



# Social Media & Mobile Internet Use Among Teens and Young Adults

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This publication is part of a Pew Research Center report series that looks at the values, attitudes and experiences of America's next generation: the Millennials. Find out how today's teens and twentysomethings are reshaping the nation at: <a href="https://www.pewresearch.org/millennials">www.pewresearch.org/millennials</a>

# **Summary of Findings**

Since 2006, blogging has dropped among teens and young adults while simultaneously rising among older adults. As the tools and technology embedded in social networking sites change, and use of the sites continues to grow, youth may be exchanging 'macro-blogging' for microblogging with status updates.

Blogging has declined in popularity among both teens and young adults since 2006. Blog commenting has also dropped among teens.

- 14% of online teens now say they blog, down from 28% of teen internet users in 2006.
- This decline is also reflected in the lower incidence of teen commenting on blogs within social networking websites; 52% of teen social network users report commenting on friends' blogs, down from the 76% who did so in 2006.
- By comparison, the prevalence of blogging within the overall adult internet population has remained steady in recent years. Pew Internet surveys since 2005 have consistently found that roughly one in ten online adults maintain a personal online journal or blog.

While blogging among adults as a whole has remained steady, the prevalence of blogging within specific age groups has changed dramatically in recent years. Specifically, a sharp decline in blogging by young adults has been tempered by a corresponding increase in blogging among older adults.

- In December 2007, 24% of online 18-29 year olds reported blogging, compared with 7% of those thirty and older.
- By 2009, just 15% of internet users ages 18-29 maintain a blog—a nine percentage point drop in two years. However, 11% of internet users ages thirty and older now maintain a personal blog.

Both teen and adult use of social networking sites has risen significantly, yet there are shifts and some drops in the proportion of teens using several social networking site features.

- 73% of wired American teens now use social networking websites, a significant increase from previous surveys. Just over half of online teens (55%) used social networking sites in November 2006 and 65% did so in February 2008.
- As the teen social networking population has increased, the popularity of some sites' features has shifted. Compared with SNS activity in February 2008, a smaller proportion of teens in mid-2009 were sending daily messages to friends via SNS, or sending bulletins, group messages or private messages on the sites.
- 47% of online adults use social networking sites, up from 37% in November 2008.

- Young adults act much like teens in their tendency to use these sites. Fully 72% of online 18-29 year olds use social networking websites, nearly identical to the rate among teens, and significantly higher than the 40% of internet users ages 30 and up who use these sites.
- Adults are increasingly fragmenting their social networking experience as a majority of those who use social networking sites – 52% – say they have two or more different profiles. That is up from 42% who had multiple profiles in May 2008.
- Facebook is currently the most commonly-used online social network among adults. Among adult profile owners 73% have a profile on Facebook, 48% have a profile on MySpace and 14% have a LinkedIn profile.<sup>1</sup>
- The specific sites on which young adults maintain their profiles are different from those used by older adults: Young profile owners are much more likely to maintain a profile on MySpace (66% of young profile owners do so, compared with just 36% of those thirty and older) but less likely to have a profile on the professionally-oriented LinkedIn (7% vs. 19%). In contrast, adult profile owners under thirty and those thirty and older are equally likely to maintain a profile on Facebook (71% of young profile owners do so, compared with 75% of older profile owners).

Teens are not using Twitter in large numbers. While teens are bigger users of almost all other online applications, Twitter is an exception.

- 8% of internet users ages 12-17 use Twitter.<sup>2</sup> This makes Twitter as common among teens as visiting a virtual world, and far less common than sending or receiving text messages as 66% of teens do, or going online for news and political information, done by 62% of online teens.
- Older teens are more likely to use Twitter than their younger counterparts; 10% of online teens ages 14-17 do so, compared with 5% of those ages 12-13.
- High school age girls are particularly likely to use Twitter. Thirteen percent of online girls ages
   14-17 use Twitter, compared with 7% of boys that age.
- Using different wording, we find that 19% of adult internet users use Twitter or similar services to post short status updates and view the updates of others online.
- Young adults lead the way when it comes to using Twitter or status updating. One-third of online 18-29 year olds post or read status updates.

Wireless internet use rates are especially high among young adults, and the laptop has replaced the desktop as the computer of choice among those under thirty.

<sup>&</sup>lt;sup>1</sup> Note: Because respondents were allowed to mention multiple sites on which they maintain a profile, totals may add to more than 100%.

<sup>&</sup>lt;sup>2</sup> Note: The question is asked differently among teens and adults – teens were asked "Do you ever use Twitter?" while adults were asked "have you ever used Twitter or another service where you can update your status online?" which may explain some of the difference in the data between the two groups.

- 81% of adults between the ages of 18 and 29 are wireless internet users. By comparison, 63% of 30-49 year olds and 34% of those ages 50 and up access the internet wirelessly.
- Roughly half of 18-29 year olds have accessed the internet wirelessly on a laptop (55%) or on a cell phone (55%), and about one quarter of 18-29 year-olds (28%) have accessed the internet wirelessly on another device such as an e-book reader or gaming device.
- The impact of the mobile web can be seen in young adults' computer choices. Two-thirds of 18-29 year olds (66%) own a laptop or netbook, while 53% own a desktop computer. Young adults are the only age cohort for which laptop computers are more popular than desktops.
- African Americans adults are the most active users of the mobile web, and their use is growing at a faster pace than mobile internet use among white or Hispanic adults.

Cell phone ownership is nearly ubiquitous among teens and young adults, and much of the growth in teen cell phone ownership has been driven by adoption among the youngest teens.

- Three-quarters (75%) of teens and 93% of adults ages 18-29 now have a cell phone.
- In the past five years, cell phone ownership has become mainstream among even the youngest teens. Fully 58% of 12-year olds now own a cell phone, up from just 18% of such teens as recently as 2004.

Internet use is near-ubiquitous among teens and young adults. In the last decade, the young adult internet population has remained the most likely to go online.

- 93% of teens ages 12-17 go online, as do 93% of young adults ages 18-29. One quarter (74%) of all adults ages 18 and older go online.
- Over the past ten years, teens and young adults have been consistently the two groups most likely to go online, even as the internet population has grown and even with documented larger increases in certain age cohorts (e.g. adults 65 and older).

Our survey of teens also tracked some core internet activities by those ages 12-17 and found:

- 62% of online teens get news about current events and politics online.
- 48% of wired teens have bought things online like books, clothing or music, up from 31% who had done so in 2000 when we first asked about this.
- 31% of online teens get health, dieting or physical fitness information from the internet. And 17% of online teens report they use the internet to gather information about health topics that are hard to discuss with others such as drug use and sexual health topics.

# Introduction

This report from the Pew Research Center's Internet & American Life Project is a part of a series of reports undertaken by the Pew Research Center that highlight the attitudes and behaviors of the Millennial generation, a cohort we define here as adults ages 18 to 29. The Pew Internet Project has conducted more than 100 surveys and written more than 200 reports on the topic of teen and adult internet use, all of which are freely available on our website: <a href="www.pewinternet.org">www.pewinternet.org</a>. This report brings together recent findings about internet and social media use among young adults by situating it within comparable data for adolescents and adults older than 30. All the most current data on teens is drawn from a survey we conducted between June 26 and September 24, 2009 of 800 adolescents between ages 12 and 17. Most of the adult data are drawn from a survey we conducted between August 18 and September 14, 2009 of 2,253 adults (age 18 and over). At times, though, we draw from other adult surveys and we will note where that occurs.

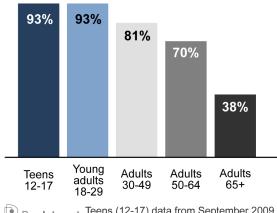
# More so than for their elders, the internet is a central and indispensable element in the lives of American teens and young adults.

As of September 2009, 93% of American teens between the ages of 12 and 17 went online, a number that has remained stable since November 2006. In comparison, adults are less likely than teens to be online. As of December 2009, 74% of adults use the internet. <sup>3</sup>

The youngest adults, 18-29 year-olds, go online at a rate equal to that of teens (both 93%). Over the past decade, young adult have remained the age group that is most likely to go online even as the internet population has grown, and even as other age cohorts – such as adults 65 and older -- have increased the percentage of their populations online.

Among adolescents, both boys and girls are equally likely to go online, but younger teens remain slightly less likely to go online than older teens. Fully 95% of teens ages 14-17 go online compared with 88% of teens ages 12-13. Most of the variance among younger teens is accounted for by 12 year olds, of whom 83% go online compared to 92% of 13 year olds.

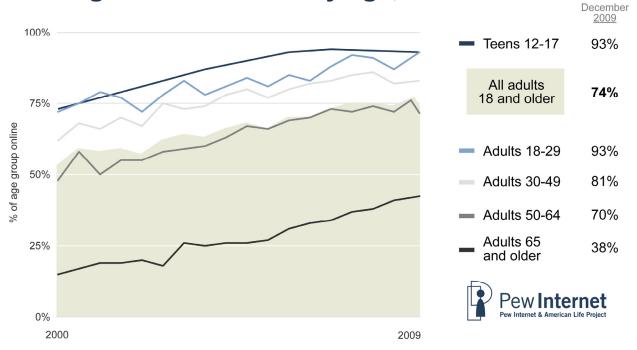
## Who's online? The internet by age groups



Pew Internet
Teens (12-17) data from September 2009.
Adults (18+) data from December 2009.

<sup>&</sup>lt;sup>3</sup> We should note that the December 2009 survey included Spanish language interviews (unlike September 2009), and is thus surveying populations that have had historically lower levels of internet use.

# Change in internet use by age, 2000-2009



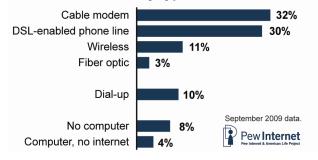
# For families with teens, home broadband adoption grows.

Among families with children between 12 and 17, more than three-quarters (76%) now have broadband internet access at home, up from 71% in February 2008 and significantly larger than in 2004, when just half of all households with teens had some type of broadband access. In 2009, about a third of all internet using families have a cable modem (32%), another third (30%) have a DSL enabled phone line, and another 11% report a wireless internet connection. Three percent of families have a fiber optic connection.

Just 10% of families have a dial-up internet connection, down from 16% in 2008 and 49% in November 2004. Another 8% of families do not have a computer at home, and 4% have a computer, but the machine is not connected to the internet.

Moving beyond just families to look at the American adult population at large, 60% of adults

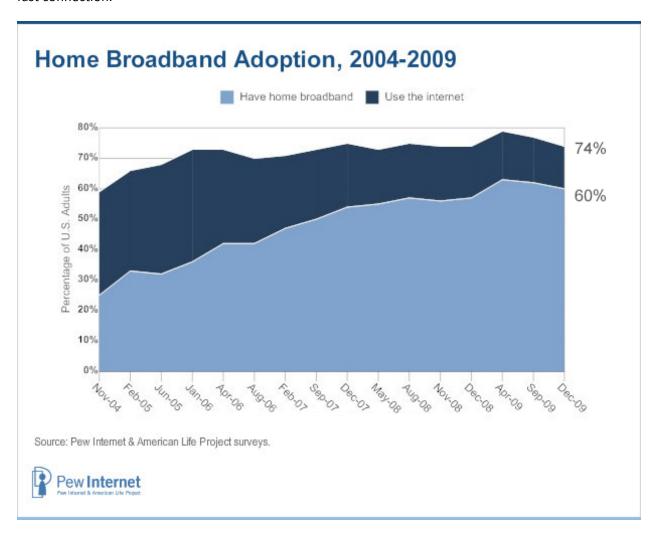
Families with teens by type of internet access



go online from home using broadband.<sup>4</sup> More than three quarters of young adults ages 18-29 have broadband at home, as do 67% of 30-49 year olds, a little more than half (56%) of 50-64 year olds and just a quarter (26%) of those 65 and older.

<sup>&</sup>lt;sup>4</sup> Data reported in this paragraph comes from PIP's December 2009 survey and is also discussed in the "Internet, broadband and cell phone statistics release, available online at http://www.pewinternet.org/Reports/2010/Internet-broadband-and-cell-phone-statistics.aspx

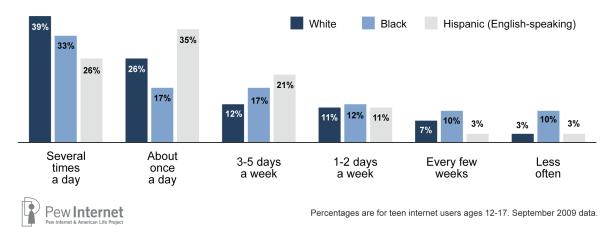
Nearly 2 in 5 households (37%) with broadband have a cable modem, 28% have a DSL connection and 17% have a wireless connection to the internet. Another 6% have fiber optic, T-1 or some other type of fast connection.



# 63% of teens go online every day

Nearly two-thirds of teen internet users (63%) go online every day – 36% of teens go online several times a day and 27% go online about once a day. More than one quarter (26%) of teens go online weekly and 11% go online less often than that, patterns that have been in place since November 2006. There are few differences in frequency of use based on demographic categories. Older teens ages 14-17 are more likely to go online frequently than younger teens. Nearly four in ten (39%) older teens say they go online several times a day, while a little more than a quarter (28%) of younger teens go online as frequently. White teens are also slightly more likely to go online frequently – several times a day – compared with Hispanic teens, who are more likely to report going online once a day or 3 to 5 days a week.

# Frequency of teen internet use by race/ethnicity



Broadband and wireless internet users go online much more frequently than dial up and stationary internet users.

The frequency of teen internet use is comparable to the frequency of internet use among online adults 18 and older. Among adult internet users, 68% go online daily, 21% go online several times a week, and 10% go online less often than that. These figures from September 2009 are comparable to adult findings from December of 2006, when 67% of adult internet users were online daily, 21% were online several times a week, and 6% were online less often than that.

Young adult internet users – those under age 30 – do not go online any more frequently than internet users age 30 and older. However, adult internet users with home broadband connections and adults who access the internet wirelessly go online much more frequently regardless of age than other internet users. About three-quarters of adult home broadband users (76%) and wireless internet users (76%) go online every day, compared with just 42% of adult internet users without home broadband connections and 52% of wired internet users who go online daily. Teens who live in households with broadband are also more likely to go online frequently than teens with dial up internet access at home – 40% of broadband-using teens go online several times a day compared to just 21% of those with dialup access.

White online adults are more likely than Hispanic online adults to be daily internet users, and the frequency of an adult's internet use is positively correlated with both educational attainment and household income.

# Gadget ownership and wireless connectivity

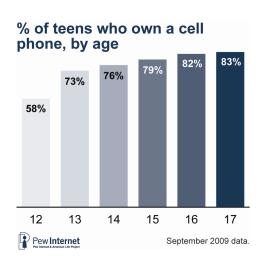
Recent Pew Internet reports have noted that internet connectivity is increasingly moving off the desktop and into the mobile and wireless environment, particularly for specific demographic groups.<sup>5</sup>

<sup>&</sup>lt;sup>5</sup> Horrigan, John. (2009) "Wireless Internet Users," Pew Research Center's Internet & American Life Project, Washington, DC. <a href="http://www.pewinternet.org/Reports/2009/12-Wireless-Internet-Use.aspx">http://www.pewinternet.org/Reports/2009/12-Wireless-Internet-Use.aspx</a>

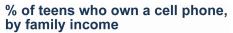
Understanding an individual's technological environment is now a vital clue in understanding how that person uses the internet, connects with others and accesses information. Among teens, the average person owns 3.5 gadgets out the five we queried in our survey: cell phones, mp3 players, computers, game consoles and portable gaming devices. In September 2009, adults were asked about seven gadgets: cell phones, laptops and desktops, mp3 players, gaming devices and ebook readers. Out of a possible seven gadgets, adults owned an average of just under 3 gadgets. Young adults ages 18-29 average nearly 4 gadgets while adults ages 30 to 64 average 3 gadgets. And adults 65 and older on average own roughly 1.5 gadgets out of the 7.

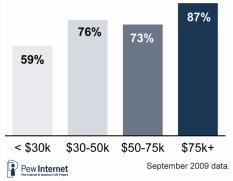
# Majority of growth in teen cell phone ownership is among younger teenagers.

Some 75% of American teens ages 12-17 have a cell phone. Since 2004, age has consistently been one of the most important factors in predicting cell phone use. Younger teens, particularly 12 year olds, are less likely than other teens to have a cell phone. As of September 2009, 58% of 12 year olds have a cell phone, much lower than the 73% of 13 year olds and the 83% of 17 year olds who own a mobile device. Much of the recent overall growth in cell phone ownership among teens has been driven by uptake among the youngest teens. In 2004, just 18% of 12 year olds had a cell phone of their own. In the same 2004 survey, 64% of 17 year olds had a phone.



Cell phones are nearly ubiquitous in the lives of teens today, with ownership cutting across demographic groups. Beyond age, there are few differences in cell phone ownership between groups of teens. Boys and girls are just as likely to have a phone, though they do not always use it in the same way. There are no differences by race or ethnicity in phone ownership by teens. Socioeconomic status is one area where cell phone ownership rates vary, with teens from lower income families less likely to own a



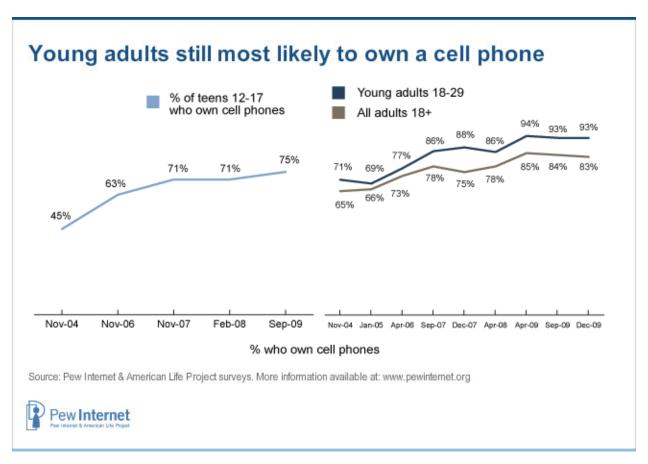


mobile phone. More than half (59%) of teens in households earning less than \$30,000 annually have a cell phone, while more than three quarters of teens from wealthier families own one.

By way of comparison, as of December 2009, 83 percent of adults owned a cell phone (or Blackberry, iPhone or other device that is also a cell phone). This is an 18 percentage point increase since Pew Internet began tracking cell ownership in November of 2004; at that time, roughly two-thirds of adults (65%) owned a cell phone.

<sup>&</sup>lt;sup>6</sup> http://www.pewinternet.org/Reports/2009/14--Teens-and-Mobile-Phones-Data-Memo.aspx

Adults younger than age 30 are more likely than those age 30 and older to own a cell phone—93% of young adults own cell phones compared with 80% of their older counterparts. Cell ownership drops off after age 50: 82% of those ages 50-64 own a cell phone, and 57% of those 65 and older own one.



Among all adults, cell phone ownership increases with educational attainment and income, and men are more likely than women (86% v. 79%) to own cell phones. As we see in the teen population, there are no racial or ethnic differences in cell phone ownership among adults.

# **Computers**

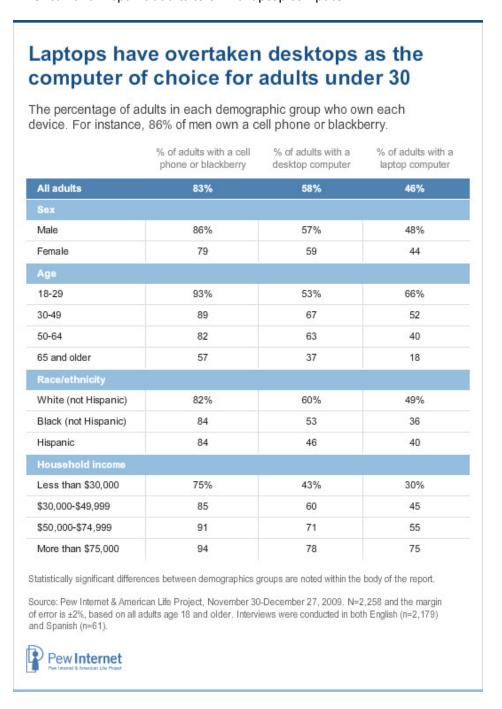
Nearly seven in ten (69%) teens ages 12-17 have a computer. Teens from wealthier families earning more than \$75,000 a year are slightly more likely (74%) than less well-off teens to personally have a desktop or laptop computer. Older teens are also more likely to report owning a desktop or laptop; 73% of 14-17 year olds have a computer while 60% of 12 and 13 year olds do.

Among adults, desktop computers are slightly more popular than laptop computers and netbooks. Overall, six in ten adults (58%) own a desktop computer, compared with 46% who own a laptop or netbook. However, while laptop computers have been increasing in popularity among adults over the past three years, desktop computers have been decreasing in popularity.

# Laptops have overtaken desktops as the computer of choice for adults under 30.

It is important to note that young adults – those under age 30 – are significantly more likely than all other adults to own a laptop or netbook, and among this group, laptops have overtaken desktops in popularity. Among adults ages 18-29, 66% own a laptop or netbook while just 53% own a desktop.

As with cell phones, computer ownership rates increase with rising educational attainment and income. White adults are more likely than Hispanic adults to own a desktop computer, and are more likely than both African American and Hispanic adults to own a laptop computer.



# **Music and E-Books**

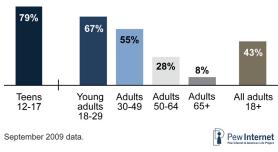
Nearly four in five teens (79%) have an iPod or other mp3 player. Ownership of music players cuts across most demographic and age groups, with all groups just about as likely to own an mp3 player as another. The exceptions to this are parent's educational attainment and family income. Unsurprisingly, as family income and education rises, so does the likelihood of a teen owning an mp3 player or iPod.

# Young adults & teens are more likely to have an mp3 player than other adults.

In September 2009, Pew Internet asked adults about a larger number of gadgets: computers, mp3 players, game consoles, portable gaming devices, and e-book readers. Among these different gadgets, mp3 players are most popular with adults (43% own one), while just 3% of adults own an e-book reader.

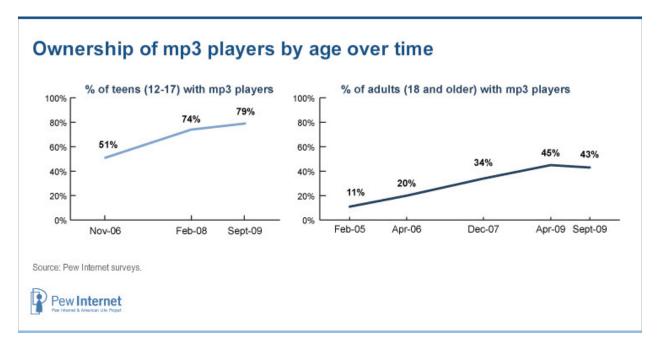
Mp3 players are especially popular with young adults. With numbers that match teens, fully three-quarters of 18-24 year-olds own an mp3 player; that compares with

# Own an iPod or mp3 player



slightly more than half of 25-29 year-olds (56%) and 30-49 year-olds (55%) and just one fifth of adults age 50 or older (20%). As with other gadgets, mp3 ownership is positively correlated with educational attainment and income.

Ownership of mp3 players by adults has risen steadily since the question was first asked in January 2005, when just 11% of adults owned a digital music player. Among teens, the percentage of teens with an mp3 player has also increased significantly, from 51% of teens in November 2006 to nearly 80% today.

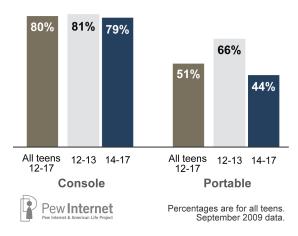


# **Gaming Devices**

Teens are enthusiastic consumers of gaming devices both wired and portable. Fully 80% of teens between the ages of 12 and 17 have a game console like a Wii, an Xbox or a PlayStation. While younger and older teens are equally likely to have a game console, boys are more likely than girls to have one. Nearly 9 in 10 (89%) boys have a game console, while 70% of girls report ownership. Younger teens, ages 12 to 15 are more likely to own a game console than 16-17 year olds.

Half of teens (51%) have a portable gaming device like a PSP, DS or a Gameboy. Unlike other tech gadgets, portable gaming devices are more often owned by younger teens, with two-thirds (66%) of teens ages 12-13 owning a portable game player compared with 44% of 14 to 17 year olds. As with consoles, boys are more

# Younger teens more likely to own portable gaming devices than older teens



likely than girls to own a portable gaming device; 56% of boys own one, as do 47% of girls. Beyond the age and gender differences in ownership, portable and console gaming platforms are equally likely to be found in households regardless of race, ethnicity, household income or parent's education.

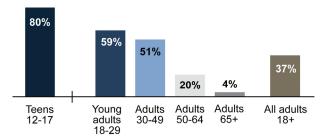
## Adults 30 and older are much less likely to own a game console than teens or young adults.

Overall, 37% of adults report owning a game console like an XBox or Play Station, and 18% report owning a portable gaming device such as a PSP or DS.

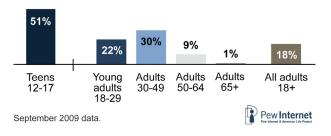
Not surprisingly, adults under age 30 are more likely than older adults to own gaming consoles, but they are not just for the very young. While 59% of adults under age 30 own a gaming console, that number drops just eight percentage points to 51% among 30-49 year-olds. Moreover, 18-29 year-olds are *less* likely than 30-49 year-olds to own a portable gaming device (22% v. 30%).

There are also gender differences in this area; men are slightly more likely than women to own a game console (39% v. 34%), while women are slightly more likely to own a portable gaming device (20% v. 16%).

# Own a game console



# Own a portable gaming device

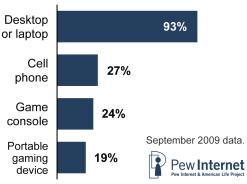


# Wireless devices and consoles provide new ways for teens & adults to go online.

Access to the internet is changing. Teens and adults no longer access the internet solely from a computer or laptop. They now go online via cell phones, game consoles and portable gaming devices in addition to their home desktop or laptop computer.

Overall the computer remains the most popular way for teens to go online, with 93% of teens with a desktop or laptop computer using the device to go online. But other more portable technologies are also now providing new paths to the internet. Among teen cell phone users, more than a quarter (27%) say they use their cell phone to go online. Similarly, 24% of teens with a game console (like a PS3, Xbox or Wii) use it to go online. Other handheld gaming devices also allow internet connectivity—among teens with a portable gaming device, about one in five (19%) use it for this purpose.

# % of teen device owners who use that device to go online (ages 12-17)

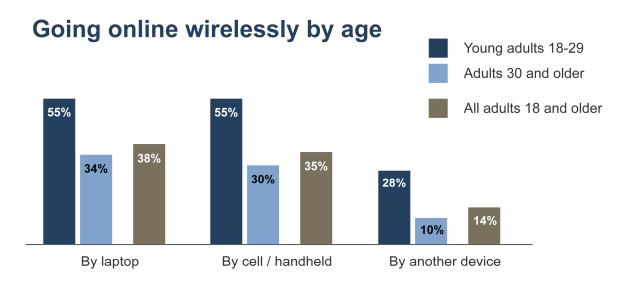


## Adults and wireless internet access<sup>7</sup>

Most adult internet users (63%) access the internet using multiple devices; this is especially true of adult internet users younger than age 50, of whom 70% access the internet with more than one device.

As of September 2009, 54% of adults accessed the internet wirelessly. The most common means of wireless access among adults is the laptop computer, with 38% of American adults reporting that they access the internet this way. Accessing the internet via a handheld device is as common among adults as access via a laptop—35% of adults report that they access the internet using a cell phone or other handheld device. One in seven adults (14%) access the internet wirelessly through a device other than a laptop or cell phone such as a gaming device.

<sup>&</sup>lt;sup>7</sup> Note that the adult definition of wireless internet user does not apply to teens, as the questions about wireless internet use were asked differently and cannot be directly compared.





Source: Pew Internet & American Life Project, September 2009 Tracking Survey, August 18-September 14, 2009. N=2,253 and the margin of error is ±2%, based on all adults age 18 and older. Interviews were conducted in both English (n=2,179) and Spanish (n=74).

# Young adults, African-Americans and Hispanics more likely to go online wirelessly

Wireless rates are especially high among adults under age 30; eight in ten adults between the ages of 18 and 29 (81%) are wireless internet users. That figure drops to 63% among 30-49 year olds, and 34% among adults age 50 and older. Roughly half of 18-29 year olds have accessed the internet wirelessly on a laptop (54%) or on a cell phone (55%), and about one quarter of 18-29 year olds (28%) have accessed the internet wirelessly on a device other than a laptop or cell phone.

Among internet users, white adults are *less* likely than both African Americans and Hispanics to use the internet wirelessly. African Americans are the most active users of the mobile internet, and their use is growing at a faster pace than mobile internet use among whites or Hispanics. While African-Americans are less likely than whites to use laptops to access the internet, they are more likely to use other mobile devices such as cell phones. Half of all African-American adults (48%) have used their cell phone to access the internet, compared with 40% of Hispanic adults and just 31% of white adults.

# Men, and adults with high income and education levels are the most likely to access the internet wirelessly.

Gender, education, and income are all related to wireless internet use. Overall, men are slightly more likely than women to be wireless. While men are no more likely than women to use wireless laptop connections, they are more likely to access the internet wirelessly via a cell phone or other device. Wireless internet use, particularly wireless laptop use, is positively correlated with educational attainment and household income. While wireless cell use and wireless internet use via other devices is also positively correlated with educational attainment and income, the impact is not as strong.

# **Demographics of Wireless Users**

The percentage of adults in each demographic group who access the internet wirelessly. Please see methodology for more information on question wording.

% of adults

All adults	54%
Sex	
Male	57%*
Female	52
Age	
18-29	81%*
30-49	63*
50-64	44*
65 and older	17
Race/ethnicity	
White (not Hispanic)	54%
Black (not Hispanic)	56
Hispanic	50
Household income	
Less than \$30,000	42%*
\$30,000-\$49,999	57
\$50,000-\$74,999	67*
More than \$75,000	73*

<sup>\*</sup> indicates a statistically significant difference from other data points within the same demographic variable.

Source: Pew Internet & American Life Project, September 2009 Tracking Survey, August 18-September 14, 2009. N=2,253 and the margin of error is ±2%, based on all adults age 18 and older. Interviews were conducted in both English (n=2,179) and Spanish (n=74). This definition of wireless internet users includes those who are wireless on a device other than a laptop or cellphone, which has not been included in previous definitions.

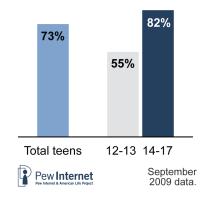


## Teens and online social networks

Teens continue to be avid users of social networking websites – as of September 2009, 73% of online American teens ages 12 to 17 used an online social network website, a statistic that has continued to climb upwards from 55% in November 2006 and 65% in February 2008.

As we have seen consistently over time, older online teens are more likely to report using online social networks than younger teens. While more than 4 in 5 (82%) online teens ages 14-17 use online social

# % of online teens on SNS



networks, just a bit more than half of online teens ages 12-13 say they use the sites. These age findings are understandable in light of age restrictions on social networking sites that request that 12 year olds refrain from registering or posting profiles, but do not actively prevent it. Indeed, among online teens just 46% of 12 year olds in the study used social network sites, while 62% of 13 year olds used them.

Teens who go online daily are also more likely to use social network websites (or perhaps are encouraged by the sites to go online daily), with 80% of daily internet users visiting these sites compared with 62% of teens who go online less often. Teens from lower income

families (those earning less than \$30,000 annually) are more likely to use online social networks than teens from wealthier households, with more than four in five teens from the less well-off households using social networks compared to roughly 70% of teens from wealthier homes.

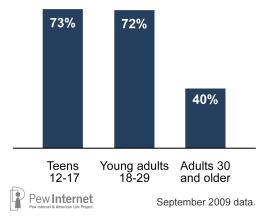
In November 2006, the composition of the teen social network-using population was somewhat different than it is today. There were no significant differences in family income between teen social network users and those who did not use the sites. Girls were more likely to use the sites than boys – unlike today when boys and girls are equally likely to visit. However, little has changed between 2006

and 2009 with regards to the age of social network users – then as now, 12 and 13 year old teens were much less likely to use online social network sites than their older, high-school aged counterparts.

## Adults and social networks

Although the number of adults who use social networking websites has grown rapidly over the last several years, adults as a whole remain less likely than teens to use these sites. As of September 2009, 47% of online adults used a social networking website, compared with the 73% of teens who did so at a comparable point in time. The percentage of adults who use online social networks has grown from 8% of internet users in February 2005 to 16% in August 2006 to

# Teens and young adults converge in enthusiasm for social networking sites



37% in November 2008. On a typical day in 2009, just over one-quarter (27%) of adult internet users visited a social networking site.

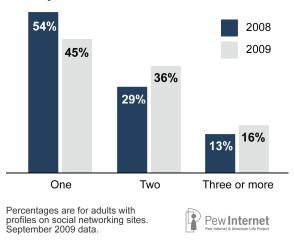
Just as with teens, usage of social networking websites by adults varies dramatically by age. Nearly three-quarters (72%) of online 18-29 year olds use these sites—similar to the rate among teens—with 45% doing so on a typical day. By contrast, 39% of internet users thirty and older use social networking websites. Within the under-thirty cohort, those ages 18-24 (73%) and those ages 25-29 (71%) are equally likely to use social networking sites. Men and women are equally likely to use these sites, as are whites, African-Americans and Hispanics. However, usage of online social networks among adults does vary by educational attainment—50% of online adults with at least some college experience use these sites, compared with 43% of such adults with a high school degree or less.

## More adults on multiple social network sites

As the number of adults who use online social networks has grown, so has the percentage of social networking site users who maintain a profile on multiple sites. In May 2008, 54% of adults with a social networking site profile had a profile on just one site, while 29% had profiles on two sites and 13% had

profiles on three or more sites. As of September 2009, the percentage of profile owners with only one profile had fallen by nine percentage points to 45%, while the percentage with two profiles had grown from 29% to 36% of profile owners. The proportion of social networking site users with profiles on three or more sites has remained consistent over this time period—16% currently have profiles on three or more such sites. Profile owners ages 18-29 are slightly more likely to have multiple profiles than those over thirty. Just under six in ten (57%) profile owners ages 18-29 maintain a profile on more than one site, compared with half (49%) of profile owners ages thirty and up.

# Adults increasingly have multiple SNS profiles

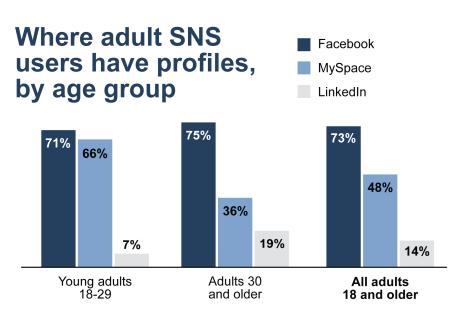


Among adult profile owners, Facebook is currently the social network of choice; 73% of adult profile owners now maintain a profile on Facebook, 48% of all adult profile owners have a profile on MySpace and 14% of profile owners use LinkedIn as of September 2009.<sup>8</sup>

When it comes to use of specific social networking sites by different age cohorts, young adult profile owners stand out by being much more likely than those thirty and older to have a profile on MySpace. For adult profile owners under thirty, MySpace and Facebook are approximately equal in popularity, with LinkedIn a distant third—71% of profile owners between the ages of 18 and 29 have a profile on Facebook, 66% have a profile on MySpace and an additional 7% have a profile on LinkedIn. Three-

<sup>8</sup> Note: Because respondents were allowed to mention multiple sites on which they maintain a profile, totals may add to more than 100%.

quarters of profile owners ages thirty and older (75%) have a Facebook profile, similar to the figures for profile owners under thirty. However, MySpace is much less popular among older adults, as just 36% of profile owners in this age group have a profile on MySpace. LinkedIn, with its focus on professional networking, is also more widely used among profile owners thirty and older—19% of profile owners in this age group have a LinkedIn profile.



Percentages are for adults with profiles on social networking sites. September 2009 data.



As with the usage of social networking sites in general, the specific sites on which adult users maintain their profiles also varies by educational attainment. Among adult profile owners with a high school degree or less, 64% have a profile on MySpace, 63% have a profile on Facebook and just 3% have a LinkedIn profile. Among profile owners with at least some college experience, Facebook and LinkedIn are much more popular—41% have a profile on MySpace, 78% have profile on Facebook and 19% have a LinkedIn profile. An analysis based on household income produces similar findings: compared with profile owners earning \$50,000 or more per year, those with annual household incomes of less than \$50,000 per year are significantly more likely to have a profile on MySpace (64% vs. 36%) and much less likely to have a profile on LinkedIn (6% vs. 22%). The proportion of high- and low-income profile owners with a profile on Facebook is similar—71% of profile owners earning less than \$50,000 per year have a profile on Facebook, compared with 77% of those earning more than \$50,000 per year.

Usage of different social networking sites also varies by gender and race. Among adult profile owners, men (18%) are more likely than women (10%) to maintain a profile on LinkedIn, while women (78%) are more likely than men (68%) to have a profile on Facebook. Additionally, white profile owners appear to gravitate towards Facebook and LinkedIn, while minority profile owners tend towards profiles on MySpace—however, due to the small number of minority profile owners in our September 2009 survey these differences are not presented in detail here.

## Teens and social network communication practices

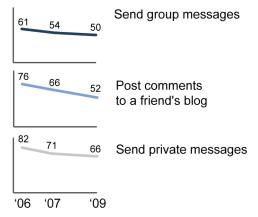
Even with teens' continued enthusiasm for social networking, recent changes in their communication patterns on the sites suggest they are somewhat less tethered to their profiles. Teens have remained steady or even shown a slight decline in their likelihood of using social network sites to connect with friends. A bit more than a third (37%) of social network-using teens said they sent messages to friends every day through the social sites, a drop from the 42% of such teens who said they did so in February of 2008. Additionally, fewer teens are sending bulletins or group messages or sending private messages to friends from within social network sites. About half of teen social network users send group messages, down from 61% in 2006. And two-thirds of social network-using teens send private messages to friends, down from 82% in November 2006. Fewer teens are posting comments to a friend's blog within a social networking site, with 52% of teens commenting on blogs, down from 76% in 2006. The decline in blog commenting in social networks may also reflect recent findings about the overall decline in blogging among teens.

Posting comments, either to a picture, page or wall remains popular with teens who use social networks. Fully 86% of teen social network users post comments to a friend's page or wall, and 83% have added comments to a friend's picture. Sending instant messages or text messages to friends through a social network site has remained stable, with 58% of social networking teens saying they sent texts or IMs. Teens also join groups on social network sites – a bit more than a third (37%) say they have done so.

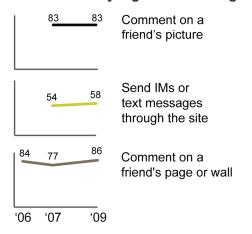
# Teens' activities on social networking sites

The percentage of teen social networking site users who have done the following activities, over time (2006-2009).

# **Declined over time**



# No statistically significant change



# 2009 data only:

% of teens on SNS

Join groups:

37%

% of teens who access SNS through mobile devices

Use your cell phone to view or update your profile:

25%

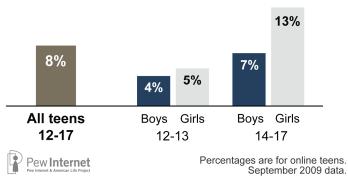


# Twitter among teens and adults

There has been much media attention given to Twitter and other microblogging services over the past year and initially the supposition was that, as with other types of social network services, teenagers would be leading the adoption charge on a social, connective technology. However, data from September 2009 suggest that teens do not use Twitter in large numbers. While a September 2009

survey of adults suggests that 19% of adult internet users ages 18 and older use Twitter or update their status online, 9 teen data collected at a similar time show that only 8% of online American teens ages 12-17 use Twitter. 10 It should be noted that the question wording for teens is quite different from how the question was posed to adults so the results are not strictly comparable. For more on our adult findings about twitter, please see

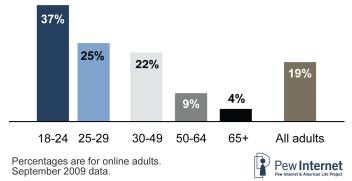
# Eight percent of online teens use Twitter



http://pewinternet.org/Reports/2009/17-Twitter-and-Status-Updating-Fall-2009.aspx and http://pewinternet.org/Reports/2009/Twitter-and-status-updating.aspx

Older teens ages 14-17 are more likely to use Twitter than middle school teens ages 12-13. Among internet users, one in ten (10%) high school aged teens uses Twitter while less than half that number of younger teens – just 5% – do so. High school aged girls are driving the age differences; 13% of online girls in that age group use Twitter, compared to 7% of boys that age. Teens from households wired with broadband are slightly more likely to report using Twitter—with 9% of broadband users on Twitter

# % of online adults who use Twitter or another status-updating site



compared to just 3% of teens with dial up access at home. There are no differences in Twitter use among teens by race, ethnicity or socioeconomic status.

Among adults, young adults are the most active users of status update services such as Twitter; one-third (33%) of internet users under the age of thirty post or read status updates online. These services are especially popular among the youngest adults—fully 37% of online 18-24 year olds post status

<sup>&</sup>lt;sup>9</sup> Please see the Pew Internet Project's Twitter and Status Updating memo online at http://www.pewinternet.org/Reports/2009/17-Twitter-and-Status-Updating-Fall-2009.aspx for more details about how adults use twitter.

<sup>&</sup>lt;sup>10</sup> Note; the question is asked differently among teens and adults – teens were asked "Do you ever use Twitter?" while adults were asked "have you ever used twitter or another service where you can update your status online?" which may explain some of the difference in the data between the two groups.

updates about themselves online or view the updates of others, up from 18% of the youngest adults in December 2008. These higher rates of Twitter use and status updating among young adults relative to teens may be partially due to our question wording capturing status updates on social networking sites. Many social networking sites offer the ability to post short status updates, and usage of social networking sites is highly correlated with status update behavior—fully 35% of social networking site users also post status updates online, compared with just 6% of internet users who do not use social networking websites. There is little variation in the use of status update services based on race, ethnicity or socio-economic status; however, online women (21% of whom use Twitter or other status update services) are more likely to use these services than men (17% of whom do so).

# Adults, teens and virtual worlds

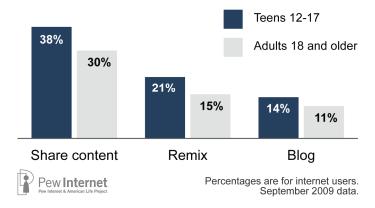
Virtual worlds are persistent online play spaces which allow users to determine the direction of game play. Teen use of virtual worlds has remained steady since February 2008 – currently, 8% of online teens say they visit virtual worlds like Gaia, Second Life or Habbo Hotel, similar to the 10% of such teens who visited virtual worlds in 2008. As we saw in 2008, younger teens continue to be more enthusiastic users of virtual worlds – 11% of online teens 12-13 use virtual worlds, while 7% of teen internet users 14-17 use them. There is no difference in virtual world use between boys and girls, by race or ethnicity or household income.

Use of virtual worlds is more common among teens than among adults. In September 2009 we measured virtual world usage among adults for the first time and found that 4% of online adults visit virtual worlds. Usage of virtual worlds is relatively consistent across age cohorts, with 4% of internet users under age 30 and 4% of those thirty and up visiting virtual worlds. Among adults there are no differences on virtual world use related to gender, race/ethnicity, income, or education.

## **Content Creation**

In previous reports, <sup>11</sup> we have highlighted teens who are avid and clever creators of digital content. Recent data suggests that some online content creating activities have remained constant over time, while others have shown slight or even significant declines since 2006. Adults, however, have shown some increases in content creating over the past few years, with most of the increases found among adults older than 30.

# Content creation activities



<sup>&</sup>lt;sup>11</sup> Teens and Social Media, <a href="http://www.pewinternet.org/Reports/2007/Teens-and-Social-Media.aspx">http://www.pewinternet.org/Reports/2007/Teens-and-Social-Media.aspx</a>; Teen Content Creators, <a href="http://www.pewinternet.org/Reports/2005/Teen-Content-Creators-and-Consumers.aspx">http://www.pewinternet.org/Reports/2005/Teen-Content-Creators-and-Consumers.aspx</a> and Content Creation Online <a href="http://www.pewinternet.org/Reports/2004/Content-Creation-Online.aspx">http://www.pewinternet.org/Reports/2005/Teen-Content-Creation-Online.aspx</a>

## **Sharing content**

Teens share self-created content online like photos, videos, artwork or stories. Online sharing of content that teens have created themselves has remained steady since 2006; 38% of internet-using teens say they shared content online in 2009, similar to the 39% who said the same in November 2006.

There is no variation among teens today in sharing self-created content by sex, age, race, ethnicity or socioeconomic status – all groups are equally likely to share. By comparison, in 2006, girls and older teens were more likely to share content online. Still, in 2006 and in 2009, there were no differences in sharing content by race, ethnicity, family income or parent's education level.

While creative content sharing among teens has not increased significantly since 2006, more adults now share self-created content online than did so two years ago. Three in ten online

# Teens (12-17) 39% 38% 21% 2006 2009 Percentages are for internet users. Pew Internet Provident Lib Project

% who share content online

adults (30%) share online content as of September 2009, up from 21% of such adults in December 2007. Interestingly, almost none of this growth over time has come from young adults. Thirty-seven percent of online 18-29 year olds now share their personal creations online, a figure that is unchanged from the 36% who did so in 2007. In contrast, 28% of internet users ages thirty and up now take part in this activity, a twelve-point increase from the 16% who did so in 2007.

There are no major differences in online content sharing among adults based on gender or race/ethnicity, although there is some variation based on educational attainment. One-third (34%) of internet users with at least some college experience post their own creations online, compared with one-quarter (24%) of those with a high school degree or less.

#### Remixing

As with content sharing, teens have held steady in their reports of remixing online content – taking material they find online such as songs, text or images and remixing it into their own artistic creations.

About one in five online teens (21%) report remixing digital content, which is not a statistically meaningful difference from our previous finding that 26% of teens reported remixing in November 2006. Girls are more likely to remix content than boys, with one quarter (26%) of online girls remixing online material compared to 15% of boys. Younger boys are the least likely to remix content – just 9% of online boys ages 12-13 remix. Remixing shows no variation by race, income or parent's level of education. Remixing in 2006 showed similar patterns to 2009, with the only difference being that boys and girls were equally likely to report remixing content in 2006.

# % who remix content online Teens (12-17) Adults (18+) 26% 21% 11% 15% 2006 2009 2007 2009 Percentages are for internet users.

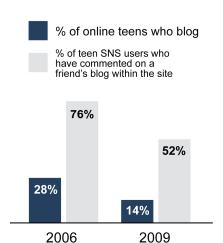
Among online adults, 15% take part in remix culture—and as with online content sharing, remixing has grown somewhat in popularity among older adults over the last two years and not at all among young adults or teens. One in five (19%) online 18-29 year olds remixes content they find online (unchanged from the 20% who did so in late 2007), while 13% of internet users ages thirty and up do so (a five percentage point increase from the 8% who did so in 2007). In contrast to teens, among adults, men and women are equally likely to remix content. There is little variation among adults based on race/ethnicity or socio-economic status.

## **Blogging**

Among all the content creating activities discussed here, most striking is the decline in blogging among teens and young adults. Since 2006, blogging by teens has dropped from 28% of teen internet users to 14% of online teens in 2009. Teens are now beginning to resemble their elders in their likelihood of blogging, as about 12% of adults have consistently reported blogging since February 2007. This decline is also reflected in the decline of the number of teens who say they comment on blogs within social networking websites – 52% of social network-using teens report commenting on friends' blogs within these sites, down from 76% commenting in 2006 (as discussed earlier in this report.)

Continuing a trend in teen blogging that first emerged in 2006, teens from lower income families – those earning below \$50,000 annually -- are more likely to report keeping a blog than teens from households earning more than \$50,000. While 23% of online teens

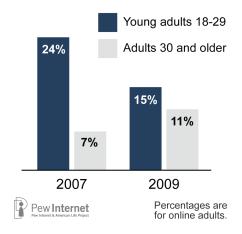
# Teens: Blogging and commenting over time



Source: Pew Internet surveys.

from families earning less than \$50,000 per year keep a blog, just 8% of teens from households earning more than \$50,000 a year say they keep a blog. Unlike in years past, boys and girls are statistically just as likely to keep a blog. There are no racial or ethnic differences in blogging by teens.

# **Adults: Blogging over time**



This decline in teen blogging mirrors a similar decrease in blogging activity among the youngest adult internet users. In December 2007, fully 28% of online 18-24 year olds maintained a blog. By September 2009 that figure had fallen by half, and just 14% of internet users ages 18-24 maintained a blog. Despite this decline among young adults, the proportion of all adult internet users who blog has not budged over this same time period (12% of adult internet users did so in 2007, and 11% do so now).

The prevalence of blogging among adults as a whole has remained consistent because the decline in blogging among young adults has been marked by a corresponding increase in blogging among older adults. For example, in December 2007,

24% of online 18-29 year olds reported blogging, compared with 7% of those thirty and older. By 2009, that difference had nearly disappeared—15% of internet users under age thirty and 11% of those ages thirty and up now maintain a personal blog. Among adult internet users, blogging is equally common among men and women; whites, black and Hispanics; and those with low and high levels of income and education.

## **Additional Adult Content Creation Activities**

Along with the content creation activities analyzed above, our September 2009 survey asked adult internet users about three additional content creation activities that were not asked of teens. These activities include: creating or working on a personal webpage; creating or working on a webpage or blog belonging to someone else (such as friends, groups, or for work); and posting comments to an online news group, website, blog or photo site.

#### **Building websites**

The proportion of adults who create or work on a website (either a personal site, or someone else's) has remained consistent over the last two years. Fourteen percent of online adults maintain a personal webpage (unchanged from the 14% who did so in December 2007), while 15% work on the webpages of others (also unchanged from the 13% who did so in December 2007).

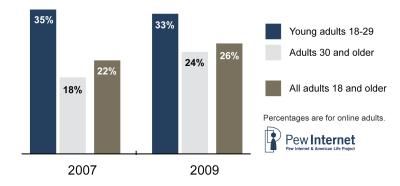
Adult internet users under age thirty are more likely than those ages thirty and up to work on a personal webpage (18% vs. 13%) as well as to work on a webpage for someone else (21% vs. 13%). Within the under-thirty cohort, those ages 18-24 and those 25-29 are equally likely to work on webpages of any kind. Men are more likely than women to work on their own webpage (16% of online men do so, compared with 12% of online women) as well as to work on webpages for others (17% vs. 12%).

# **Posting comments**

Posting comments online (such as on a news group, website, blog or photo site) has become somewhat more common among adults over the last two years. Just over one-quarter (26%) of wired adults posted comments online as of September 2009, up from 22% of such adults in late 2007. As with many of the content creation activities discussed here, those under age thirty are no more likely to post online

comments in 2009 then they were in 2007, while for older adults commenting has become more popular in recent years. In 2009 33% of internet users ages 18-29 posted comments online (unchanged from the 35% who did so in December 2007). Among internet users ages thirty and up, one-quarter (24%) now post comments online, up from 18% in late 2007. As reported earlier, teens are enthusiastic

Adults: Posting blog comments over time



online commenters within the social network context. Fully 86% of social-networking teens post comments to a friend's page or wall on a social network site and 83% post comments on friends' photos posted to an online social network.

There is little variation in online commenting by adults based on gender, race/ethnicity or income. However, education does play a role—31% of adult internet users with at least some college experience post comments online, significantly higher than the 20% of those with a high school degree or less who do so.

# The internet as an information and economic appliance in the lives of teens and young adults.

Beyond its role as an indispensable communications hub, internet access connects users to reams of vital information, necessary for life management, health and civic engagement. The section below explores the intersection of teen and adult data over time on health information searches, news-seeking behaviors and online purchasing.

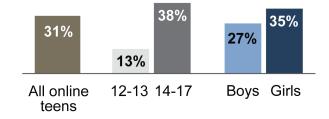
#### Teens, adults and online health information

About a third (31%) of online teens ages 12 to 17 use the internet to look for health, dieting or physical fitness information, a finding that has remained relatively stable since the question was first asked in December 2000, when 26% of online teens gathered health information online. Older teens are more likely than younger teens to look online for health information (38% of teens ages 14-17 vs. 13% of teens ages 12-13). Back in 2000, when we first asked teens about their online health information seeking practices, teens showed similar variations - older teens, particularly older teen girls were more likely to look for health information online.

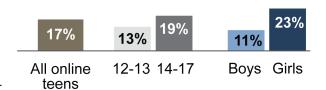
Teens also use the internet to look for information on health topics that are hard to talk about, like drug use, sexual health or depression. A bit more than one in six (17%) internet-using teens look online for information about sensitive health topics, statistically equivalent to the 22% who reported such searches in 2004.

Girls are more likely than boys to look online for sensitive health information (23% vs. 11%). Younger boys are the least likely group to look for information on a health topic that is hard to talk about—just 4% of online boys ages 12-13 have done so, compared with 13% of older boys ages 14-17. Teens from the lowest- income families – those earning less than \$30,000 annually – are the most

# Searching for health, dieting, or physical fitness information



# Searching for sensitive health information





Percentages are for internet users ages 12-17. September 2009 data.

likely to seek health information online. Just about a quarter (23%) of online low-income teens look for health information compared with 11% of teens from households earning more than \$75,000 a year.

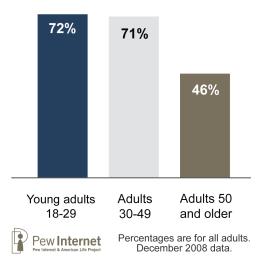
These patterns are similar to the differences visible between groups when we first asked about looking for sensitive health information in 2004. Back then, as now, girls, older teens and especially older girls were the most likely to look for sensitive health information online, as were lower income teens. In 2009, there are no racial or ethnic or education level differences in those who look for sensitive health information online compared with those who did not. However, in 2004, non-white teens and teens with less well-educated parents were more likely to look online for answers to health questions that were hard to ask of others.

A December 2008 Pew Internet survey of adults 18 and older indicates that overall, six in ten adults are online health information seekers. 12 In that survey, adults were asked about a series of health topics, and 61% said they had looked online for at least one of those items. 13 This is a notable increase over the 45% of all American adults who were looking online for health information in 2002. Specifically, in 2008,

38% of adults indicated that they look online for information about exercise or fitness, and 21% said they look online for information about depression, anxiety, stress or mental health issues. Overall, one quarter of adults (24%) report looking online for information about how to lose weight or how to control their weight. This is particularly common among adults in the 25-39 age range; four in ten adults in this population (40%) look online for information about weight control.

The key age divide among adult online health information seekers is 50 years of age. Seven in ten adults under age 50 are online health information seekers—72% of those under age 30 and 71% of those age 30-49. In comparison, just 46% of adults age 50 or

# % of all adults who look for health information online



older look for health information online. Overall, online women are more avid health information

seekers than online men, and are significantly more likely than men to look for information about exercise and fitness (56% v. 48%), information about how to lose weight (42% v. 24%), and information about depression, anxiety and other mental health issues (35% v. 22%).

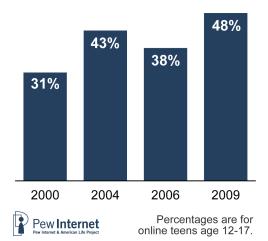
<sup>12</sup> Fox. Susannah and Sydney Jones, "The Social Life of Health Information" (Pew Internet & American Life Project: June 11, 2009). Available at: http://www.pewinternet.org/Reports/2009/8-The-Social-Life-of-Health-Information.aspx

<sup>&</sup>lt;sup>13</sup> Health questions were asked differently of adults and teens.

# Teens and online purchasing

Nearly half (48%) of online teens buy things online like books, clothing or music, a practice that has been steadily increasing since the question was first asked in December 2000, when 31% of online teens made online purchases. Older teens ages 14-17 are more likely to buy items online – more than half (53%) of online teens in this age group have purchased items online, while 38% of middle school aged teens have made online purchases. Older girls drive this trend, with 57% of online girls ages 14-17 making online purchases while less than half (48%) of online boys the same age buy things online.

# % of online teens who have bought things online, such as books, clothing, or music



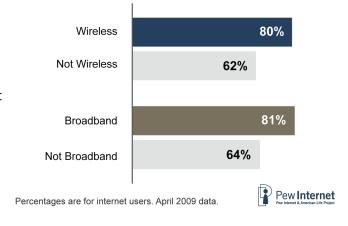
In both 2000 and 2009, teens living in households with higher incomes and education levels were consistently more likely to buy things online. The most striking differences between 2000 and today relate to gender. Older teens were and are more likely to buy online. However, older boys were the most likely online purchasers in 2000, while older girls lead the trend in 2009.

As one would expect, adults purchase goods online at a much higher rate than teens. As of April 2009, three in four online adults (75%) report purchasing a product online such as books, music, toys or clothing. That figure has increased at a fairly steady rate since Pew Internet first began asking this question in March 2000. At that time, about half of all online adults (48%) had ever purchased a product online.

Overall, white adult internet users are more likely to purchase products online than African American adult internet users (77% v. 60%), and educational attainment and income are both positively correlated with online shopping. More than eight in ten adult internet users (85%) living in households with annual incomes of \$50,000 or more have purchased something online; that figure drops to 64% among internet users living in households with incomes below \$50,000.

Other drivers of online shopping are wireless internet use and a broadband connection at home. Eight in ten wireless internet users (80%) have bought a product online, compared with just six in ten internet users who are not wireless (62%). Likewise, home broadband users are more likely than those without broadband at home (81% v. 64%) to be online shoppers.

# % of adults who bought something online



# Teens and news/political news

About two-thirds (62%) of internet-using teens consume online news about current events and politics. These numbers have remained roughly the same since 2000, except for spikes around mid-term and general elections in our November 2004 and November 2006 studies, when news consumption rose to 76% and 77% of online teens, respectively. Older teens are more likely to visit sites for news or political information; 68% of online teens ages 14-17 visited online news sites, while just about half (49%) of 12-13 year olds said the same. There are no gender differences in whether teens visit online news sites.

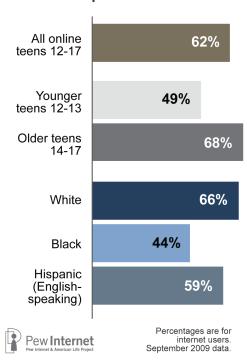
White teens and teens from families with higher income and education levels are more likely to report visiting sites for online news or political information. Two-thirds of online white teens (66%) say they have gone online to get news or information about current events or politics, while 44% of black teens and 59% of English-speaking Hispanic teens have done the same. Teens whose parents have a college

degree or earn more than \$75,000 annually are more likely than teens whose parents have a high school diploma or earn less than \$50,000 in household income to seek out online information about politics or current events.

Previous Pew Internet studies have shown similar findings for online news use and household income and education and age. However, previous research did not show any racial or ethnic difference in online news use.

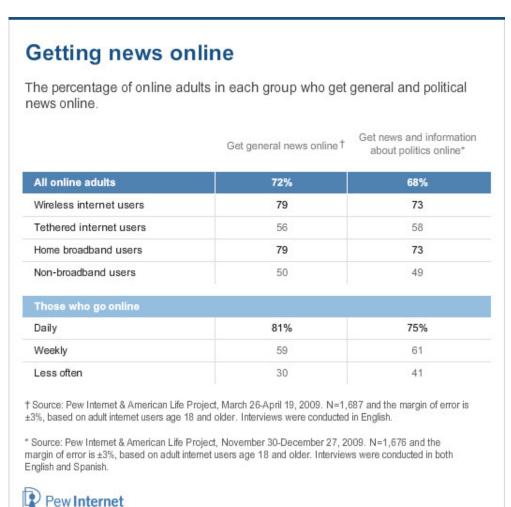
In Pew Internet surveys, adults are generally asked two separate items about getting news online and going online for news or information about politics. As of April 2009, 72% of online adults get news online, and as of December 2009, 68% of online adults get news or information online that is specifically about politics. The percentage of adult internet users who get news online has held fairly constant since 2002, when 71% of adult internet users reported getting news online. In contrast, getting political news online has increased dramatically since it was first measured by Pew Internet in March of 2000. At that time, just 35% of online adults were getting political news online.

% of online teens in each group who get news about current events and politics online



Similar to teen news consumption behavior, as well as adults' online shopping, educational attainment and income are both positively correlated with getting news online. Eight in ten college-educated adult internet users (81%) get news online; that figure drops to 59% among internet users who have not attended college. The same pattern holds when looking at online political news consumption; three in four college educated internet users (75%) get political news online, compared with just 56% of internet users with lower educational attainment.

Wireless internet users are more likely than wired internet users to get both general news online (79% v. 56%) and to get political news online (73% v. 58%). Likewise, those with home broadband connections are more likely than other online adults to get general news (79% v. 50%) and political news (73% v. 49%) on the internet. Finally, those who go online daily are more likely than those who use the internet less frequently to get both general news and political news and information online.



# Acknowledgements

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# Methodology

#### **SUMMARY**

For the 2009 teens data mentioned in this report, the bulk of the data comes from the 2009 Parent-Teen Cell Phone Survey, sponsored by the Pew Internet and American Life Project. The survey obtained telephone interviews with a nationally representative sample of 800 teens age 12 to 17 years-old and their parents living in the continental United States. The survey was conducted by Princeton Survey Research Associates International. The interviews were done in English by Princeton Data Source, LLC from June 26 to September 24, 2009. Statistical results are weighted to correct known demographic discrepancies. The margin of sampling error for the complete set of weighted data is ±3.8%. For methodological information on teens data collected prior to 2009, please visit the data set page for each study at <a href="http://www.pewinternet.org/Data-Tools/Download-Data/Data-Sets.aspx">http://www.pewinternet.org/Data-Tools/Download-Data/Data-Sets.aspx</a>

The adult data in 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 between August 18 to September 14, 2009, among a sample of 2,253 adults, age 18 and older. Interviews were conducted in both English (n=2,179) and Spanish (n=74). For results based on the total sample, one can say with 95% confidence that the error attributable to sampling and other random effects is plus or minus 2.3 percentage points. For results based Internet users (n=1,698), 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 few of the adult data points in this study (where noted) are based on data from telephone interviews conducted by Princeton Survey Research Associates International between November 30 and December 27, 2009, among a sample of 2,258 adults, age 18 and older. Interviews were conducted in both English (n=2,197) and Spanish (n=61). For results based on the total sample, one can say with 95% confidence that the error attributable to sampling and other random effects is plus or minus 2.4 percentage points. For results based Internet users (n=1,676), the margin of sampling error is plus or minus 2.8 percentage points.

For methodological information for adult data collected prior to September 2009, please visit the data set page for each study at <a href="http://www.pewinternet.org/Data-Tools/Download-Data/Data-Sets.aspx">http://www.pewinternet.org/Data-Tools/Download-Data/Data-Sets.aspx</a>

Details on the design, execution and analysis of the survey are discussed below.

## **DESIGN AND DATA COLLECTION PROCEDURES**

Sample Design

A combination of landline and cellular random digit dial (RDD) samples was used to represent all teens and their parents in the 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.

#### **Contact Procedures**

Interviews were conducted from June 26 to September 24, 2009. As many as 7 attempts were made to contact and interview a parent at every sampled telephone number. After the parent interview, an additional 7 calls were made to interview an eligible teen. Sample was released for interviewing in replicates, which are representative subsamples of the larger sample. Using replicates to control the release of sample ensures that complete call procedures are followed for the entire sample. Calls were staggered over times of day and days of the week to maximize the chance of making contact with potential respondents. Each telephone number received at least one daytime call in an attempt to find someone at home.

Contact procedures were slightly different for the landline and cell samples. For the landline sample, interviewers first determined if the household had any 12 to 17 year-old residents. Households with no teens were screened-out as ineligible. In eligible households, interviewers first conducted a short parent interview with either the father/male guardian or mother/female guardian. The short parent interview asked some basic household demographic questions as well as questions about a particular teen in the household (selected at random if more than one teen lived in the house.)

For the cell phone sample, interviews first made sure that respondents were in a safe place to talk and that they were speaking with an adult. Calls made to minors were screened-out as ineligible. If the person was not in a safe place to talk a callback was scheduled. Interviewers then asked if any 12 to 17 year olds lived in their household. Cases where no teens lived in the household were screened-out as ineligible. If there was an age-eligible teen in the household, the interviewers asked if the person on the cell phone was a parent of the child. Those who were parents went on to complete the parent interview. Thos who were not parents were screened-out as ineligible.

For both samples, after the parent interview was complete an interview was completed with the target child. Data was kept only if the child interview was completed.

#### **WEIGHTING AND ANALYSIS**

Weighting is generally used in survey analysis to compensate for patterns of nonresponse that might bias results. The interviewed sample was weighted to match national parameters for both parent and child demographics. The parent demographics used for weighting were: sex; age; education; race; Hispanic origin; and region (U.S. Census definitions). The child demographics used for weighting were gender and age. These parameters came from a special analysis of the Census Bureau's 2008 Annual Social and Economic Supplement (ASEC) that included all households in the continental United States.

Weighting was accomplished using Sample Balancing, a special iterative sample weighting program that simultaneously balances the distributions of all variables using a statistical technique called the Deming Algorithm. Weights were trimmed to prevent individual interviews from having too much influence on the final results. The use of these weights in statistical analysis ensures that the demographic characteristics of the sample closely approximate the demographic characteristics of the national population. Table 1 compares weighted and unweighted sample distributions to population parameters.

**Table 1: Sample Demographics** 

	<u>Parameter</u>	Unweighted	Weighted
Census Region			
Northeast	17.8	15.4	17.4
Midwest	21.8	24.6	22.1
South	36.7	36.8	36.9
West	23.7	23.3	23.6
Parent's Sex			
Male	43.7	36.3	42.4
Female	56.3	63.8	57.6
Parent's Age			
LT 35	10.0	11.8	10.2
35-39	19.2	16.6	18.8
40-44	26.4	21.3	25.6
45-49	24.8	26.2	25.2
50-54	13.1	16.0	13.5
55+	6.4	8.1	6.6

Parent's Education			
Less than HS grad.	13.1	7.5	11.6
HS grad.	34.9	27.6	35.1
Some college	23.2	25.0	23.6
College grad.	28.8	39.9	29.8
Parent's Race/Ethnicity			
White, not Hispanic	63.6	69.5	65.2
Black, not Hispanic	11.9	14.8	12.3
Hispanic	18.1	10.0	16.1
Other, not Hispanic	6.3	5.8	6.4
<u>Kid's Sex</u>			
Male	50.9	53.6	51.3
Female	49.1	46.4	48.7
Kid's Age			
12	16.7	14.3	16.1
13	16.7	17.0	16.8
14	16.7	15.6	16.6
15	16.7	17.8	16.8
16	16.7	16.3	16.7
17	16.7	19.1	17.0

## Effects of Sample Design on Statistical Inference

Post-data collection statistical adjustments require analysis procedures that reflect departures from simple random sampling. PSRAI calculates the effects of these design features so that an appropriate adjustment can be incorporated into tests of statistical significance when using these data. The so-called "design effect" or deff represents the loss in statistical efficiency that results from systematic non-response. The total sample design effect for this survey is 1.18.

PSRAI calculates the composite design effect for a sample of size n, with each case having a weight,  $w_i$  as:

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

In a wide range of situations, the adjusted standard error of a statistic should be calculated by multiplying the usual formula by the square root of the design effect (Vdeff). Thus, the formula for computing the 95% confidence interval around a percentage is:

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

where  $_{\vec{p}}$  is the sample estimate and n is the unweighted number of sample cases in the group being considered.

The survey's margin of error is the largest 95% confidence interval for any estimated proportion based on the total sample— the one around 50%. For example, the margin of error for the entire sample is  $\pm 3.8\%$ . This means that in 95 out every 100 samples drawn using the same methodology, estimated proportions based on the entire sample will be no more than 3.8 percentage points away from their true values in the population. It is important to remember that sampling fluctuations are only one possible source of error in a survey estimate. Other sources, such as respondent selection bias, questionnaire wording and reporting inaccuracy, may contribute additional error of greater or lesser magnitude.

#### **RESPONSE RATE**

Table 2 reports the disposition of all sampled callback telephone numbers ever dialed. 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
- o **Cooperation rate** the proportion of contacted numbers where a consent for interview was at least initially obtained, versus those refused
- o **Completion rate** the proportion of initially cooperating and eligible interviews that agreed to the child interview and were completed

Thus the response rate for landline sample was 14 percent and the response rate for the cell sample was 11 percent.

**Table 2:Sample Dispositions** 

Landline	Cell	
95863	39997	T Total Numbers Dialed
5185	619	<b>OF</b> Non-residential
4147	29	<b>OF</b> Computer/Fax
59	0	<b>OF</b> Cell phone
39588	14290	<b>OF</b> Other not working
6206	1145	<b>UH</b> Additional projected not working
40679	23915	Working numbers
42.4%	59.8%	Working Rate
2069	382	<b>UH</b> No Answer / Busy
7575	5176	UO <sub>NC</sub> Voice Mail
79	11	UO <sub>NC</sub> Other Non-Contact
30956	18346	Contacted numbers
76.1%	76.7%	Contact Rate

2611	3092	UO <sub>R</sub> Callback
17958	8644	UO <sub>R</sub> Refusal
10387	6610	Cooperating numbers
33.6%	36.0%	Cooperation Rate
1232	837	IN1 Language Barrier
	1717	IN1 Child's cell phone
8142	3426	IN2 No teen in household
1013	630	Eligible numbers
9.8%	9.5%	Eligibility Rate
260	212	R Parent refused child interview
209	162	<b>R</b> Break-off child or parent
544	256	I Completes
53.7%	40.6%	Completion Rate
13.7%	11.2%	Response Rate