search engines to find information on the Web, including 59% who do so on a typical day. This places search at the top of the list of most popular online activities among U.S. adults. But it is not alone at the top. Among online adults, 92% use email, with 61% using it on an average day.

Since the Pew Internet Project began measuring adults' online activities in the last decade, these two behaviors have consistently ranked as the most popular.¹ Even as early as 2002, more than eight in ten online adults were using search engines, and more than nine in ten online adults were emailing. The table below shows how these two activities compare over time to some other popular online activities.



% of internet users who do each activity

Source: The Pew Research Center's Internet & American Life Project tracking surveys, 2002-2011. Social network site use not tracked prior to February, 2005. For more activity trends, go to pewinternet.org.

¹ Pew Internet began asking about email use in March 2000 and began to ask about search engine use in January 2002.

Of course, the internet population has grown substantially since 2002. So, the overall number of users of both email and search engines has also grown. In January 2002, 52% of *all Americans* used search engines and that number grew to 72% in the most recent survey. In January 2002, 55% of *all Americans* said they used email and that number grew to 70% in the current survey.

Email and search form the core of online communication and online information gathering, respectively. And they have done so for nearly a decade, even as new platforms, broadband and mobile devices continue to reshape the way Americans use the internet and web. Perhaps the most significant change over that time is that both activities have become more habitual. Today, roughly six in ten online adults engage in each of these activities on a typical day; in 2002, 49% of online adults used email each day, while just 29% used a search engine daily.

The most recent search figures come from a survey conducted from April 26-May 22 among 2,277 adults ages 18 and over, including surveys in English and Spanish and on landline and cell phones. The margin of error for the sample is plus or minus 2 percentage points. The most recent email figures come from a survey conducted November 3-24, 2010 among 2,257 adults ages 18 and over, also conducted in both English and Spanish and using a dual-frame sample. The margin of error for the November survey is plus or minus 2 percentage points.

Search

Perhaps surprisingly for an online activity that has been around for a while, search is most popular among the youngest adult internet users (those age 18-29), 96% of whom use search engines to find information online. But even among the oldest internet users (age 65+), 87% are search engine users.

Adults who have attended college and the highest income adults make slightly more use of search engines to gather information online when compared with other adults, as the table below indicates. These same groups—young adults, the college-educated, and higher income adults—are also the most likely to use search engines daily.

Who uses search?

% of online adults in each group who use search engines to find information online

	% of each group who ever use search engines	% of each group who use search engines on a typical day
All online adults	92%	59%
Gender		
Male	93	61
Female	91	57
Race/Ethnicity		
White	93	60
African American	91	57
Hispanic	87	48
Age		
18-29	96	66
30-49	91	64
50-64	91	52
65+	87	37
Education		
Some high school	81	29
High school	88	41
Some college	94	66
College graduate	96	75
Household income		
< \$30,000	90	38
\$30,000 - \$49,999	91	67
\$50,000 - \$74,999	93	66
\$75,000+	98	78

Source: The Pew Research Center's Internet & American Life Project, April 26-May 22, 2011 tracking survey. N=2,277 adults ages 18 and older. Interviews conducted in English and Spanish.

Similar demographic patterns existed in 2002, when Pew Internet first measured online search. At that time, the college-educated and the highest income adults were most likely to use search on an average day, though the overall percentage of online adults who used a search engine on an average day was much lower at just 29%. Two other patterns evident in 2002 have since vanished. Back then, men were more likely than women to say they had used an online search "yesterday" (33% v. 25%), and white adults were more likely than both African-American and Hispanic adults (31% v. 23% v. 19%, respectively) to report using a search engine "yesterday." Today, there are no significant differences between these groups in these usage patterns.

Email

Email is similar to search (and many other online activities) in that the youngest online adults, the college-educated, and those in the highest income categories are more likely than others to engage in the activity. These demographic differences are considerably more pronounced when one looks at email use on a typical day. Moreover, while overall email use is comparable across white, African-American and Hispanic online adults, internet use on any given day is not. White online adults are significantly more likely than both African-American and Hispanic online adults to be email users on a typical day (63% v. 48% v. 53%, respectively).

Who uses email?

% of online adults in each group who send or read email

	% of each group who ever send or read email	% of each group who send and receive email on a typical day	
All online adults	92%	61%	
Gender			
Male	90	59	
Female	93	64	
Race/Ethnicity			
White	93	63	
African American	87	48	
Hispanic	88	53	
Age			
18-29	94	64	
30-49	91	63	
50-64	91	61	
65+	87	46	
Education			
Some high school	90	39	
High school	84	46	
Some college	94	64	
College graduate	96	77	
Household income			
< \$30,000	86	47	
\$30,000 - \$49,999	89	59	
\$50,000 - \$74,999	94	67	
\$75,000+	97	78	

Source: The Pew Research Center's Internet & American Life Project, November 3-24, 2010 tracking survey. N=2,257 adults ages 18 and older. Interviews conducted in English and Spanish.

Email is also similar to search in that while some of these demographic differences were present in 2002, some were not. In 2002, college graduates were the most likely to use email, as were adults with household incomes of \$75,000 or more. However, 2002 surveys also showed that overall, women were slightly more likely than men to ever use email, and white online adults were more likely than African-American online adults to ever use email. These two differences are no longer statistically significant.

Survey questions

Spring Change Assessment Survey 2011

Final Topline

5/25/2011

Data for April 26–May 22, 2011

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

Sample: n = 2,277 national adults, age 18 and older, including 755 cell phone interviews Interviewing dates: 04.26.2011 - 05.22.2011

Margin of error is plus or minus 2 percentage points for results based on Total [n=2,277] Margin of error is plus or minus 3 percentage points for results based on internet users [n=1,701] Margin of error is plus or minus 3 percentage points for results based on cell phone users [n=1,914] Margin of error is plus or minus 3 percentage points for results based on SNS or Twitter users [n=1,015]

WEB1 Next... Please tell me if you ever use the internet to do any of the following things. Do you ever use the internet to...[INSERT; RANDOMIZE]? / Did you happen to do this **yesterday**, or not?²

·····					
	TOTAL HAVE EVER DONE THIS	DID YESTERDAY	HAVE NOT DONE THIS	DON'T KNOW	REFUSED
Use an online search engine to help you					
find information on the Web					
Current	92	59	8	*	0
May 2010	87	49	12	*	*
April 2009 ³	88	50	12	*	0
May 2008	89	49	10	*	
December 2006	91	41	9	1	
August 2006	88	42	11	*	
Dec 2005	91	38	9	1	
September 2005	90	41	9	*	
June 2004	84	30	16	*	
June 2003	89	31	10	1	
Jan 2002	85	29	14	1	

Based on Form B internet users [N=846]

² Prior to January 2005, question wording was "Please tell me if you ever do any of the following when you go online. Do you ever...?/Did you happen to do this yesterday, or not?" Unless otherwise noted, trends are based on all internet users for that survey.

³ In April 2009, item was asked only of Form B internet users [N=879].

Post-Election Tracking Survey 2010

Data for November 3–24, 2010

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

Sample: n = 2,257 national adults, age 18 and older, including 755 cell phone interviews Interviewing dates: 11.03.10 - 11.24.10

Margin of error is plus or minus 2 percentage points for results based on Total [n=2,257] Margin of error is plus or minus 3 percentage points for results based on internet users [n=1,628] Margin of error is plus or minus 3 percentage points for results based on cell phone users [n=1,918] Margin of error is plus or minus 3 percentage points for results based on registered voters [n=1,833] Margin of error is plus or minus 3 percentage points for results based on online political users [n=1,167]

WEB1 Next... Please tell me if you ever use the internet to do any of the following things. Do you ever use the internet to...? / Did you happen to do this **yesterday**, or not?⁴

	TOTAL HAVE EVER DONE THIS	DID YESTERDAY	HAVE NOT DONE THIS	DON'T KNOW	REFUSED
Send or read e-mail					
Current	92	61	8	*	*
September 2010	91	61	9	*	*
May 2010	94	62	6	*	0
January 2010	92	59	8	*	*
December 2009	90	55	10	*	*
September 2009	89	58	11	*	*
April 2009	90	57	9	*	0
December 2008	91	58	9	*	
November 2008	89	56	11	0	*
August 2008	92	60	8	*	
December 2007	92	60	8	*	
September 2007	90	56	10	*	
February 2007	91	56	9	*	
December 2006	91	54	8	*	
November 2006 ⁵	91	52	9	*	
August 2006 ⁶	90	53	10	*	
December 2005	91	53	9	*	
September 2005	91	54	9	*	
February 2005	91	52	9	*	

Based on all internet users [N=1,628]

⁵ November 2006 results for this activity series reflect the landline respondents only [N=1,578].

⁴ Prior to January 2005, question wording was "Please tell me if you ever do any of the following when you go online. Do you ever...?/Did you happen to do this yesterday, or not?" Unless otherwise noted, trends are based on all internet users for that survey.

⁶ August 2006 WEB1 trends were asked of internet users based on split form. Results shown for "Send or read e-email" reflect combined responses for total internet users.

January 2005	90	49	9	*	
November 23-30, 2004	92	48	8	*	
November 2004	93	54	7	*	
June 2004	93	45	7	*	
February 2004	91	48	8	*	
Nov 2003	91	48	8	*	
June 2003	91	49	9	*	
May 2003	93	52	7	*	
March 20-25, 2003	94	50	6	*	
March 12-19, 2003 ⁱ	91	52	9	0	
March 3-11, 2003	94	54	6	*	
February 2003	91	50	9	*	
Dec 2002	93	49	7	0	
Nov 2002	94	51	6	*	
Oct 2002	93	50	7	0	
Sept 2002	93	51	7	*	
July, 2002	93	46	7	*	
March/May 2002	93	50	7	*	
Jan 2002	95	52	5	0	
Dec 17-23, 2001	95	54	5	*	
Nov 19-Dec 16, 2001	95	53	5	*	
Oct 19-Nov 18, 2001	94	52	6	*	
Oct 8-18, 2001	95	44	5	*	
Oct 2-7, 2001	92	46	7	*	
Sept 20-Oct 1, 2001	94	49	6	0	
Sept 12-19, 2001	93	42	7	*	
Aug 2001	93	52	7	*	
Feb 2001	93	53	7	*	
Fall 2000	92	49	8	*	
August 2000	93	43	7	*	

Methodology (May 2011 Tracking Survey)

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

A combination of landline and cellular random digit dial (RDD) samples was used to represent all adults in the continental United States who have access to either a landline or cellular telephone. Both samples were provided by Survey Sampling International, LLC (SSI) according to PSRAI specifications. Numbers for the landline sample were selected with probabilities in proportion to their share of listed telephone households from active blocks (area code + exchange + two-digit block number) that contained three or more residential directory listings. The cellular sample was not list-assisted, but was drawn through a systematic sampling from dedicated wireless 100-blocks and shared service 100-blocks with no directory-listed landline numbers.

New sample was released daily and was kept in the field for at least five days. The sample was released in replicates, which are representative subsamples of the larger population. This ensures that complete call procedures were followed for the entire sample. At least 7 attempts were made to complete an interview at a sampled telephone number. The calls were staggered over times of day and days of the week to maximize the chances of making contact with a potential respondent. Each number received at least one daytime call in an attempt to find someone available. For the landline sample, interviewers asked to speak with the youngest adult male or female currently at home based on a random rotation. If no male/female was available, interviewers asked to speak with the youngest adult 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 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 nonresponse that might bias results. A two-stage weighting procedure was used to weight this dual-frame sample. The first-stage weight is the product of two adjustments made to the data – a Probability of Selection Adjustment (PSA) and a Phone Use Adjustment (PUA). The PSA corrects for the fact that respondents in the landline sample have different probabilities of being sampled depending on how many adults live in the household. The PUA corrects for the overlapping landline and cellular sample frames.

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

from Census 2000 data. The cell phone usage parameter came from an analysis of the January-June 2010 National Health Interview Survey.⁷

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

Following is the full disposition of all sampled telephone numbers:

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:

o Contact rate – the proportion of working numbers where a request for interview was made

⁷ Blumberg SJ, Luke JV. Wireless substitution: Early release of estimates from the National Health Interview Survey, January-June, 2010. National Center for Health Statistics. December 2010.

- Cooperation rate the proportion of contacted numbers where a consent for interview was at least initially obtained, versus those refused
- Completion rate the proportion of initially cooperating and eligible interviews that were completed

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

Methodology (November 2010 Post-Election Tracking Survey)

This report is based on the findings of a daily tracking 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 November 3-24, 2010, among a sample of 2,257 adults, age 18 and older. Interviews were conducted in English and Spanish. For results based on the total sample, one can say with 95% confidence that the error attributable to sampling is plus or minus 2.4 percentage points. For results based Internet users (n=1,628), 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.

New sample was released daily and was kept in the field for at least five days. The sample was released in replicates, which are representative subsamples of the larger population. This ensures that complete call procedures were followed for the entire sample. At least 7 attempts were made to complete an interview at a sampled telephone number. The calls were staggered over times of day and days of the week to maximize the chances of making contact with a potential respondent. Each number received at least one daytime call in an attempt to find someone available. For the landline sample, 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 male at home. If no female was available, interviewers asked to speak with the youngest adult male at home. 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 nonresponse 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.⁸

Following is the	full disposition of	of all sampled	telephone numbers:

Table 1:Sam	ple Dispos	ition
Landline	Cell	
29342	14599	Total Numbers Dialed
1391	310	Non-residential
1454	38	Computer/Fax
15	0	Cell phone
13307	5782	Other not working
1648	175	Additional projected not working
11527	8294	Working numbers
39.3%	56.8%	Working Rate
549	58	No Answer / Busy
2578	2370	Voice Mail
90	14	Other Non-Contact
8310	5852	Contacted numbers
72.1%	70.6%	Contact Rate
482	751	Callback
6213	3817	Refusal
1615	1284	Cooperating numbers
19.4%	21.9%	Cooperation Rate
75	44	Language Barrier
0	462	Child's cell phone
1540	778	Eligible numbers
95.4%	60.6%	Eligibility Rate
38	23	Break-off
1502	755	Completes
97.5%	97.0%	Completion Rate
13.7%	15.0%	Response Rate

Table 1:Sample Disposition

⁸ 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.

The disposition reports all of the sampled telephone numbers ever dialed from the original telephone number samples. The response rate estimates the fraction of all eligible respondents in the sample that were ultimately interviewed. At PSRAI it is calculated by taking the product of three component rates:

- Contact rate the proportion of working numbers where a request for interview was made
- Cooperation rate the proportion of contacted numbers where a consent for interview was at least initially obtained, versus those refused
- Completion rate the proportion of initially cooperating and eligible interviews that were completed

Thus the response rate for the landline sample was 13.7 percent. The response rate for the cellular sample was 15.0 percent.

ⁱ March 12-19, 2003 trends based on daily tracking survey conducted March 12-19, 2003 [N=883].