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Younger Americans' library habits and expectations

Americans ages 16-29 are heavy technology users, including in using computers and internet at libraries. At the same time, most still read and borrow printed books, and value a mix of traditional and technological library services.

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<http://libraries.pewinternet.org/2013/06/25/younger-americans-library-services/>

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Summary of findings

Younger Americans—those ages 16-29—exhibit a fascinating mix of habits and preferences when it comes to reading, libraries, and technology. Almost all Americans under age 30 are online, and they are more likely than older patrons to use libraries' computer and internet connections; however, they are also still closely bound to print, as three-quarters (75%) of younger Americans say they have read at least one book in print in the past year, compared with 64% of adults ages 30 and older.

Similarly, younger Americans' library usage reflect a blend of traditional and technological services. Americans under age 30 are just as likely as older adults to visit the library, and once there they borrow print books and browse the shelves at similar rates. Large majorities of those under age 30 say it is "very important" for libraries to have librarians as well as books for borrowing, and relatively few think that libraries should automate most library services, move most services online, or move print books out of public areas.

At the same time, younger library visitors are more likely than older patrons to access the library's internet or computers or use the library's research resources, such as databases. And younger patrons are also significantly more likely than those ages 30 and older to use the library as a study or "hang out" space: 60% of younger patrons say they go to the library to study, sit and read, or watch or listen to media, significantly more than the 45% of older patrons who do this. And a majority of Americans of all age groups say libraries should have more comfortable spaces for reading, working, and relaxing.

Younger Americans' use of technology

Compared with older adults, Americans under age 30 are just as likely to have visited a library in the past year (67% of those ages 16-29 say this, compared with 62% of adults ages 30 and older), but they are significantly *more* likely to have either used technology at libraries or accessed library websites and services remotely:

- Some 38% of Americans ages 16-29 have **used computers and the internet at libraries** in the past year, compared with 22% of those ages 30 and older. Among those who use computers and internet at libraries, young patrons are more likely than older users to use the library's computers or internet to do research for school or work, visit social networking sites, or download or watch online video.
- Almost half (48%) of Americans ages 16-29 have ever **visited a library website**, compared with 36% of those ages 30 and older (who are significantly less likely to have done so).¹
- Almost one in five (18%) Americans ages 16-29 have **used a mobile device to visit a public library's website or access library resources** in the past 12 months, compared with 12% of those ages 30 and older.

The higher rates of technology use at libraries by those under age 30 is likely related to their heavier adoption of technology elsewhere in their lives. In the late-2012 survey analyzed in this report, over nine

¹ Though the sample size was too small to report detailed findings within age groups, more information about how Americans used library websites is available at: <http://libraries.pewinternet.org/2013/01/22/part-2-what-people-do-at-libraries-and-library-websites/>

in ten younger Americans owned a cell phone, with the majority owning a smartphone; some 16% owned an e-reader, and 25% owned a tablet computer.

The high figures for technology adoption by young adults is also striking in more recent surveys by the Pew Research Center's Internet & American Life Project (surveys that covered those 18 and older, cited here for reference):

- 98% of young adults ages 18-29 use the internet and 80% have broadband at home²
- 97% of young adults ages 18-29 own a cell phone and 65% own a smartphone³
- 34% of young adults ages 18-29 have a tablet computer⁴
- 28% of young adults ages 18-29 own an e-reader⁵

Focusing back on younger Americans ages 16-29 from our November 2012 survey, we find that their interest in technology is reflected in their views about library services: 97% of Americans under age 30 say it is important for libraries to provide free computer and internet access to the community, including 75% who say it is "very important."

E-book reading habits over time

As with other age groups, younger Americans were significantly more likely to have read an e-book during 2012 than a year earlier. Among all those ages 16-29, 19% read an e-book during 2011, while 25% did so in 2012. At the same time, however, print reading among younger Americans has remained steady: When asked if they had read at least one print book in the past year, the same proportion (75%) of Americans under age 30 said they had both in 2011 and in 2012.

In fact, younger Americans under age 30 are now significantly more likely than older adults to have read a book in print in the past year (75% of all Americans ages 16-29 say this, compared with 64% of those ages 30 and older). And more than eight in ten (85%) older teens ages 16-17 read a print book in the past year, making them significantly more likely to have done so than any other age group.

Library habits and priorities for libraries

The under-30 age group remains anchored in the digital age, but retains a strong relationship with print media and an affinity for libraries. Moreover, younger Americans have a broad understanding of what a library is and can be—a place for accessing printed books as well as digital resources, that remains at its core a physical space.

Overall, most Americans under age 30 say it is "very important" for libraries to have librarians and books for borrowing; they are more ambivalent as to whether libraries should automate most library services or move most services online. Younger Americans under age 30 are just as likely as older adults to visit the library, and younger patrons borrow print books, browse the shelves, or use research databases at

² Among adults 18 and older (May 2013): <http://www.pewresearch.org/fact-tank/2013/05/30/internet-adoption-becomes-nearly-universal-among-some-groups-but-others-lag-behind/>

³ Among adults 18 and older (May 2013): <http://www.pewinternet.org/Reports/2013/Smartphone-Ownership-2013.aspx>

⁴ Among adults 18 and older (May 2013): <http://www.pewinternet.org/Reports/2013/Tablet-Ownership-2013.aspx>

⁵ Among adults 18 and older; does not include Spanish-language interviews (January 2013): [http://www.pewinternet.org/Shared-Content/Data-Sets/2013/January-2013--Mobile-Shopping-\(omnibus\).aspx](http://www.pewinternet.org/Shared-Content/Data-Sets/2013/January-2013--Mobile-Shopping-(omnibus).aspx)

similar rates to older patrons; finally, younger library visitors are more likely to use the computer or internet at a library, and more likely to see assistance from librarians while doing so.

Additionally, younger patrons are significantly *more* likely than older library visitors to use the library as a space to sit and read, study, or consume media—some 60% of younger library patrons have done that in the past 12 months, compared with 45% of those ages 30 and older. And most younger Americans say that libraries should have completely separate locations or spaces for different services, such as children’s services, computer labs, reading spaces, and meeting rooms: 57% agree that libraries should “definitely” do this.

Along those lines, patrons and librarians in our focus groups often identified teen hangout spaces as especially important to keep separate from the main reading or lounge areas, not only to reduce noise and interruptions for other patrons, but also to give younger patrons a sense of independence and ownership. A library staff member in our online panel wrote:

“Having a separate children's area or young adults area will cater solely to those groups and make them feel that the library is theirs. They do not have to deal with adults watching them or monitoring what book they pick or what they choose to do—it's all about them and what they want with no judgment. Children and teens love having their own space so why not give them that at the library?”

Younger Americans’ priorities for libraries reflect this mix of habits, including various types of brick-and-mortar services as well as digital technologies. Asked about what it is “very important” libraries should offer, for instance, librarians were at the top of the list:

- 80% of Americans under age 30 say it is “very important” for libraries to have **librarians to help people find information they need**
- 76% say it is “very important” for libraries to offer **research resources such as free databases**
- 75% say **free access to computers and the internet** is “very important” for libraries to have
- 75% say it is “very important” for libraries to offer **books for people to borrow**
- 72% say **quiet study spaces** are “very important”
- 72% say **programs and classes for children and teens** are “very important” for libraries to have
- 71% say it is “very important” for libraries to offer **job or career resources**

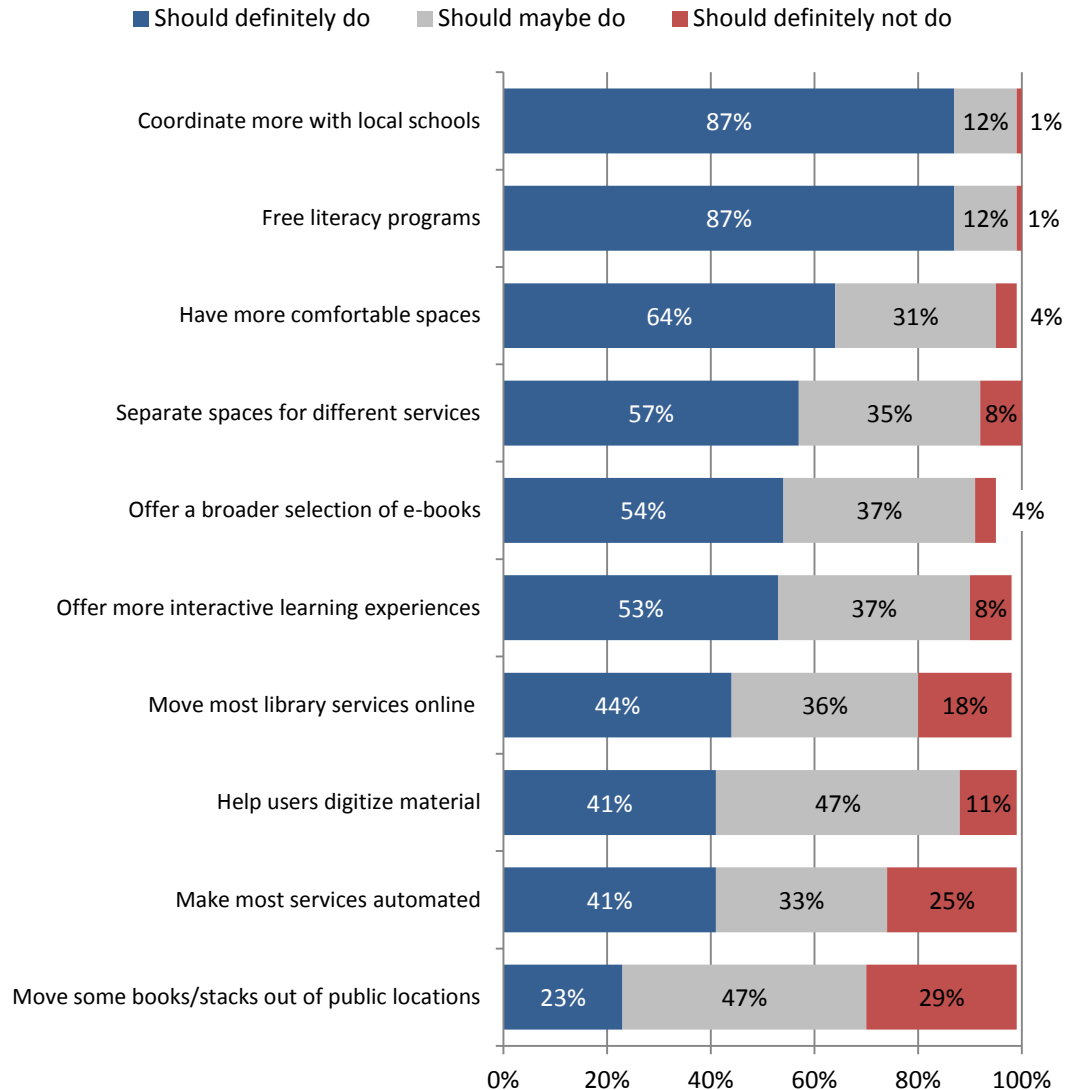
However, even as young patrons are enthusiastic users of libraries, they are not as likely to see it as a valuable asset in their lives. Even though 16-17 year-olds rival 30-49 year-olds as the age groups most likely to have used a library in the past year, those in this youngest age group are less likely to say that libraries are important to them and their families. Parents and adults in their thirties and forties, on the other hand, are more likely to say they value libraries, and are more likely than other Americans to use many library services.

Attitudes toward current and future library services

When it comes to questions about the kinds of services libraries should offer, the top priorities of younger adults are that libraries should coordinate more with schools and offer free literacy programs, the same as older adults.

What services and programs younger Americans say libraries should or should not implement

Among all Americans ages 16-29, the percentage who say public libraries should “definitely,” “maybe,” or “should definitely not” implement the following programs



Source: Pew Research Center’s Internet & American Life Library Services Survey of 2,252 people ages 16 and older conducted October 15–November 10, 2012. N=470 for Americans ages 16–29. Interviews were conducted in English and Spanish and on landline and cell phones.

Younger Americans’ priorities for libraries also mirror those of older adults in other measures. For instance, 80% of Americans under age 30 say that **librarians** are a “very important” resource for libraries to have (along with 81% of adults ages 30 and older). Other resources ranked “very important” by Americans under age 30 include:

- **Research resources such as free databases** (76%)
- **Free access to computers and the internet** (75%)

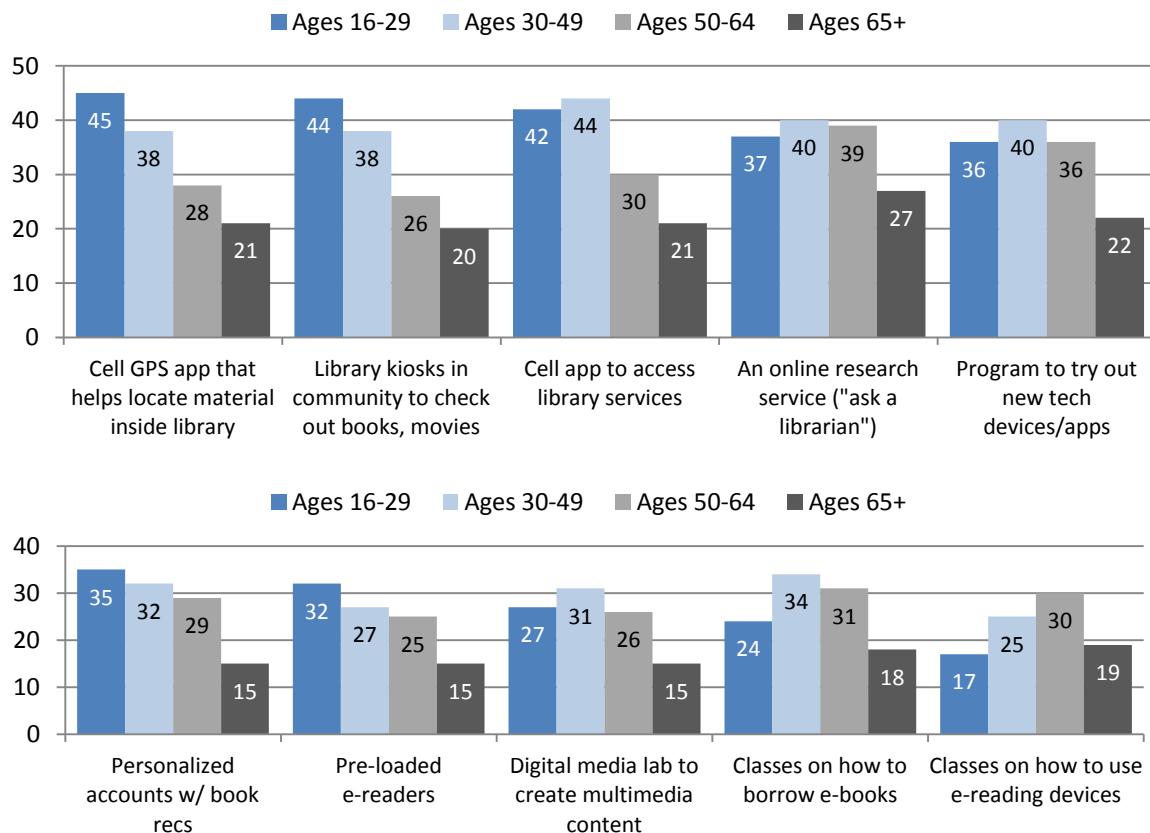
- **Books for borrowing** (75%)
- **Quiet study spaces** (72%)
- **Programs and classes for children and teens** (72%)
- **Job or career resources** (71%)

Finally, when given a series of questions about possible new services at libraries, Americans ages 16-29 expressed the strongest interest in **apps that would let them locate library materials within the library** or **access library services on their phone**, as well as **library kiosks that would make library materials available throughout the community**. In addition, younger respondents were somewhat more likely than older adults to say they would be likely to use **personalized online accounts**, **digital media labs**, and **pre-loaded e-readers**.

The following chart shows the differences between age groups that emerged when respondents were asked about the future of libraries.

Which library services Americans say they would be “very likely” to use

Among Americans ages 16+, the % who say they would be “very likely” to use the following library services and activities, by age group



Source: Pew Research Center's Internet & American Life Library Services Survey of 2,252 people ages 16 and older conducted October 15-November 10, 2012. N=470 for Americans ages 16-29. The survey was conducted in English and Spanish and on landline and cell phones.

A snapshot of younger Americans' reading and library habits

Reading habits

Some **82% of Americans ages 16-29 read at least one book** in any format in the previous 12 months. Over the past year, these younger readers consumed a mean (average) of 13 books—a median (midpoint) of 6 books.

- 75% of Americans ages 16-29 read at least one book **in print** in the past year
- 25% read at least one **e-book**
- 14% listened to at least one **audiobook**

Library use

As of November 2012:

- 65% of Americans ages 16-29 have a **library card**.
- 86% of those under age 30 have **visited a library or bookmobile in person**; over half (58%) have done so in the past year.
- 48% of those under age 30 have visited a **library website**; 28% have done so in the past year.
- 18% of those under age 30 have visited library websites or otherwise accessed library services **by mobile device** in the past 12 months.

Among **recent library users** under age thirty (that is, Americans ages 16-29 who have visited a library, library website, or library's mobile services in the past year), 22% say their overall library use has increased over the past five years. Another 47% said it had stayed about the same, and 30% said it had decreased over that time period.

About this research

This report explores the changing world of library services by exploring the activities at libraries that are already in transition and the kinds of services citizens would like to see if they could redesign libraries themselves. It is part of [a larger research effort](#) by the Pew Research Center's Internet & American Life Project that is exploring the role libraries play in people's lives and in their communities. The research is underwritten by the Bill & Melinda Gates Foundation.

This report contains findings from a survey of 2,252 Americans ages 16 and above between October 15 and November 10, 2012. The surveys were administered half on landline phones and half on cell phones and were conducted in English and Spanish. The margin of error for the full survey is plus or minus 2.3 percentage points. More information about the survey is available in the Methods section at the end of this report.

There were several long lists of activities and services in the phone survey. In many cases, we asked half the respondents about one set of activities and the other half of the respondents were asked about a different set of activities. These findings are representative of the population ages 16 and above, but it is important to note that the margin of error rises when only a portion of respondents is asked a question. The number of respondents in each group or subgroup is noted in the charts throughout the report.

In addition, we quote librarians and library patrons who participated in focus groups in person and online that were devoted to discussions about library services and the future of libraries. Our in-person focus groups were conducted in Chicago, Illinois; Denver, Colorado; Charlotte, North Carolina; and Baltimore, Maryland in late 2012 and early 2013.

Other quotes in this report come from an online panel canvassing of librarians who have volunteered to participate in Pew Internet research. Over 2,000 library staff members participated in the online canvassing that took place in late 2012. No statistical results from that canvassing are reported here because it was an opt-in opportunity meant to draw out comments from patrons and librarians, and the findings are not part of a representative, probability sample. Instead, we highlight librarians' written answers to open-ended questions that illustrate how they are thinking about and implementing new library services.

Age group definitions

For the purposes of this report, we define younger Americans as those ages 16-29, although we will use several different frameworks for this analysis. At times we will compare all those ages 16-29 to all older adults (ages 30 and older). When more fine-grained analysis reveals important differences, we will divide younger readers into three distinct groups: high-schoolers (ages 16 and 17); college-aged adults (ages 18-24) who are starting their post-secondary life; and adults in their later twenties (ages 25-29) who are entering jobs and careers.⁶ For more information about these older age groups, please see our earlier report, [Library Services in the Digital Age](#).

Acknowledgements

About the Pew Research Center's Internet & American Life Project

The Pew Research Center's Internet & American Life Project is an initiative of the Pew Research Center, a nonprofit "fact tank" that provides information on the issues, attitudes, and trends shaping America and the world. The Pew Internet Project explores the impact of the internet on children, families, communities, the work place, schools, health care and civic/political life. The Project is nonpartisan and takes no position on policy issues. Support for the Project is provided by The Pew Charitable Trusts. More information is available at pewinternet.org.

⁶ In the full sample, n=101 for Americans ages 16-17, 218 for Americans ages 18-24, and 196 for Americans ages 25-29.

Advisors for this research

A number of experts have helped Pew Internet in this research effort:

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Part I: A portrait of younger Americans' reading habits and technology use

Before analyzing younger Americans' library use habits, we will first explore the broad contours of their technology use and reading habits, as the changing reading habits chronicled in [our recent reports](#) are intrinsically tied to the new formats and devices on which people read.

This section will just cover the findings from the survey conducted in November and December 2012. Unlike most other Pew Internet surveys, this one included a sizeable sample of younger respondents, including 101 respondents ages 16-17, in addition to adults ages 18 and older.⁷ We included this youngest age group so that we could develop a fuller portrait of younger library users.

The vast majority of Americans ages 16-29 go online, and most have a desktop or laptop computer to use at home. Over nine in ten younger Americans own a cell phone, with the majority owning a smartphone. They are significantly more likely than adults ages 50 and older to go online and have these devices.

However, these trends do not extend to all types of gadgets; in fact, adults in their thirties and forties are significantly more likely to own tablet computers and e-readers than other age groups. This might be why rates of e-reading are generally highest among readers ages 30-49, who are also *less* likely to have read a print book in the last year than younger readers. Meanwhile, Americans under age 30 were just as likely to have read a book in print in 2012 as they were in 2011.

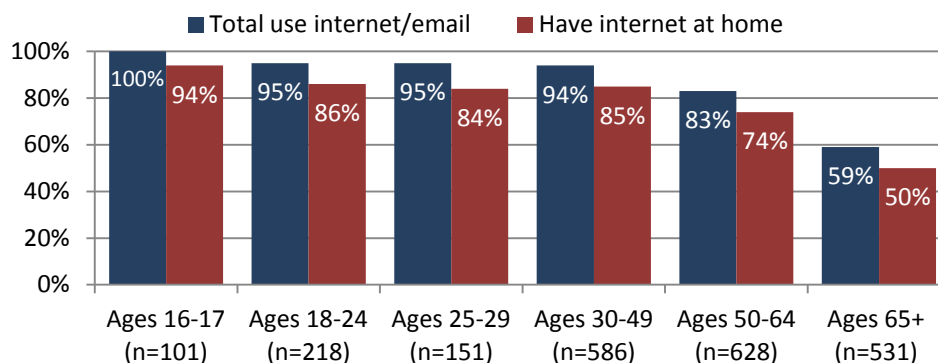
Internet use and home internet use

Younger Americans ages 16-29 are significantly more likely to use the internet than older adults. More than nine out of ten Americans ages 16-29 (96%) say they use the internet or email, compared with 82% of adults over age 30—as shown in the chart below.

⁷ In general, Pew Internet surveys of adults include Americans ages 18 and older, and surveys of teens include Americans ages 12-17.

The vast majority of teens and young adults go online, and most have internet access at home

Among all Americans ages 16+, the % in each age group who use the internet overall, and the % who have access at home



Source: Pew Research Center's Internet & American Life Library Services Survey of 2,252 people ages 16 and older conducted October 15-November 10, 2012. The survey was conducted in English and Spanish and on landline and cell phones.

Device ownership

In our late 2012 national survey, we found that teens and young adults continue to have high levels of ownership of mobile devices like cell phones and laptops, especially compared with adults ages 65 and older.⁸

Device ownership by age group

Among all Americans ages 16+, the % in each age group who have the following gadgets

		Cell phone (total)	Smartphone	Desktop/ laptop	E-reader	Tablet
All Americans ages 16+		85%	47%	78%	19%	25%
Age						
a	16-17 (n=101)	93 ^{ef}	63 ^{ef}	91 ^{bef}	21	26 ^f
b	18-24 (n=218)	94 ^{def}	65 ^{ef}	82 ^{ef}	14	23 ^f
c	25-29 (n=151)	91 ^{ef}	65 ^{ef}	82 ^{ef}	17	26 ^f
d	30-49 (n=586)	91 ^{ef}	60 ^{ef}	85 ^{ef}	26 ^{bcef}	35 ^{bcef}
e	50-64 (n=628)	84 ^f	36 ^f	75 ^f	18	19
f	65+ (n=531)	64	14	57	14	15

Source: Pew Research Center's Internet & American Life Library Services Survey of 2,252 people ages 16 and older conducted October 15-November 10, 2012. The survey was conducted in English and Spanish and on landline and cell phones.

Note: Columns marked with a superscript letter (^a) or another letter indicate a statistically significant difference between that row and the row designated by that superscript letter. Statistical significance is determined inside the specific section covering each demographic trait.

⁸ The most recent data available for adult ownership of all devices is available on our website and includes surveys conducted in 2013: <http://pewinternet.org/Static-Pages/Trend-Data-%28Adults%29/Device-Ownership.aspx>

Some 85% of all Americans ages 16 and older own a cell phone, including more than nine in ten of those under age 30, and almost half (47%) own smartphone (including over six in ten of those under age 30).

Looking at gadget ownership or access by age group:⁹

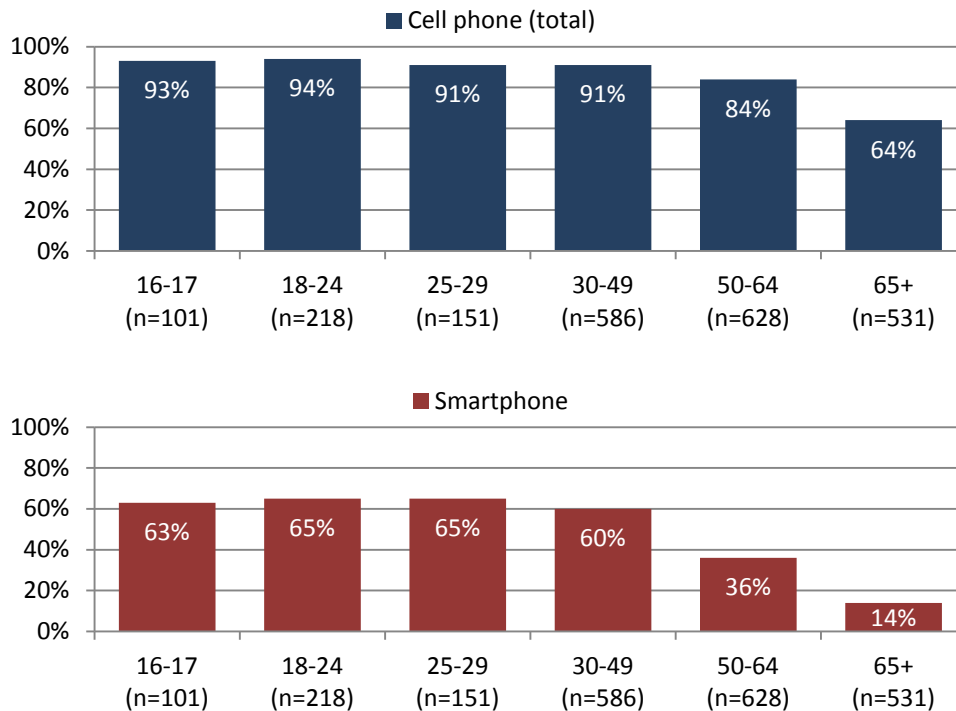
- A majority of **older teens ages 16-17** own a cell phone (93%), including 63% who own a smartphone. Some 91% have a desktop or laptop computer at home. Looking at e-reading devices, we find that about one in five (21%) have an e-reader and about one in four (26%) say they have a tablet computer.¹⁰
- Among **college-aged adults ages 18-24**, 94% own a cell phone (65% own a smartphone), and 82% own a computer. Some 14% own an e-reader, and 23% own a tablet.
- **Adults in their later twenties (ages 25-29)** are similar to younger age groups in that they are just as likely to own a cell phone (91%) or smartphone (82%), and 82% own a desktop or laptop computer. They are also just as likely to own an e-reader (17%) or tablet computer (26%).

⁹ Of course, age is not the only factor at play. We also see strong correlations by education and household income. Our recent reports on [smartphone](#) and [tablet](#) ownership among Americans adults show some of these relationships.

¹⁰ While teens tend to “own” their cell phones/smartphones and sometimes their computers, e-reader and especially tablet numbers most likely reflect shared household use.

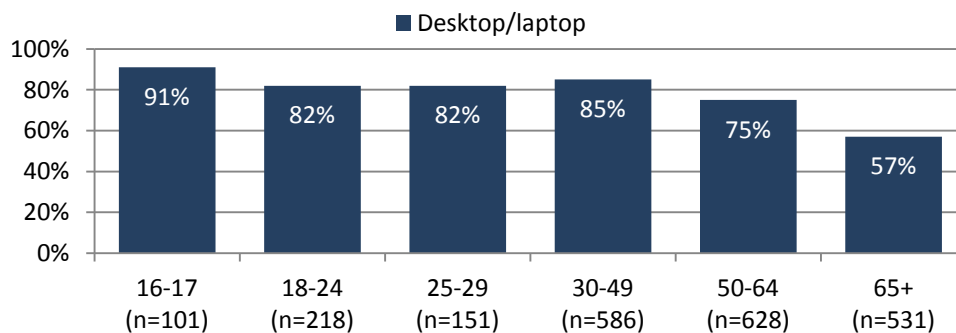
Cell phone and smartphone ownership by age group

Among all Americans ages 16+, the % in each age group who own a cell phone (total) or smartphone.



Home computer ownership by age group

Among all Americans ages 16+, the % in each age group who own a desktop or laptop

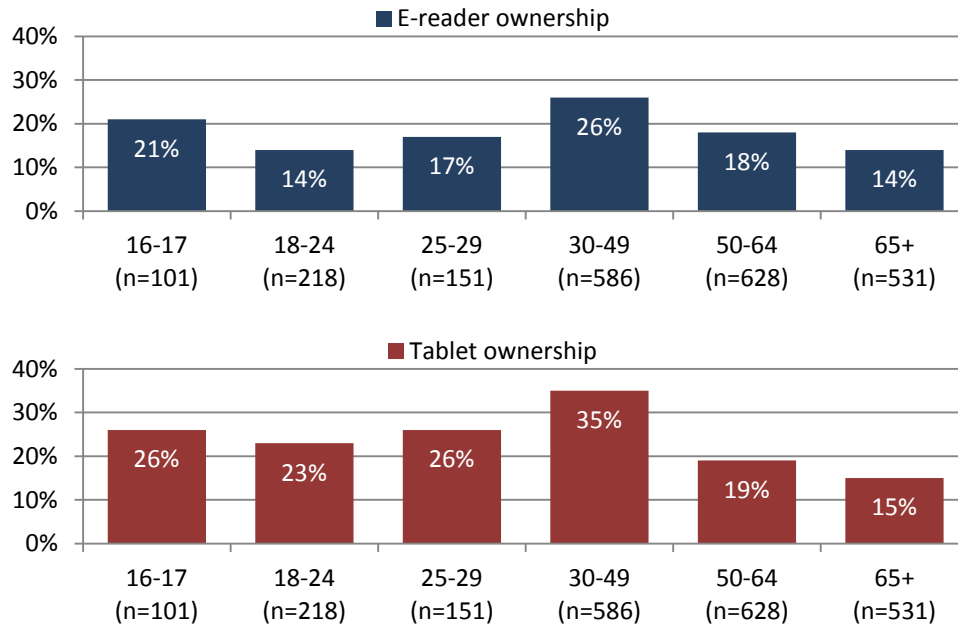


Source: Pew Research Center's Internet & American Life Library Services Survey of 2,252 people ages 16 and older conducted October 15-November 10, 2012. The survey was conducted in English and Spanish and on landline and cell phones.

But while younger Americans are more likely than those ages 30 and older to have smartphones or computers, adults in their thirties and forties are the most likely to own e-readers and tablets. In fact, adults ages 30-49 are significantly more likely to own either of these devices than any other age group, with the exception of 16-17 year-olds.

E-reader and tablet ownership by age group

Among all Americans ages 16+, the % in each age group who own an e-reader or tablet



Source: Pew Research Center's Internet & American Life Library Services Survey of 2,252 people ages 16 and older conducted October 15-November 10, 2012. The survey was conducted in English and Spanish and on landline and cell phones.

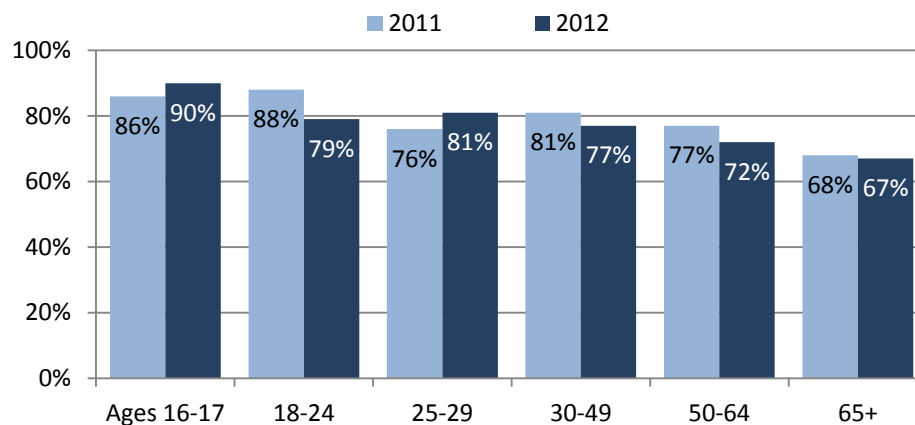
Reading habits

Some 75% of all Americans ages 16 and older had read at least one book in any format in the previous 12 months, including 82% of Americans ages 16-29 (significantly more than older adults). High schoolers ages 16-17 are especially likely to have read a book in the past year (90%), while adults ages 65 and older are the least likely to have read a book in that time span (67%).

[Our previous research found](#) that younger respondents are more likely to read for work or school, or to research topics of interest to them, while older respondents are generally more likely to read for pleasure, or to keep up with current events.

Over eight in ten Americans under the age of 30 read at least one book in the past year

Among all Americans ages 16+, the % in each age group who have read a book in whole or in part in any format in the past 12 months, over time



Source: Pew Research Center's Internet & American Life Library Services Survey of 2,252 people ages 16 and older conducted October 15-November 10, 2012. The survey was conducted in English and Spanish and on landline and cell phones.

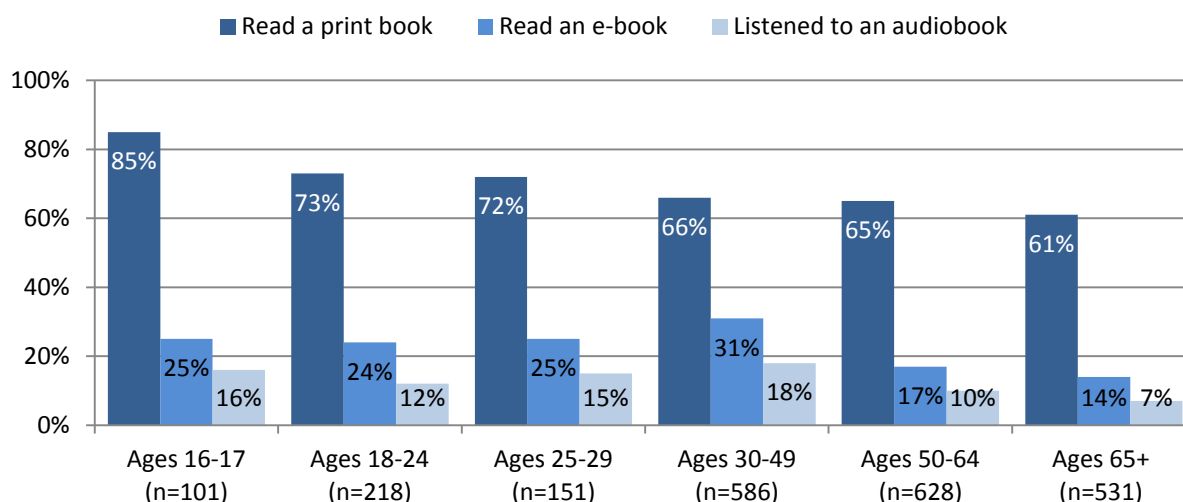
According to our November 2012 national survey:

- 67% of all Americans ages 16 and older read at least one book in the past year in print, including 75% of those under age 30—and 85% of those ages 16-17.
- 23% of all Americans read at least one e-book, including 25% of those under age 30.
- 13% listened to at least one audiobook, including 14% of those under age 30.¹¹

¹¹ Overall, 75% of all Americans read at least one book in any of these format in the previous 12 months. Many readers consumed books in multiple formats, which is why these numbers add up to more than 75%.

Books formats over the past year, by age group, among general population

Among all Americans ages 16+, the % in each age group who have read a book in whole or in part in the following formats in the past 12 months



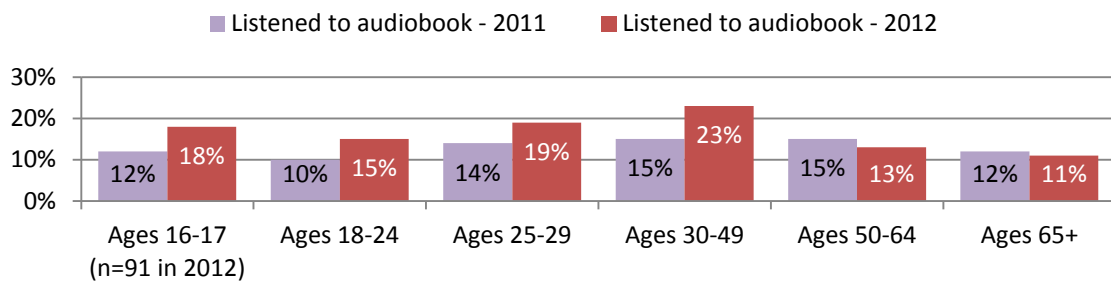
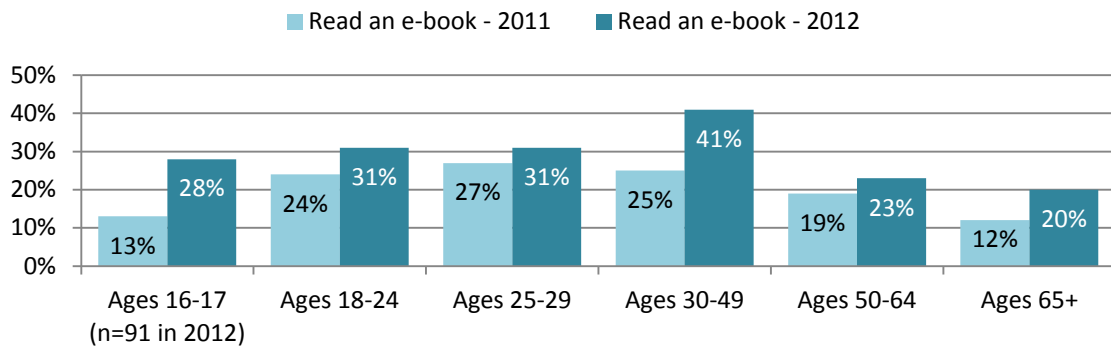
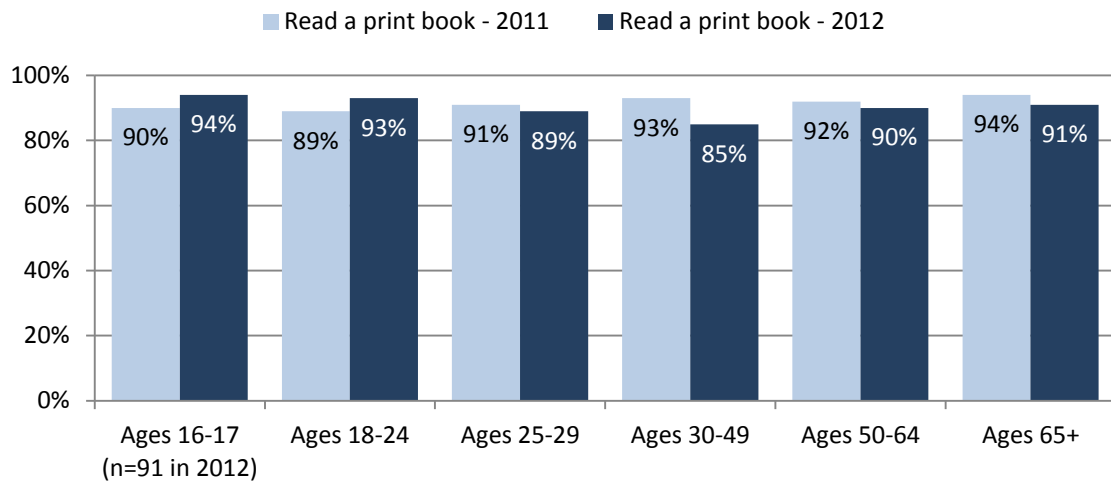
Source: Pew Research Center's Internet & American Life Library Services Survey of 2,252 people ages 16 and older conducted October 15-November 10, 2012. The survey was conducted in English and Spanish and on landline and cell phones.

Among Americans ages 16 and older who read a book in the year prior to the survey, the proportion who read a print book in that time decreased from 93% in 2011 to 89% in 2012. At the same time, e-book reading rose from 21% of readers ages 16 and older in 2011 to 30% in 2012. Audiobook listening also increased from 14% in 2011 to 17% in 2012.

As the following charts show, the proportion of younger readers who read a print book in the past year has remained relatively steady, while e-reading rose among all ages of readers—particularly those in their thirties and forties.

Among younger readers, e-books are on the rise

Among Americans who read at least one book in the past 12 months, the % in each age group who read a book in whole or in part in the following formats in that time period, in 2011 and 2012



Source: Pew Research Center's Internet & American Life Library Services Survey of 2,252 people ages 16 and older conducted October 15-November 10, 2012. The survey was conducted in English and Spanish and on landline and cell phones.

All told, book readers under age 30 consumed a mean (average) of 13 books in the previous 12 months and a median (midpoint) of 6 books — in other words, half of book readers in that age cohort had read fewer than six and half had read more than six.

How many books Americans read (among total)

Among all Americans, the mean and median number of books each group read in the past 12 months, by age group (includes non-readers)

	Mean number of books read (average)	Median (midpoint)
16-17 (n=101)	12	5
18-24 (n=218)	11	5
25-29 (n=151)	11	5
30 and older (n=1745)	12	4

How many books Americans read (among readers)

Among readers (those who read a book in the past year), the mean and median number of books each group read in the past 12 months, by age group

	Mean number of books read (average)	Median (midpoint)
16-17 (n=101)	13	5
18-24 (n=218)	13	7
25-29 (n=151)	13	6
30 and older (n=1745)	16*	6

* indicates a statistically significant difference compared with all other age groups

Source: Pew Research Center's Internet & American Life Library Services Survey of 2,252 people ages 16 and older conducted October 15-November 10, 2012. The survey was conducted in English and Spanish and on landline and cell phones.

Part II: Libraries in younger Americans' lives and communities

In the past 12 months, 53% of Americans ages 16 and older visited a library or bookmobile; 25% visited a library website; and 13% used a [handheld device](#) such as a smartphone or tablet computer to access a library website. All told, 59% of Americans ages 16 and older had at least one of those kinds of interactions with their public library in the past 12 months.

Family members' library use from childhood

In our national survey, we asked respondents about their general library patronage—if they had experiences with libraries in childhood, how often they visit libraries or library websites, and what sort of experiences they have had in these visits. We also asked people how important libraries are, not only to them and their family, but also to their community as a whole.

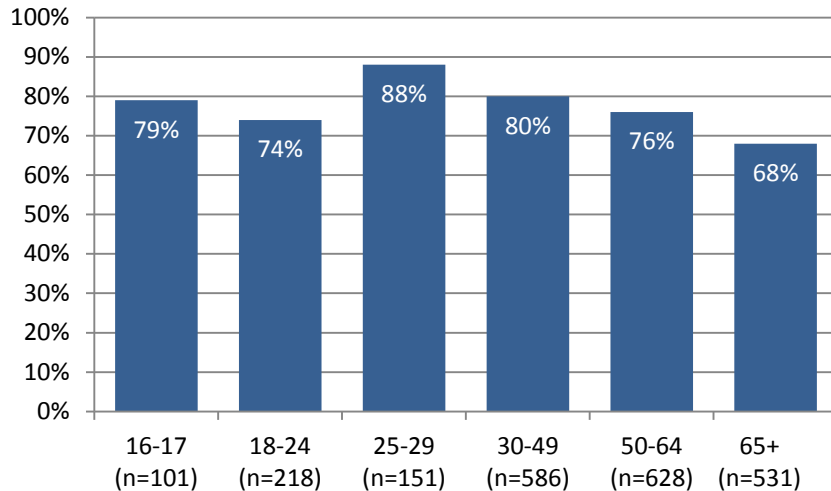
One theme that emerged in our qualitative work was that library staff members frequently told us that they were eager to build connections with younger patrons, but often have difficulty maintaining these connections as they age. While we did not see many significant differences in younger Americans' overall library usage, some aspects of our quantitative findings do parallel these impressions. We found, for instance, that among recent library users ages 18-24, 36% say their use has decreased within the past five years; almost a third (27%) of those in their later twenties say this as well. And even though 16-17 year-olds rival 30-49 year olds as the age groups most likely to have used a library in the past year, they are less likely to say that libraries are important to them and their families. [Parents](#) and adults in their thirties and forties, on the other hand, are more likely to say they value libraries, and are more likely than other Americans to use many library services.

Our survey showed that 77% of Americans ages 16 and older say they remember someone else in their family using public libraries as they were growing up, but a fifth (20%) say that no one in their family used the library.

Adults in their later twenties (ages 25-29) were significantly more likely than most other age groups to say that they recalled family members using the library when they were growing up (88%), as shown in the following chart; adults ages 65 and older were the least likely to say this (68%).

Did anyone else in your family use public libraries while you were growing up?

Among all Americans ages 16+, the % in each age group who recall family members using the library as they were growing up



Source: Pew Research Center's Internet & American Life Library Services Survey of 2,252 people ages 16 and older conducted October 15-November 10, 2012. The survey was conducted in English and Spanish and on landline and cell phones.

Library cards

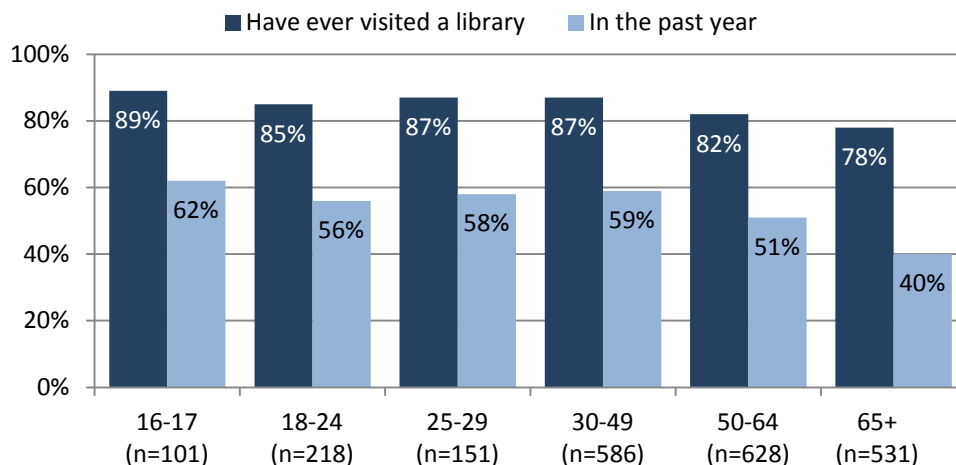
Although many activities at libraries do not always require a library card, many others—such as borrowing books—usually do. Currently, 63% of all Americans ages 16 and older say they have a library card, including 65% of those under age 30. Looking at teens and young adults, we find little variation between the younger age groups; 18-24 year-olds (63%) and 25-29 year-olds (65%) are as likely to own a library card as 16-17 year-olds (70%).

Younger Americans' library use: In-person visits

When we asked about Americans' own personal use of public libraries, we found that 84% of Americans ages 16 and older have ever visited a library or bookmobile in person, including 86% of those ages 16-29. Older Americans are less likely than those under age 50 to have visited a library, particularly those ages 65 and older.

Most younger Americans have visited a public library or book mobile, and a majority have done so in the past year

Among all Americans ages 16+, the % in each age group who say they have ever visited a library or bookmobile in person & those who have done so in the past 12 months



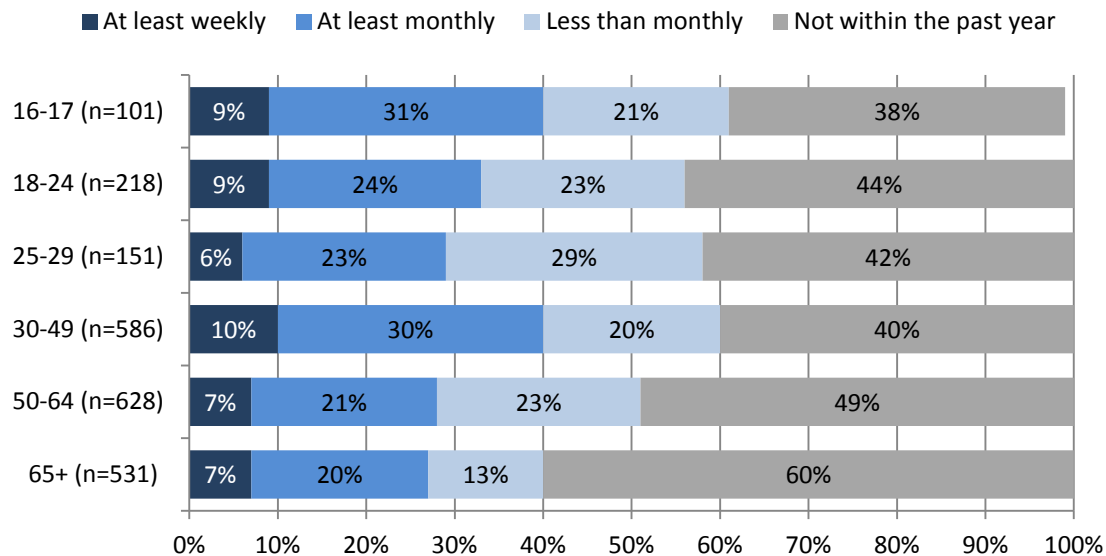
Source: Pew Research Center's Internet & American Life Library Services Survey of 2,252 people ages 16 and older conducted October 15-November 10, 2012. The survey was conducted in English and Spanish and on landline and cell phones.

About 64% of Americans who had ever visited a public library say they had visited a public library or bookmobile in person in the past twelve months (including 67% of those ages 16-29). This means that 53% of all Americans ages 16 and older, and 58% of those ages 16-29, visited a public library or bookmobile in person in the past year.

The following chart shows how frequently Americans in different age groups visit a library or bookmobile in person, from those who visit a library at least once a week to those who have not visited a library within the past 12 months.

A snapshot of younger Americans' library visits

Among all Americans ages 16+, how often those in each age group visit the library in person



Source: Pew Research Center's Internet & American Life Library Services Survey of 2,252 people ages 16 and older conducted October 15-November 10, 2012. The survey was conducted in English and Spanish and on landline and cell phones.

Interactions with library staff

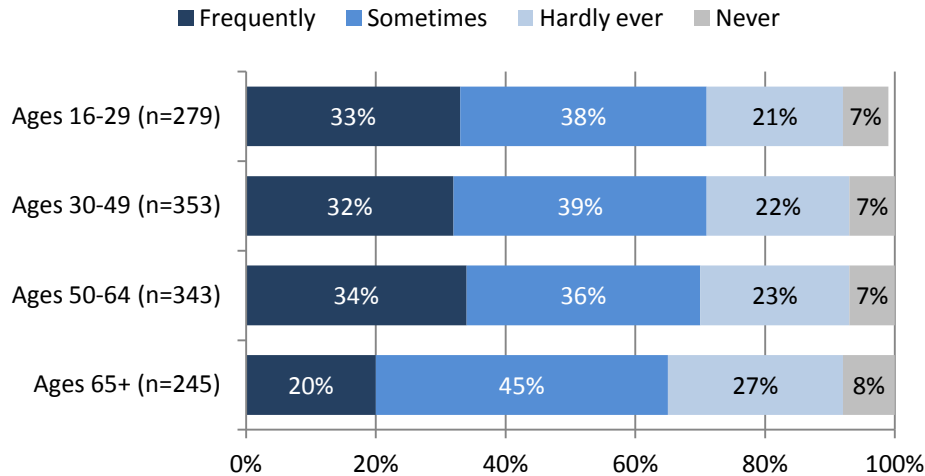
Overall, 80% of Americans say that it is "very important" to the community for libraries to have **librarians available to help people find information they need**, including 80% of those under age 30.

About half (50%) of those who visited a library in the past 12 months say they visit **to get help from a librarian**. Some 40% of library users under age 30 say they have done this in the past year, making them significantly less likely than those ages 30 and older (53%) to say so.

However, asked how often they get help from library staff in such things as answering research questions, 31% of library patrons in the past 12 months say they frequently get help, 39% say they sometimes get help, 23% say they hardly ever get help, and 7% say they never get help. Older library visitors are significantly less likely than most younger patrons to say they receive assistance "frequently."

How often younger library visitors receive assistance from library staff

How often Americans who visited a library in person in the past 12 months say they receive help from library staff

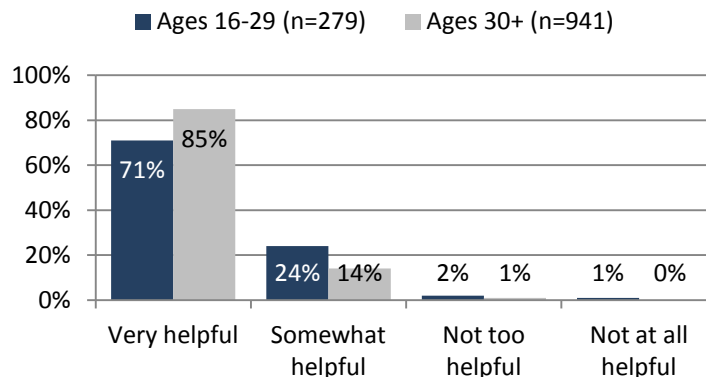


Source: Pew Research Center Internet & American Life Project Library Services Survey. October 15-November 10, 2012. N for those ages 16+ who visited library in past 12 months=1,238. Interviews were conducted in English and Spanish and on landline and cell phones.

Asked how helpful library staffers are in general, 81% of those who had visited a library in the past 12 months say librarians are “very helpful,” 17% say “somewhat helpful,” 1% say “not too helpful” and another 1% say “not at all helpful.” Library visitors under age 30 are significantly less likely than older library visitors to say that library staff are “very helpful” (71% vs. 85%).

Most say library staff are “very helpful”

Among Americans who visited a library in the past 12 months, the % who say that library staff are...



Source: Pew Research Center Internet & American Life Project Library Services Survey. October 15-November 10, 2012. N for those ages 16+ who visited library in past 12 months=1,238. Interviews were conducted in English and Spanish and on landline and cell phones.

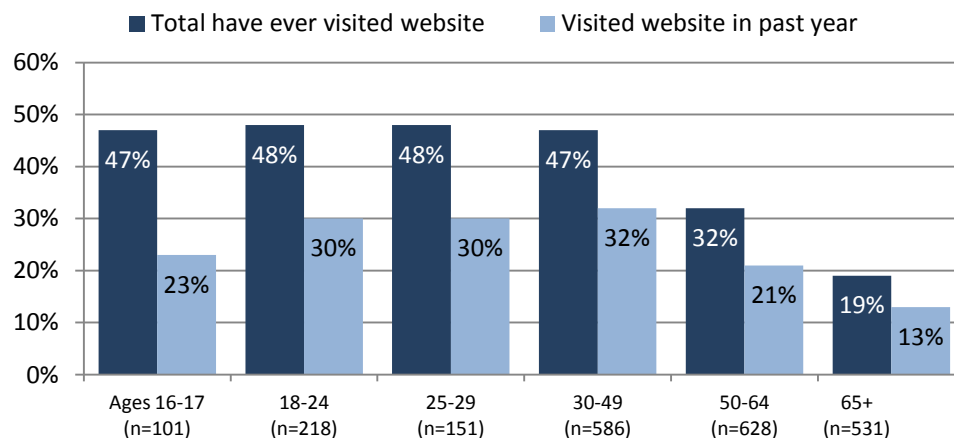
Younger Americans' library use: Library websites

In all, we find that 39% of Americans ages 16 and older have gone to [a library website](#) at one time or another. Some 48% of those ages 16-29 have used library websites, compared with 36% of those ages 30 and older. Among those website users, 64% visited a library site in the previous 12 months. This means that 25% of all Americans ages 16 and older visited a library website in the past year, including 28% of those ages 16-29 and 24% of those ages 30 and older.

Among all Americans, those ages 18-49 are most likely to say they have used a library's website in the past year, while those ages 65 and older are the least likely to say this.¹²

Almost half of younger Americans under age 30 have ever visited a library website

Among all Americans ages 16+, the % in each age group who have visited a library website, ever and in the past year



Source: Pew Research Center's Internet & American Life Library Services Survey of 2,252 people ages 16 and older conducted October 15-November 10, 2012. The survey was conducted in English and Spanish and on landline and cell phones.

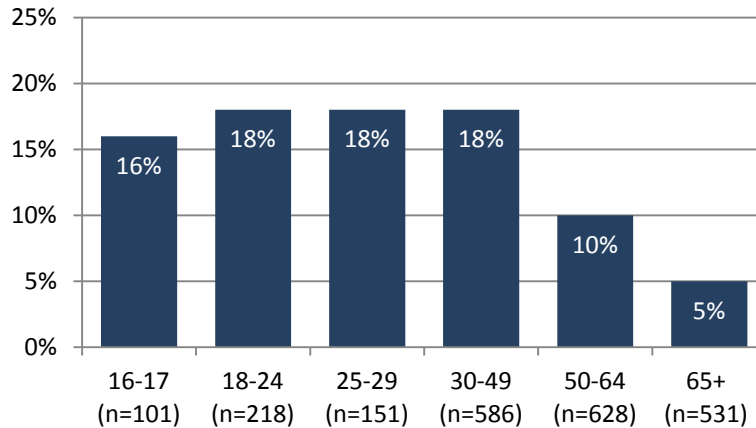
Additionally, [13% of those ages 16 and older have visited library websites or otherwise accessed library services by mobile device](#), including 18% of those under age 30.¹³ Americans ages 18-49 are significantly more likely than older adults to have access a library website or services by mobile device.

¹² Though the sample size was too small to report detailed findings within age groups, more information about how Americans used library websites is available at <http://libraries.pewinternet.org/2013/01/22/part-2-what-people-do-at-libraries-and-library-websites/>

¹³ "Mobile Connections to Libraries" (2012): <http://libraries.pewinternet.org/2012/12/31/mobile-connections-to-libraries/>

In the past 12 months, have you used a cell phone, e-reader, or tablet computer to visit a public library's website or access public library resources?

Among all Americans ages 16+, the % in each age group who have visited library websites or otherwise accessed library services by mobile device in the past year



Source: Pew Research Center's Internet & American Life Library Services Survey of 2,252 people ages 16 and older conducted October 15-November 10, 2012. The survey was conducted in English and Spanish and on landline and cell phones.

Changes in library use in recent years

We also asked recent library users about their own use of libraries has changed, if at all, over the last five years. "Recent library users" here are those who either visited a public library in person in the past 12 months, have gone on a public library website in the past 12 months, or have used a cell phone, e-reader or tablet to visit a public library website or access public library resources in the past 12 months. They amount to 59% of those who are ages 16 and older in the general population.

The results of our national survey show a general fluidity in library patronage patterns:

- 26% of recent library users say their own use of local libraries has **increased** in the past five years, including 22% of those under age 30.
- 22% say their use has **decreased**. This includes 30% of those under age 30, making them significantly more likely to say this than adults ages 30 and older (19%).
- 52% say their use has **stayed the same** during that time period, including 47% of those under age 30.

When asked about their communities' library use, many librarians said they felt they often "lost" younger patrons until the patrons were old enough to have children of their own—or later. "They go away [to college], and hopefully they come back to you . . . [when] they're looking for jobs or they're starting to get married, have a family, and have their kids," one librarian said in a focus group. "We kind of figured that if we forged this really great relationship as they're growing up and then they go off on

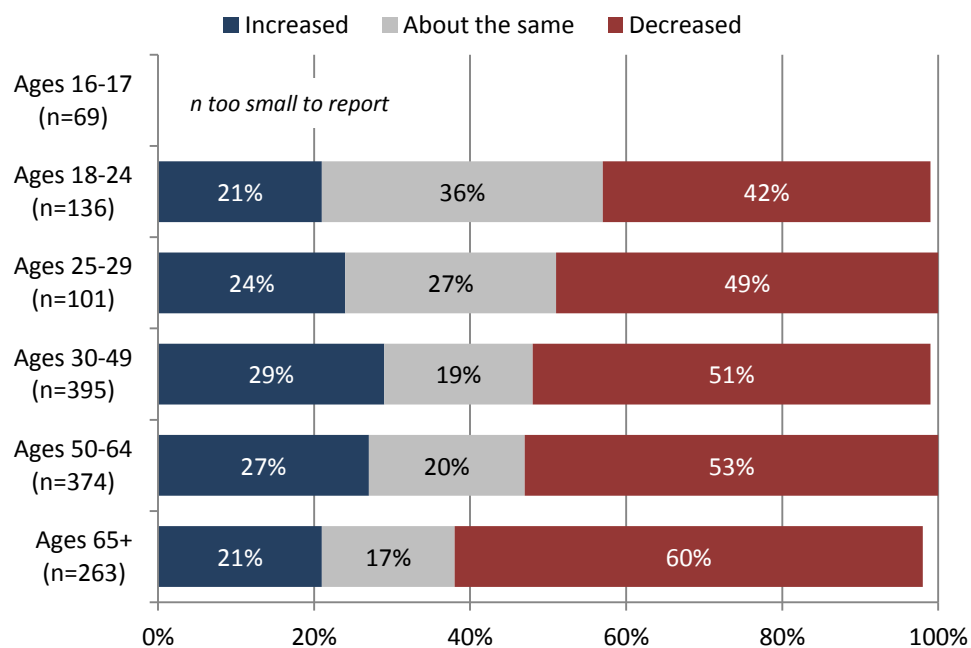
their own for a little while, . . . hopefully we'll get them back when they need us again." She added that while she thought her library did a good job of providing programming for younger teens, she felt that it had less of a draw for older teens and adults in their early twenties:

"I think there's a chunk of time where we are maybe not going to be able to be at the top of their list because they have university libraries and they have activities and things. They've just got an awful lot going on and they have more disposable income at that age. . . . I don't know if anybody has come up with a great answer for what they really need us for in that spot."

Among recent library users, college-aged adults ages 18-24 are significantly more likely than older adults to say that their library use has decreased in the past five years; adults in their thirties and forties are generally most likely to say that their library use has increased in that time period.

In the past five years, has your use of the public library (in person and online) increased, decreased, or stayed about the same?

Among recent library users ages 16-29, by age group



Source: Pew Research Center's Internet & American Life Library Services Survey of 2,252 people ages 16 and older conducted October 15-November 10, 2012. The survey was conducted in English and Spanish and on landline and cell phones.

We also asked those whose use has either increased or decreased why their library use has changed. The sample size was not large enough to break out reasons by age group, although some of the answers from younger users about increased use included the need to take children or other family members to the library, using the library for research, and becoming a student. Some of the answers about why younger patrons library use decreased included being too busy and finding online resources to be more convenient.

Experiences at libraries are mostly positive

Among all Americans ages 16 and older who had ever used a public library, almost all respondents say that their experiences using public libraries are either very positive (57%) or mostly positive (41%); only about 1% say their experiences had been mostly negative.

While younger respondents also report overall positive experiences, the youngest respondents (those ages 16-17 and 18-24) are significantly less likely than older library users to report “very positive” experiences—although only 2% report mostly negative experiences overall.

Experiences at libraries are mostly positive

Among all Americans ages 16+ who have ever used a public library, the % in each age group who characterize their experiences in the following ways

		Very positive	Mostly positive	TOTAL POSITIVE	Mostly negative	Very negative	TOTAL NEGATIVE
All Americans ages 16+ who have ever used a public library		57%	41%	98%	1%	*%	1%
Age							
a	16-17 (n=95)	37	62 ^{cdef}	98	2	-	2
b	18-24 (n=192)	45	52 ^{def}	97	2	-	2
c	25-29 (n=138)	56 ^a	43	99	-	-	-
d	30-49 (n=531)	59 ^{ab}	39	98	1	-	2^e
e	50-64 (n=549)	64 ^{ab}	35	99^f	-	-	-
f	65+ (n=444)	61 ^{ab}	36	97	1	-	1^e

Source: Pew Research Center’s Internet & American Life Library Services Survey of 2,252 people ages 16 and older conducted October 15-November 10, 2012. The survey was conducted in English and Spanish and on landline and cell phones.

Note: Columns marked with a superscript letter (^a) or another letter indicate a statistically significant difference between that row and the row designated by that superscript letter. Statistical significance is determined inside the specific section covering each demographic trait.

How important libraries are to individuals and their communities

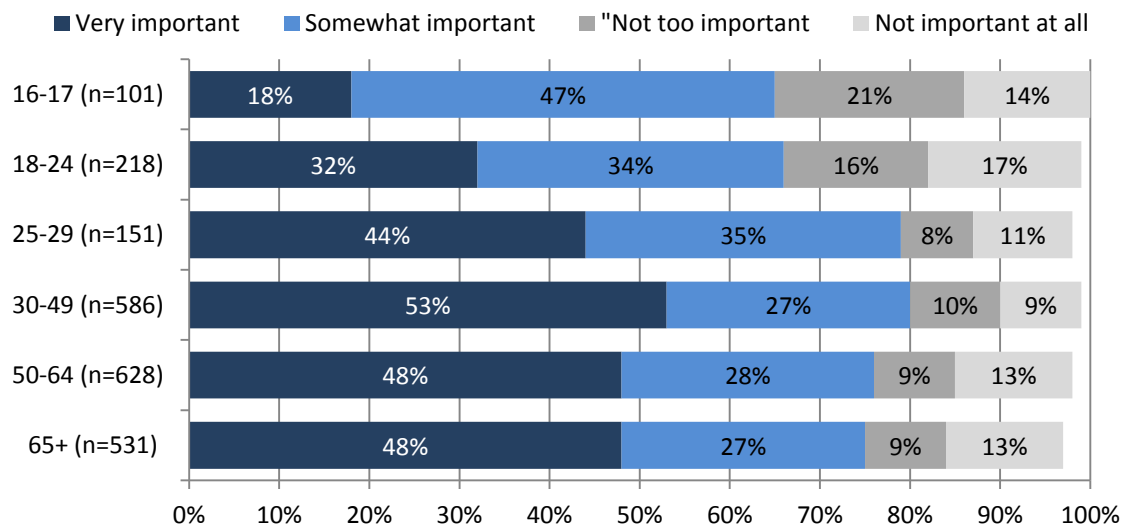
One section of our survey asked respondents directly about the importance of public libraries. We found that while a majority of Americans say that libraries are important to them personally, the vast majority of respondents in every age group say that libraries are important to their communities as a whole.

A majority of Americans (76% of all respondents) say that libraries are **important to them and their families**, and 46% say that libraries are “very important”—up from 38% saying libraries are “very important” in December 2011.¹⁴

Just 18% of 16-17 year-olds say that libraries are “very important” to them and their families, though they are among the heaviest users of libraries. Instead, Americans ages 16-17 are more likely to say that libraries are “somewhat important” (47%) or “not too important” (21%) to them and their families.

How important are libraries to you and your family?

Among all Americans ages 16+, the % in each age group who say that libraries are important or not important to them and their families



Source: Pew Research Center’s Internet & American Life Library Services Survey of 2,252 people ages 16 and older conducted October 15–November 10, 2012. The survey was conducted in English and Spanish and on landline and cell phones.

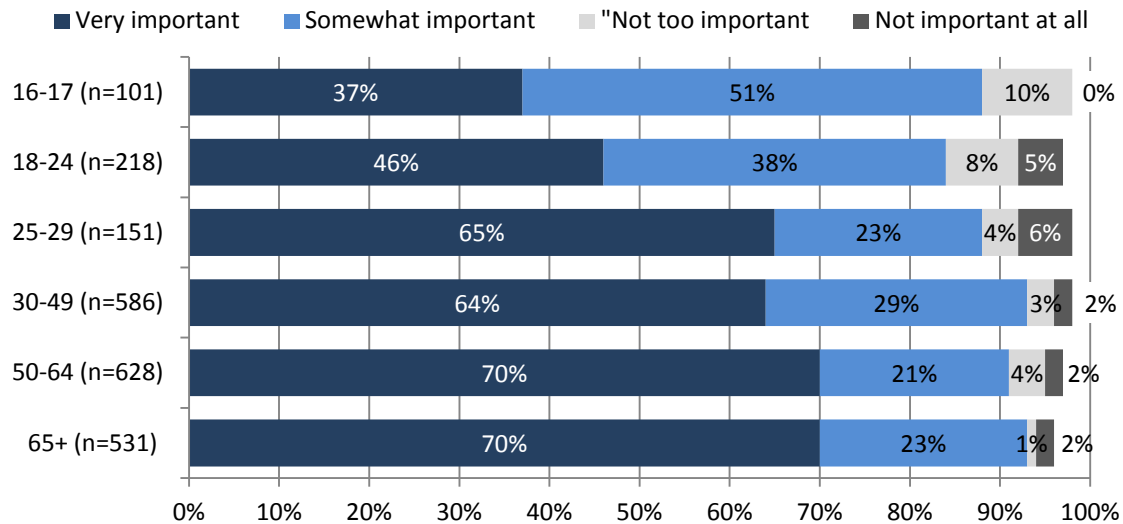
And when asked about the importance of public libraries to their community, at least nine in ten Americans ages 16 and older (91%) say they considered the library either “very important” (63%) or “somewhat important” (28%) **to their community as a whole**.

While a strong majority of all groups considered libraries important to their communities, adults ages 25 and older are more likely to consider the library “very important” to their community than younger respondents ages 16-24.

¹⁴ In February 2012, question was a standalone question.

How important are libraries to your community as a whole?

Among all Americans ages 16+, the % in each age group who say that libraries are important or not important to their community as a whole



Source: Pew Research Center's Internet & American Life Library Services Survey of 2,252 people ages 16 and older conducted October 15-November 10, 2012. The survey was conducted in English and Spanish and on landline and cell phones.

How much people know about what their library offers

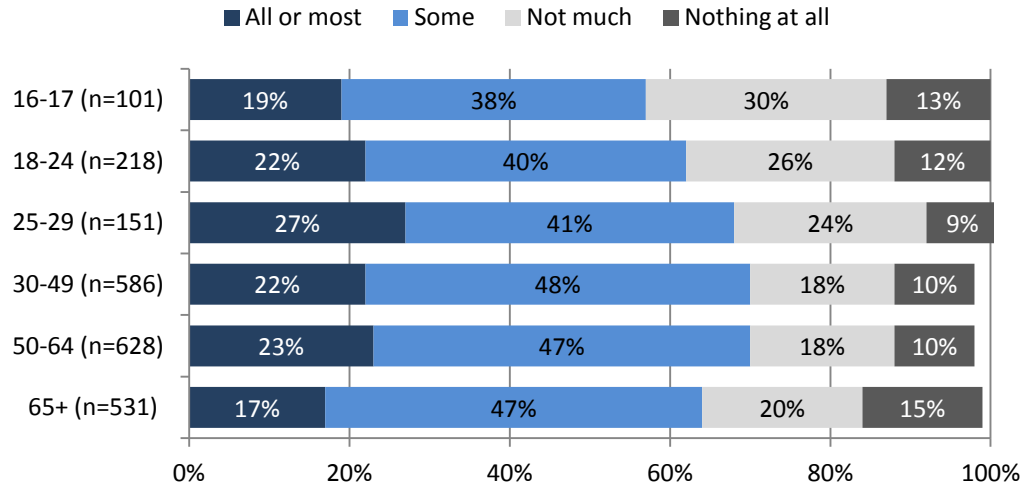
In general, Americans feel somewhat well-informed about the various services and programs offered by their local libraries, although about a third say they know "not much" or "nothing at all." In general, younger Americans are somewhat less aware of what is offered by their public library:

- About one in five Americans ages 16 and older (22%) feel they are aware of **"all or most"** of the services and programs their public library offers, including 23% of those under age 30.
- 46% of Americans feel they just know of **"some"** of what their library offers, including 40% of those under age 30.
- 20% of Americans say they know **"not much"** about services offered by their library, including 26% of those under age 30.
- 11% of Americans say they know **"nothing at all"** about what is available at their library, including 11% of those under age 30.

While there were few dramatic differences between age groups, younger respondents ages 16-17 (30%) and 18-24 (26%) were significantly more likely than most older age groups to say that they know "not much" about what different services and programs their public library offers. The chart below breaks down these findings further by age group.

How much do you feel like you know about the different services and programs your public library offers?

How much Americans ages 16+ in each age group feel they know about the services offered by their public library



Source: Pew Research Center's Internet & American Life Library Services Survey of 2,252 people ages 16 and older conducted October 15-November 10, 2012. The survey was conducted in English and Spanish and on landline and cell phones.

Part III: Library patrons' activities and expectations

Overview

In broad strokes, younger Americans' library habits are very similar to those of older adults. They also value many of the same things in public libraries, and have generally similar views on what services and resources libraries should offer to their communities.

However, our research also finds some notable differences, especially related to technology at libraries. Americans under age 30 are significantly more likely than older adults to have used the computers or internet at a library, for instance, and 97% say that this is an important service for libraries to provide to their communities. Younger library patrons are also significantly more likely than those over age 30 to use the library as a space to just sit and read, study, or watch or listen to media.

The sections that follow will examine younger library patrons' habits and expectations in three loose categories:

- Books and media at libraries;
- Technology and information resources, including research databases, job search and career resources, and automated library services; and
- Programs and spaces for younger patrons, and the role of the library as a community space.

An overview of patrons' activities at libraries

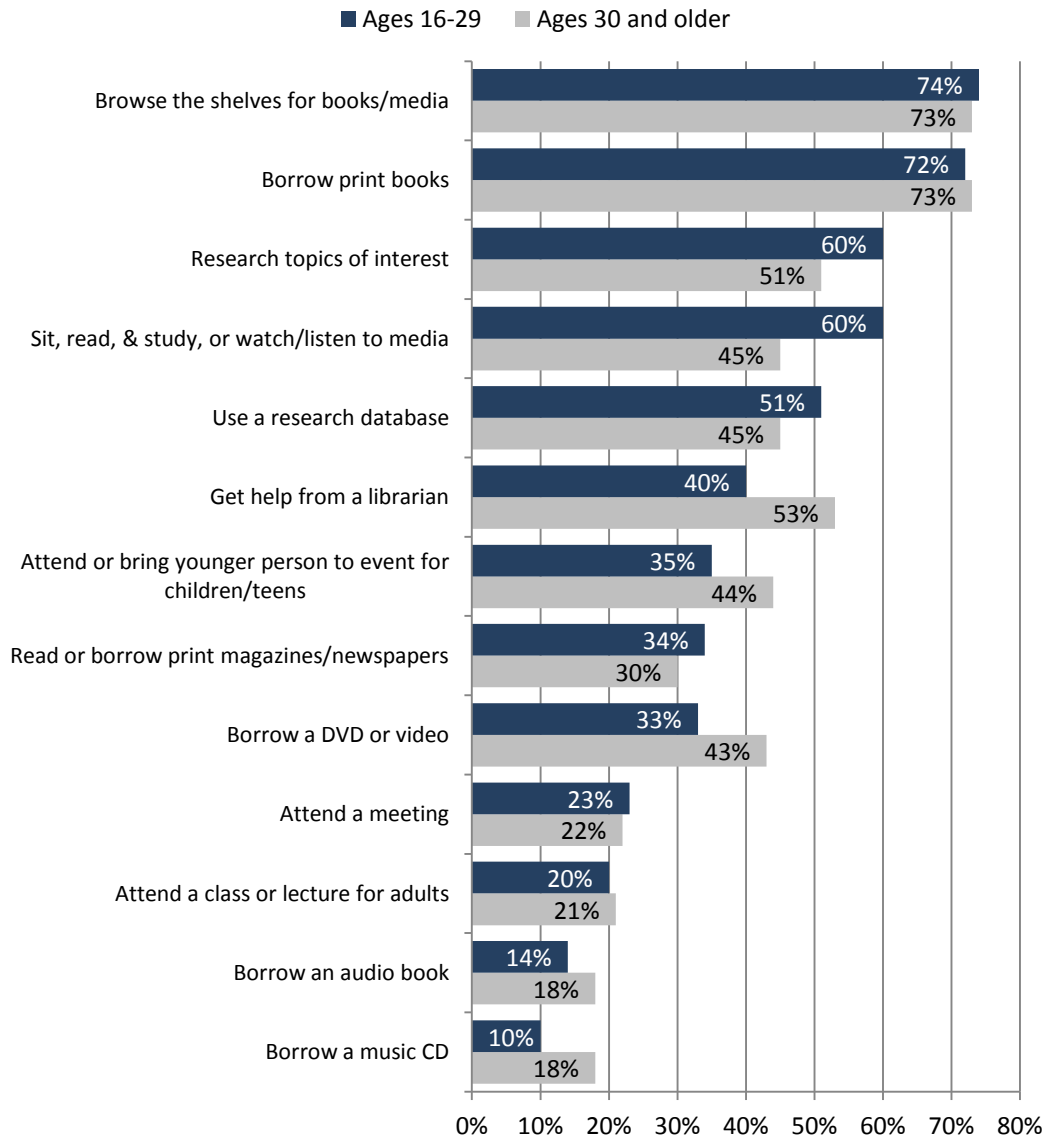
In our national survey, we asked respondents who had visited a library or bookmobile in-person in the past 12 months about what they did at the library. We asked about 13 different activities, from browsing the shelves for books and media to attending classes and events (and explore them in detail beyond age group analysis in our recent report [Libraries in the Digital Age](http://libraries.pewinternet.org/2013/01/22/library-services/).¹⁵) Below is an overview of how Americans use libraries; these activities will be discussed thematically in later sections.

Some 53% of Americans ages 16 and older visited a library or bookmobile in person in the past 12 months; the following chart breaks these activities down by general age group (ages 16-29 and ages 30 and older). Among recent library visitors, those ages 16-29 were significantly more likely to have visited the library just to study, sit and read, or watch or listen to media. Meanwhile, recent library visitors ages 30 and older were significantly more likely to have received help from a librarian in that time period, and to have brought a younger person to a class or event for children or teens. Older adults were also more likely to have borrowed a DVD or music CD.

¹⁵ <http://libraries.pewinternet.org/2013/01/22/library-services/>

What younger Americans do at libraries

Among Americans ages 16+ who have visited a library or bookmobile *in person* in the past 12 months, the % in each age group who have done the following activities



Source: Pew Research Center's Internet & American Life Library Services Survey of 2,252 people ages 16 and older conducted October 15-November 10, 2012. The survey was conducted in English and Spanish and on landline and cell phones.

An overview of public priorities and expectations

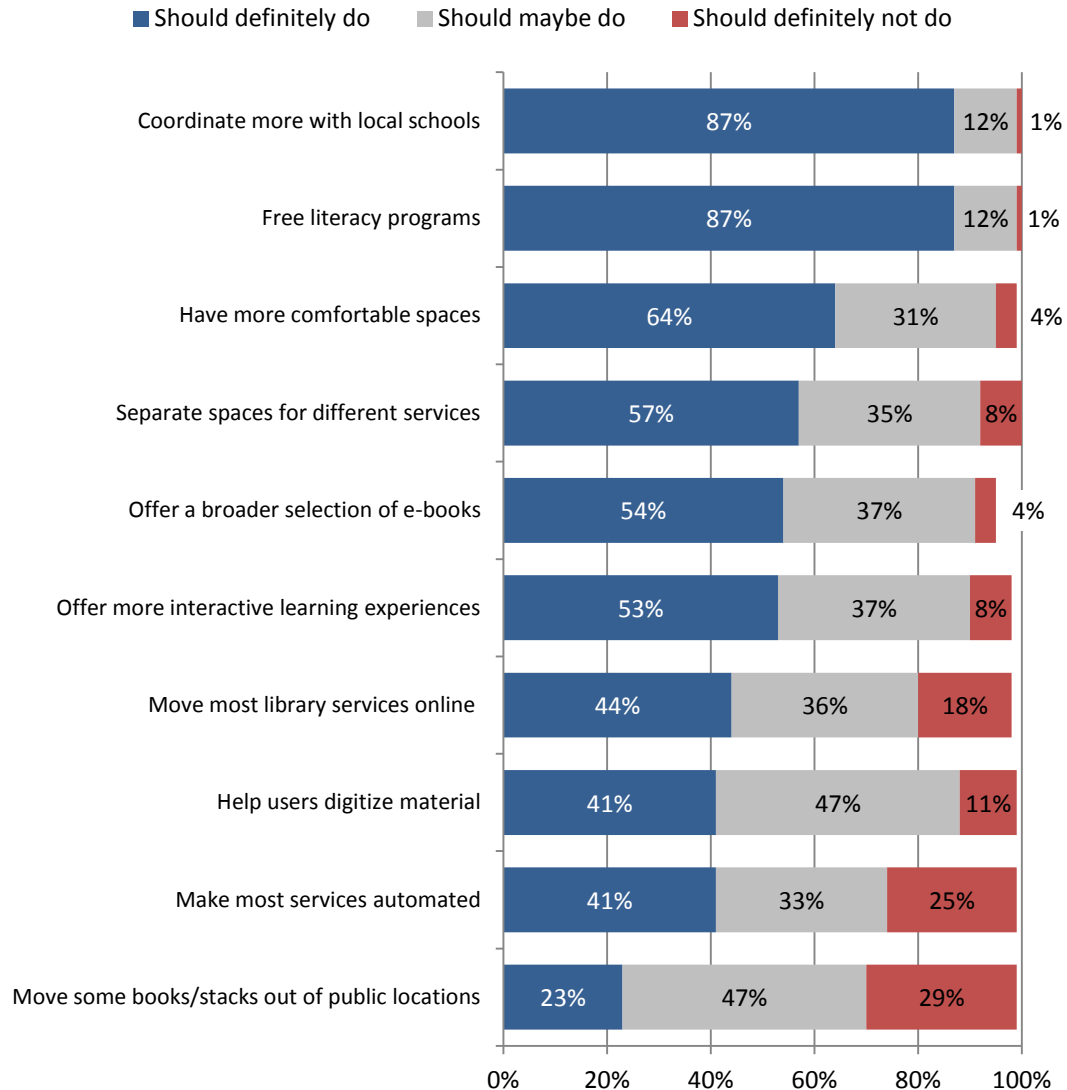
In order to learn more about public priorities for libraries, we asked national survey respondents how important, if at all, they think it is for public libraries to provide various services to the community. All but one of the services are considered to be “very important” [by a majority of respondents](#).

We also asked our national survey respondents, as well as our focus groups, about some different ways public libraries could change the way they serve the public, and whether or not they thought public libraries should implement these changes (if they do not offer these services already). In a separate, qualitative questionnaire aimed at public library staff members, we also asked librarians and other library workers their thoughts on these services.

Younger Americans were more often in favor of these ideas than older adults (specifically adults ages 50 and older), including having more comfortable spaces for reading, working, and relaxing, offering more interactive learning exhibits, and moving most services online.

What services and programs younger Americans say libraries should or should not implement

Among all Americans ages 16-29, the % who say public libraries should “definitely,” “maybe,” or “should definitely not” implement the following programs



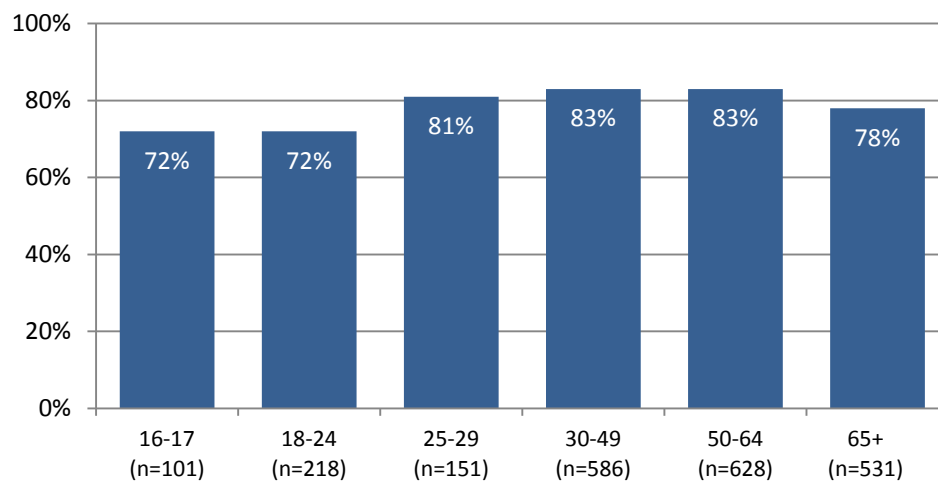
Source: Pew Research Center Internet & American Life Project Library Services survey. October 15-November 10, 2012. N=2,252 Americans ages 16 and older. Interviews were conducted in English and Spanish and on landline and cell phones.

I. Books and media

Books remain strongly associated with libraries in Americans' minds. Overall, 80% of Americans say that it is "very important" for libraries to **provide books to the community for borrowing**. Americans ages 16-29 are significantly less likely to say books at libraries are "very important" than adults ages 30 and older (75% vs.82%), but just as likely to say that books are important overall (94% vs.96%).

A majority say books are "very important" for libraries

Among Americans ages 16+, the % in each age group who say it is "very important" for libraries to provide books to the community for borrowing



Source: Pew Research Center's Internet & American Life Library Services Survey of 2,252 people ages 16 and older conducted October 15-November 10, 2012. The survey was conducted in English and Spanish and on landline and cell phones.

We see this reflected in what recent library visitors do at libraries:

- Almost three-quarters (73%) of Americans ages 16 and older who visited a library in the past 12 months also say they visit **to borrow print books**, including 72% of those under age 30.
- A similar number (73%) say they **visit to browse the shelves for books or media**, including 74% of those under age 30.

We also asked about periodicals, and found that about three in ten (31%) Americans ages 16 and older who visited a library in the past year visit **to read or check out printed magazines or newspapers**, including 34% of those under age 30.

Looking at other forms of media people visit the library for:

- About 40% of those who visited a library in the past 12 months say they visit **to borrow a DVD or videotape of a movie or TV show**, including 33% of those under age 30. Adults ages 30-49 (45%) and ages 50-64 (49%) are most likely say they come to the library for this reason.

- About 17% of those who visited a library in the past 12 months say they visit **to borrow or download an audio book**, including 14% of those under age 30.
- Some 16% of those who visited a library in the past 12 months say they **visit to borrow a music CD**, including 10% of those under age 30.

E-books at libraries

Among the 25% of Americans who visited a library website in the past 12 months, 22% **borrowed an e-book**.¹⁶ Some 57% of Americans do not know if their library lends out e-books, including 53% of those under age 30.

About half of Americans (53%) say that libraries should “definitely” offer a broader selection of e-books. Some 30% say libraries should “maybe” do this, and 5% say libraries should “definitely not” do this.

Among those under age 30, 54% say that libraries should “definitely” offer a broader selection of e-books, 37% say libraries should “maybe” do this, and 4% say libraries should “definitely not” do this.

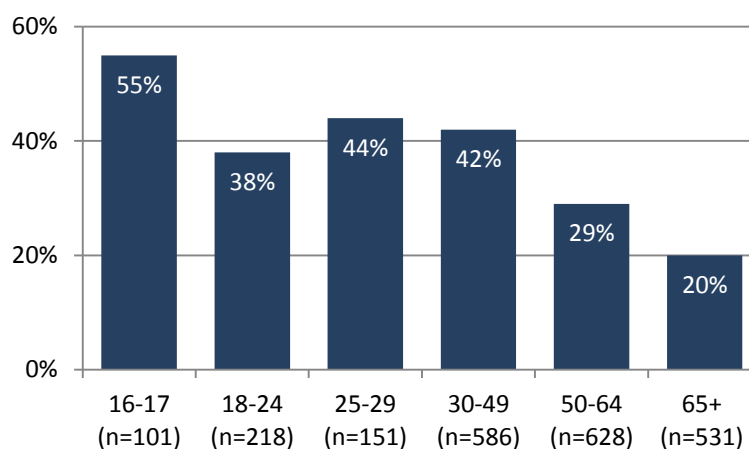
¹⁶ The sample size was too small in this survey to report the breakdown by age group. For more on e-books at libraries, see “Libraries, patrons, and e-books” (2012) at <http://libraries.pewinternet.org/2012/06/22/libraries-patrons-and-e-books/>.

II. Technology and information resources

Some 73% of Americans ages 16 and older say there are places in their community where they can access the internet or use a computer for free, including 77% of those under age 30.¹⁷ And 35% of Americans say they have used those free access points, including 44% of those under age 30 (and 55% of those ages 16-17).

In the past 12 months, have you accessed the internet or used a computer for free someplace other than home, work or school?

Among all Americans ages 16+, the % in each age group who say they have used free computer or internet access points in their community.



Source: Pew Research Center's Internet & American Life Library Services Survey of 2,252 people ages 16 and older conducted October 15-November 10, 2012. The survey was conducted in English and Spanish and on landline and cell phones.

Use of computers and the internet at libraries

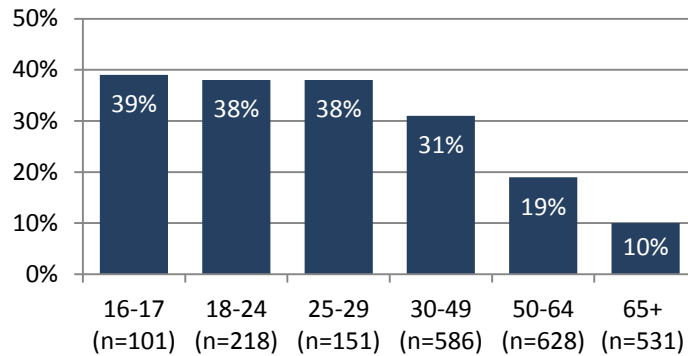
We asked those who had visited libraries in the past 12 months if they used the internet or computers at the library in a question designed to include people who used the wired computers at the library as well as people who had used the library Wi-Fi connection.¹⁸ We found that about a quarter (26%) of Americans ages 16 and older had connected to the internet at the library in the past year, including 38% of those ages 16-29.

¹⁷ The American Library Association reports that 62% of libraries report they are the only source of free public access to computers and the Internet in their communities. Study available at: http://www.ala.org/research/sites/ala.org.research/files/content/initiatives/plftas/2011_2012/2012%20PLFTAS%20Key%20Findings.pdf

¹⁸ "In the past 12 months, have you used computers, the internet, or a public WI-FI network at a public library?"

Computer and internet use at libraries

Among all Americans ages 16+, the % in each age group who have accessed a public library computer, internet or WI-FI connection in the past 12 months



Source: Pew Research Center's Internet & American Life Library Services Survey of 2,252 people ages 16 and older conducted October 15-November 10, 2012. The survey was conducted in English and Spanish and on landline and cell phones.

Additionally, some 36% of those who had ever visited a library in person say the library staff had **helped them use a computer or the internet at a library**. Those under age 30 are significantly more likely than older library visitors to say library staff has helped them use a computer or the internet at the library (43% vs.34%).

Among the 26% of Americans ages 16 and older who used the internet or computers at the library in the past year:

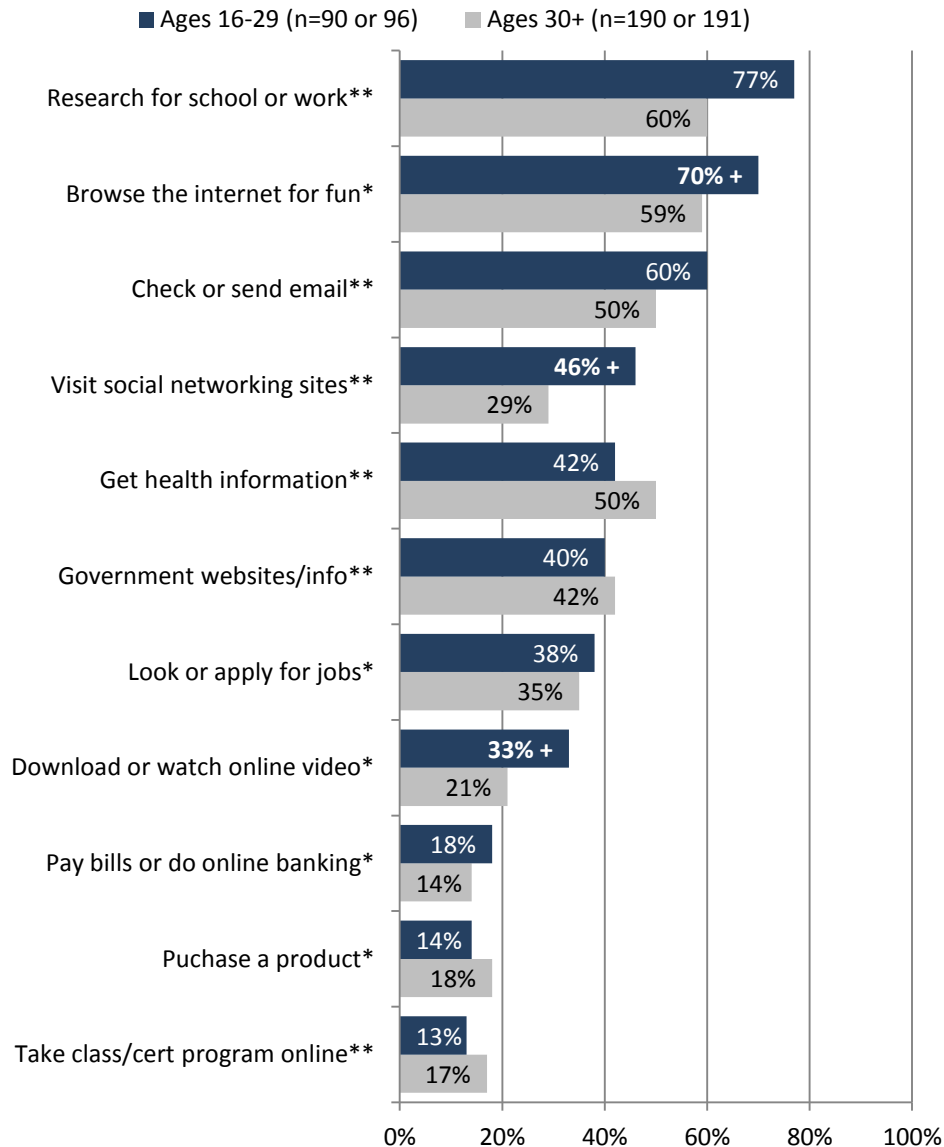
- 66% of Americans ages 16 and older who used the internet at a library in the past 12 months **did research for school or work**, including 77% of those under the age of 30.¹⁹
- 63% say they **browsed the internet for fun or to pass the time**, including 70% of those under the age of 30.
- 54% say they **used email**, including 60% of those under the age of 30. Those ages 18-49 are especially likely to say they did this activity.
- 47% say they **got health information**, including 42% of those under the age of 30.
- 41% say they **visited government websites or got information about government services**, including 40% of those under the age of 30.
- 36% say they **looked for jobs or applied for jobs online**, including 38% of those under the age of 30.
- 35% say they **visited social networking sites**, including 46% of those under the age of 30 (who are significantly more likely than older adults to report this use).
- 26% say they **downloaded or watched online video**, including 33% of those under the age of 30 (who are significantly more likely than older adults to report this use).
- 16% say they **bought a product online**, including 14% of those under the age of 30.

¹⁹ Note: For library computer/internet users under age 30, n=90 or 96 depending on form split.

- 16% say they **paid bills or did online banking**, including 18% of those under the age of 30.
- 16% say they **took an online class or completed an online certification program**, including 13% of those under the age of 30.

What younger Americans do on library internet connections

Among Americans ages 16+ who used a public library computer, internet or WI-FI connection in the past 12 months, the % in each age group who did the following activities in that time period



** n for ages 16-29 = 90 due to form split

* n for ages 16-29 = 96 due to form split

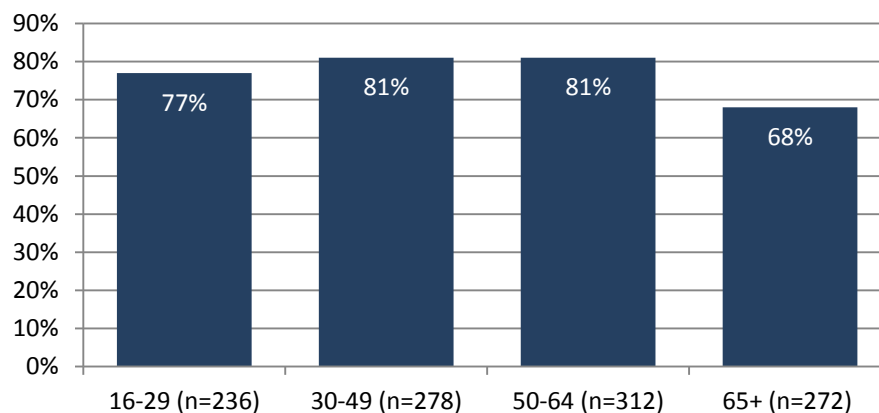
+ indicates statistical significance between age groups

Source: Pew Research Center's Internet & American Life Library Services Survey of 2,252 people ages 16 and older conducted October 15-November 10, 2012. The survey was conducted in English and Spanish and on landline and cell phones.

While we did not ask a question about whether library internet users *depend on* the library as their primary internet connection, we did ask respondents how important they think it is to have free access to computers and the internet at the library in their community. According to the results of our national survey, three-quarters (77%) of Americans think it is “very important” for public libraries to **provide free access to computers and the internet to the community**, including 75% of Americans under age 30.

How important is free library access to computers and the internet to the community?

Among all Americans ages 16+, the % in each age group who say it is “very important” for libraries to provide free access to computers and internet



Source: Pew Research Center’s Internet & American Life Library Services Survey of 2,252 people ages 16 and older conducted October 15–November 10, 2012. The survey was conducted in English and Spanish and on landline and cell phones.

In response to the open-ended questions on our separate online questionnaire, several librarians agreed that providing both access to the internet and assistance with digital tasks were important roles for libraries in their communities. One wrote, “Not everyone has access to computers and internet on a regular basis. . . . Even children, teens, and young adults who do not have the resources to have internet/computer access 24 hours each day are not able to complete tasks online which others may find simple.”

Research resources

Several of the questions in our nationally representative phone survey touched on how Americans use public libraries for their research needs. In general, we found wide support for libraries providing research resources, including specialized resources that otherwise may not be available for free to the general public—for instance, 96% of Americans under age 30 say it is important for libraries to provide research resources such as free databases.

In looking at how Americans use libraries for research, we find:

- Over half (54%) of those who visited a library in the past 12 months say they **visit to research topics that interest them**, including 60% of those under age 30.

- And as mentioned earlier, among those ages 16 and older who used the computers or internet at a library in the past 12 months, a majority (66%) used it to **do research for school or work**, including 77% of those under the age of 30.

In focus groups and in our online panel, librarians echoed these findings in describing how the library is used by older teens and young adults for studying and research. One library staff member especially emphasized the role of the library as a physical space for study, writing that librarians should “reach out more to young adults and offer a safe place for them to study, to ask questions and discover answers.”

In addition to space and basic resources such as computers and internet access, most libraries also offer access to specialized digital resources such as subscription databases—and Americans identify these services as key resources for the community. In fact, almost three-quarters (73%) of Americans ages 16 and older say it is “very important” for public libraries to **provide research resources such as free databases to the community**, including 76% of those under age 30.

Overall, about 46% of those who visited a library in the past 12 months say they visit to **use a research database**, including 51% of those under age 30. Library users ages 65 and older are the least likely age group to say they come to the library for this reason (33%).

In discussions about providing research databases for the public, many librarians in our focus groups said that patrons are not generally aware of the databases that are available or how these databases differ from the resources available through a public search engine such as Google. Several cited students’ lack of awareness in particular. One member of our online panel wrote: “We . . . need to encourage young adults to use the resources we provide for free-databases, e-books, programs, etc. rather than relying solely on Google and other search engines.”

One librarian said that while students weren’t always aware of databases, the library staff made an effort to teach them about research resources:

“We’re big advocates of the databases, especially with the students when they come in, and they have to do a research paper and they’re looking for articles on certain things, so letting them know that you don’t necessarily have to have a physical journal . . . I can show you how you can access the journals from home.”

However, another issue identified by library staff members was potential confusion among both high school and college students as to whether using online databases would be considered an “online source” by their instructors.²⁰ “They don’t understand or care about the difference between a database that they get to from the internet and the internet,” one librarian said in a focus group. As another librarian in an in-person focus group put it, “Their teachers say, ‘No internet resources. You can’t use the internet.’ It’s like you want to say, ‘But this isn’t really the internet. It’s not what your teacher meant.’”²¹

Several librarians cited their efforts to surface a variety of databases, beyond those used for research. One said, “There are a number of databases just for people who are seeking jobs, careers, skills, GED, testing sites that are buried that we want to bring out and highlight and make them more visible for the customer.”

²⁰ Students are often given requirements limiting the number of online sources they can cite, or requiring that their sources include a certain proportion of journal articles or books.

²¹ See also “How Teens Do Research in the Digital World” (2012): <http://pewinternet.org/Reports/2012/Student-Research.aspx>

Many librarians did cite job search and career resources as a major service provided by their library, a view that is shared by the general public: Two-thirds (67%) of Americans ages 16 and older think it is “very important” to the community for public libraries to **provide job, employment and career resources**, including 71% of those under age 30. And over a third (36%) of Americans ages 16 and older who used the internet at a library in the past 12 months say they did so to **look for jobs or apply for jobs online**, including 38% of those under the age of 30.

New digital resources and automation

Library staff members in our focus groups and online panel discussed various ways libraries focus younger patrons after high school. Participants often said that younger adults in their libraries wanted digital services to be easy to use—“seamless,” in the words of one focus group member:

“It has to be easy. It has to be really easy for them or they’re not going to do it. So, making our services as seamless as possible can sometimes be a barrier because you have to work with the company that’s providing the service. You have to work with the publishers. It’s really hard to make it all come together in a seamless way.”

In our national survey of the general public, we asked whether libraries should make various major changes, such as automating most services or moving most services online:

- When we asked Americans whether libraries should **move most services online so users can access them without having to visit the library**, we found lukewarm support for this idea compared with others we asked about—some 42% of Americans say that libraries should “definitely” do this (including 44% of those under age 30), and another 34% say libraries should “maybe” do this (including 36% of those under age 30).
- We also asked about **making most library services automated so people can find what they need and check out material on their own without help from staff**. We found that a similar proportion of Americans (41%) say that libraries should “definitely” make most services automated, including 41% of Americans under age 30. Interestingly, these younger respondents were significantly more likely than older adults to be strongly opposed to this idea: 25% of those under age 30 said libraries should “definitely not do” make most library services automated, compared with 18% of those ages 30 and older.

III. Programs and spaces for younger patrons

Libraries as a community space

One strong theme that emerged from our survey findings and in qualitative discussions was the role of the library as a community space. “A warm, welcoming and friendly space is hard to find these days,” one librarian in our online panel wrote, “and the public library has the remarkable opportunity to become a community gathering place in communities where such a space is sorely missing.”

Through our national phone survey, we attempted to quantify Americans’ views on several different roles that libraries may play in their communities:

- About three-quarters (76%) of Americans think it is “very important” to the community for public libraries to **provide quiet study spaces for adults and children**, including 72% of those under age 30. Adults ages 50-64 are especially likely to say this (81%).²²
- Almost six in ten Americans (59%) say that libraries should “definitely” **create more comfortable spaces for reading, working, and relaxing at the library**, including 64% of those under age 30. Some 49% of those who visited a library in the past 12 months say they visit just to **sit, read, and study, or watch or listen to media**, including 60% of those under age 30.
- About half (49%) of Americans say it is “very important” to the community for public libraries to **provide free public meeting spaces**, including 48% of those under age 30. And almost a quarter (23%) of Americans who visited a library in the past 12 months say they visit to attend a meeting of a group to which they belong, including 23% of those under age 30.
- We also asked about whether libraries should **help users digitize material such as family photos or historical documents**, and found that 43% of Americans think that libraries should “definitely” help patrons digitize material such as family photos or historical documents, including 41% of those under age 30.

The different demands these various type of services might be why a majority (61%) of Americans say that libraries should “definitely” have **completely separate locations or spaces for different services, such as children’s services, computer labs, reading spaces, and meeting rooms**, including 57% of Americans under age 30.

However, when we asked about how libraries could make space for all these activities, we found that Americans overall are less than enthusiastic about the idea of removing print books from their central place. Just one in five Americans (20%), including 23% of those under age 30, say that libraries should “definitely” **move some print books and stacks out of public locations to free up more space** for things such as technology centers, reading rooms, meetings rooms, and cultural events. Yet while this idea lacked immediate support among all age groups, those under age 30 were somewhat more open to this idea in general, as they were significantly more likely than older adults to say that libraries should “maybe” do this (47% vs.36%).

Patrons in our focus group often identified children’s areas and teen hangout spaces as especially important to keep separate from the main reading or lounge areas, to keep noise levels and other

²² More views about how quiet libraries should be: <http://libraries.pewinternet.org/2013/02/06/should-libraries-shush/>

distractions down to a minimum—and the librarians we spoke with agreed. Having a separate area is “very inviting for teens [because] they don’t have to worry about being very quiet,” one librarian said.

In addition to reducing noise and interruptions for other patrons, many librarians told us that having separate spaces was important to give children and young adults a sense of independence and ownership. One online respondent pointed out that “the public library’s role as ‘third place’ is particularly important for teens, since few noncommercial public spaces welcome and engage teens.”

A library staff member in our online panel wrote:

“Having a separate children’s area or young adults area will cater solely to those groups and make them feel that the library is theirs. They do not have to deal with adults watching them or monitoring what book they pick or what they choose to do—it’s all about them and what they want with no judgment. Children and teens love having their own space so why not give them that at the library?”

Many of the library staff members in our online panel said that their libraries already have separate locations for different services. Those who said their library was not very likely to do this in the future often cited issues of space, or funding; one pointed out that “in small libraries, often operated by a single staff member, separate spaces cannot be for reasons of security or even customer service.”

One potential solution that focus group members discussed was sound-proof teen sections with glass walls, allowing for both supervision and privacy. One librarian described a similar teen section at a nearby library:

“The teens really take ownership of it. From the information desk, a librarian can see in to make sure nothing is going on but it’s still private because it’s more or less sound-proof from the rest [of the library]. They can enjoy their time there. Patrons reading in the magazine room can have their own quiet area. It’s a really nice set-up.”

Libraries and schools

Whether in focus groups or national survey results, one theme that stood out was the desire for libraries to coordinate more closely with local schools. Overall, 85% of respondents say that libraries should “definitely” coordinate more closely with local schools in providing resources to kids. This opinion was also frequently voiced by parents²³ in our focus groups, [as discussed in a recent report](#). (Another popular service was free early literacy programs to help young children prepare for school, which 82% of respondents say that libraries should “definitely” offer.)

While these findings do not apply directly to the younger Americans in this 16-29 year-old age group, many librarians told us that connecting with younger children early in their education was a valuable way to create connections that would continue as they grow older.

“Interacting with children and young adults at their schools is an important aspect of encouraging these groups to use the library at a young age,” one library staff member in our

²³ <http://libraries.pewinternet.org/2013/05/01/parents-children-libraries-and-reading/>

online panel wrote. “These groups may be more likely to use the library as adults if they are comfortable there as children.” Another wrote that close coordination with local public schools “has increased program attendance and circulation in the children and teens area because the youth services librarian has made an effort to connect.”

Programs and classes for children and teens

When it comes to programs and resources for younger patrons:

- Almost three-quarters (74%) of Americans think it is “very important” for public libraries to provide **programs and classes for children and teens**, including 72% of Americans under age 30.
- Some 47% of Americans (and 53% of those under age 30) say that libraries should “definitely” offer **more interactive learning experiences similar to museum exhibits**.
- And 41% of those who visited a library in the past 12 months (including 35% of those under age 30) say they visit to **attend or bring a younger person to a class, program, or event designed for children or teens**.

In focus groups, librarians described their various experiences with teens at their libraries, and emphasized that the situation varies from town to town—and library to library:

“In some of the branches there’s a large teen population that’s going to hang out there anyway. So, it’s providing them with something to do while they’re in there. Some [libraries] are trying to pull [teens] into the branch and some . . . are just trying to deal with the [teens] that they have.”

Another librarian in the focus group had a similar experience:

“I spent most of my first year as a librarian in a very small . . . branch in the county, in a very low income community that desperately needs a library. The kids would come in. A lot of them haven’t stepped foot in the library before and they didn’t know how to behave, what to do, what they could do. There are three hours per day of computer time and then I’ve heard them say, ‘Oh, I’m logged off. There’s nothing else to do. Let’s go home.’ So, our goal in that specific branch was to give them something to do . . . They’re going to hang out there anyway, so, we wanted to keep them occupied, out of trouble, and not disruptive. So, when we started introducing LEGO programs for the tween demographic and board game programs for the older teens, it improved a lot. They would invite their friends. It was more structured and the issues went down significantly after that.”

Another librarians also cited crafts and other activities as ways to bring new teens into library programs, especially when they take place in visible public areas:

“Every quarter we do two or three crafts. Making origami craft, make a CD clock, bracelets. . . . Sometimes we do them right on the public floor so that if we can’t get teens to come down into the meeting room because they’re shy or reluctant, we can maybe get their attention right there on the floor by wearing the bracelet [craft] around and going up to teens and getting them to come over to a table right on the floor.”

Librarians we spoke with mentioned several potential roadblocks in creating teen programs, such as lacking the funds, space, or available and trained staff. In an answer to our online questionnaire, one library staff member wrote that while funding issues existed, “the bigger problem is geographic and transport related. We cannot bring together a critical mass of young people at one time and one place,” although coordinating with the local school’s bus schedules might be a workaround in the future.

Digital media labs

One library innovation that we explored was **digital media labs**, where patrons can create and upload new digital content, such as music, movies, or their own e-books. Overall, 58% of respondents say they would be interested in a digital media lab where patrons could create and upload new digital content; some 26% say they would be “very likely” to use such a resource.

Among those under age 30, 27% said they would be “very likely” to use digital media labs, and 67% said they would be likely to use them overall (significantly more than older adults). Adults 65 and older were the least likely to say they would be likely to use such a lab—32% said they would be likely to use them overall, compared with over half of younger respondents, and just 15% said they would be “very likely” to use them.

One example of this type of space that has a particular focus on younger patrons is the [YOUmedia](#) teen learning spaces, which are funded by the MacArthur Foundation and the Institute of Museum and Library Services. The first YOUmedia space, YOUmedia Chicago, opened in 2009, and offers teens both access to digital technologies and resources as well as guidance and mentoring from adult library staff. A new report, “[Teens, Digital Media, and the Chicago Public Library](#),” analyzes YOUmedia Chicago’s first three years.²⁴

Several of the librarians who answered our online questionnaire were enthusiastic about the idea of media labs. One wrote: “[We should have] more teen services and dedicated teen space for exploring technology and literacy—a multimedia lab and teen lounge! We have to reach this population and mentor them at a higher rate than we do today.”

However, few of the librarians wrote that their libraries already offer this. When asked why not, some mentioned staff time, technology resources, budget concerns, and space as primary factors. Others mentioned liability issues related to user-created content. One of the librarians in our online panel wrote, “I want to work more with the teens on content creation. We are good with the old fashioned programs such as writing groups and art, but when it comes to playing with new technology, money, training and equipment get in the way.”

²⁴ See “Teens, Digital Media, and the Chicago Public Library,” by Penny Bender Sebring, Eric R. Brown, Kate M. Julian, Stacy B. Ehrlich, Susan E. Spote, Erin Bradley, and Lisa Meyer at the UChicago Consortium on Chicago School Research (May 2013): <http://ccsr.uchicago.edu/publications/teens-digital-media-and-chicago-public-library>. More: youmedia.org / youmediachicago.org

Other activities

Another potential area of change that librarians identified in our qualitative work was the need for programming that would appeal to younger adults. Asked about what libraries need to change, one library staff member wrote: “[There’s] not enough programming for teens and actual young adults; it seems that in the library world the term ‘young adult’ refers to children aged ten to thirteen.” Another librarian agreed: “We should also focus on the ‘lost’ age group of older-than-teens-but-younger-than-baby-boomers for programs.”

Overall, over six in ten Americans (63%), including 64% of those under age 30, say it is “very important” for public libraries to **provide free events and activities, such as classes and cultural events, for people of all ages**. About one in five (21%) Americans who visited a library in the past 12 months say they visit to **attend a class, program, or lecture for adults**, including 20% of those under age 30.

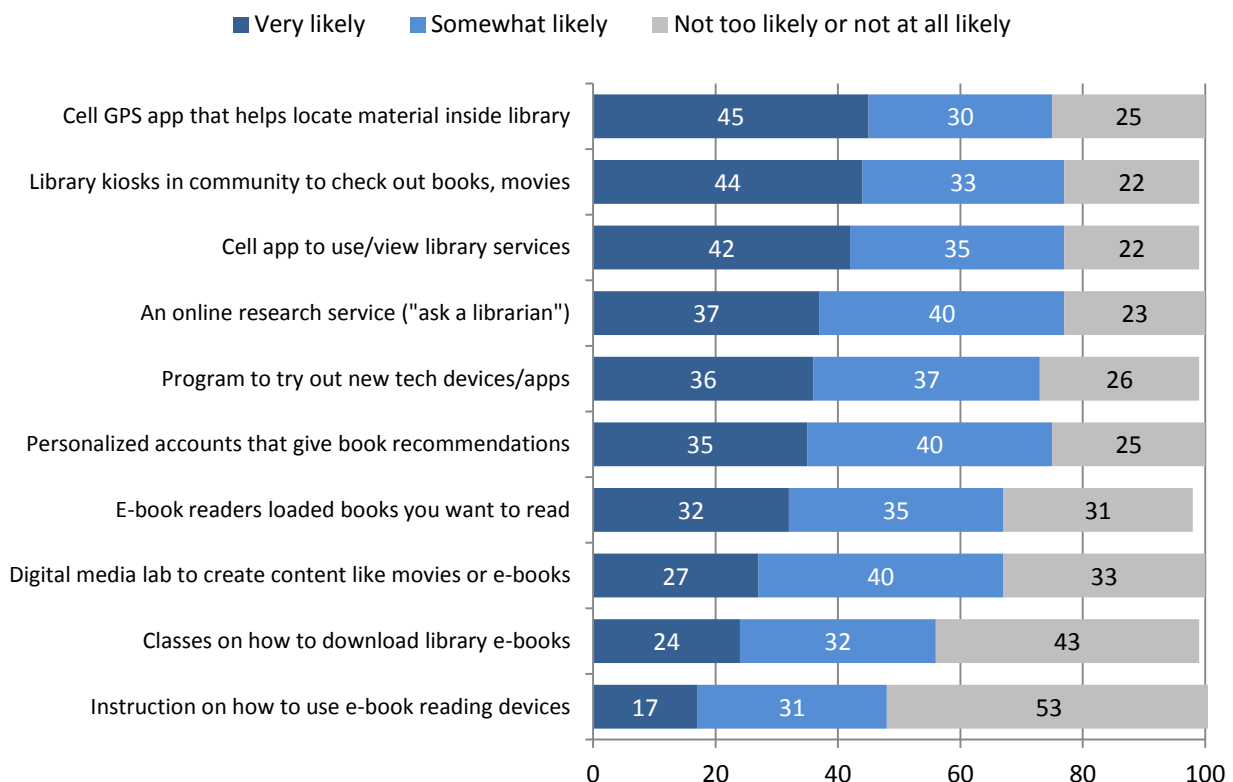
However, several librarians and patrons in our focus groups noted that many programs and events for adults are often targeted toward parents with young children. “We need to find a way to get young adults into the library,” one librarian wrote. “I mean the ones who do not have children. There needs to be a reason that a 30 year old goes to the library that is not to drop off their kids to story time. We are missing entire generations until they reach retirement age.”

Part IV: New services and innovations

In addition to asking people for their preferences on some new library services, we also asked respondents whether they would themselves use a variety of possible new activities and features at libraries. Our list was weighted towards services that are rooted in technology and allow more tech-related interactions with libraries and at them.

How likely younger Americans say they would be to use various library services

Among younger Americans ages 16-29, the % who say they are likely – or not – to use the following library services and activities



Source: Pew Research Center's Internet & American Life Library Services Survey of 2,252 people ages 16 and older conducted October 15-November 10, 2012. The survey was conducted in English and Spanish and on landline and cell phones.

These items are discussed further individually below.

An online research service where you could pose questions and get responses from librarians

Over three-quarters (77%) of Americans under the age of 30 say they would be interested in an "Ask a Librarian" type of online research service, where they could pose questions and get responses from

librarians; some 37% say they would be “very likely” to use this type of resource. Americans ages 65 and older were least likely to express a strong interest in this resource.

A program that allowed people to try out the newest tech devices or applications

Overall, 73% of respondents ages 16-29 say they would be interested in a “technology petting zoo” program that allowed people to try out the newest tech devices or applications; some 36% say they would be “very likely” to use such a service. About four in ten Americans under the age of 65 said they were “very likely” to use this type of program, significantly more than the 22% of those ages 65 and older who say this.

Personalized online accounts that give you customized recommendations for books and services based on your past library activity

Some three-quarters (75%) of respondents ages 16-29 say they would be interested in personalized online accounts that provide customized recommendations for books and services based on their past library activity, similar to the recommendations offered by commercial sites like Amazon—significantly more than older adults. Some 35% say they would be “very likely” to use a service with customized book recommendations.

A cell phone app that allows you to access and use library services from your phone and see what programs the library offers

Overall, 77% of respondents ages 16-29 say they would be likely to use library a cell phone app that would allow them to access and use library services from their phone; some 42% say they would be “very likely” to use such an app. As discussed earlier in the report, [13% of those ages 16 and older have visited library websites or otherwise accessed library services by mobile device](#) in the past year, including 18% of those under age 30.²⁵

Younger respondents, specifically those under the age of 50, were significantly more likely than older adults to express an interest in mobile library apps.

Library kiosks located throughout the community where people can check out books, movies or music without having to go to the library itself

Overall, 76% of respondents ages 16-29 say they would be likely to use library kiosks located throughout the community where people can check out books, movies or music, similar to Redbox’s DVD rental service; some 44% say they would be “very likely” to use such kiosks. Respondents under age 50 are significantly more likely than older adults to express strong interest in kiosks.

A cell phone app that helps you locate material within the library by guiding you with GPS

Overall, 75% of respondents ages 16-29 say they would be interested in a GPS-driven cell phone app that helps patrons easily locate material within the library, significantly more than older adults; some 45% say they would be “very likely” to use this type of app. Younger respondents, specifically those under the age of 50, were more likely than older adults to express a strong interest in location-driven apps.

²⁵ “Mobile Connections to Libraries” (2012): <http://libraries.pewinternet.org/2012/12/31/mobile-connections-to-libraries/>

E-book readers already loaded with the book you want to read

Overall, 68% of respondents under age 30 say they would be likely to check out pre-loaded e-readers if their library offered them, significantly more than older adults; some 32% say they would be “very likely” to take advantage of this service.

Respondents ages 65 and older are the *least* likely to be interested in this service—just about four in ten say they would be likely to use pre-loaded e-readers, overall; meanwhile, [previous research](#) has shown that Americans ages 16-17 who don’t already borrow e-books are significantly *more* likely than older non-borrowers to be interested in this service, although the sample size was too small in this survey to report those numbers.

A digital media lab where you could create and upload new digital content like movies or your own e-books

As was discussed earlier in the report, 67% of Americans ages 16-29 say they would be interested in a digital media lab where patrons could create and upload new digital content, significantly more than older adults; some 27% say they would be “very likely” to use such a resource.

Adults 65 and older were the least likely to say they would be likely to use such a lab—32% said they would be likely to use them overall, compared with over half of younger respondents, and just 15% said they would be “very likely” to use them.

Classes or instruction on how to use handheld reading devices like e-book readers and tablet computers

Almost half (47%) of respondents under the age of 30 say they would be interested in classes on how to use handheld reading devices like e-book readers and tablet computers, including 17% who say they would be “very likely” to take these classes. Adults ages 50-64 were significantly more likely than most other age groups to express a strong interest in this service, with 30% saying they would be “very likely” to take these classes.

Classes or instruction on how to download library e-books to handheld devices

Almost half (56%) of respondents under the age of 30 say they would be interested in classes on how to download library e-books to handheld devices, including 24% who say they would be “very likely” to take these classes. Adults ages 30-49 and 50-64 were particularly likely to express an interest in this service, with about one in three saying they would be “very likely” to take these classes.

Methods

Library Services Survey

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

November 2012

SUMMARY

The Library Services Survey obtained telephone interviews with a nationally representative sample of 2,252 people ages 16 and older living in the United States. Interviews were conducted via landline ($n_L=1,127$) and cell phone ($n_C=1,125$, including 543 without a landline phone). The survey was conducted by Princeton Survey Research Associates International. The interviews were administered in English and Spanish by Princeton Data Source from October 15 to November 10, 2012. Statistical results are weighted to correct known demographic discrepancies. The margin of sampling error for results based on the complete set of weighted data is ± 2.3 percentage points. Results based on the 1,945 internet users²⁶ have a margin of sampling error of ± 2.5 percentage points.

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 adults in the United States who have access to either a landline or cellular telephone. Both samples were provided by Survey Sampling International, LLC (SSI) according to PSRAI specifications.

Numbers for the landline sample were drawn with 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 October 15 to November 10, 2012. As many as 7 attempts were made to contact every sampled telephone number. 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

²⁶ Internet user is defined based on those accessing the internet occasionally, sending or receiving email, and/or accessing the internet on a cell phone, tablet, or other mobile handheld device.

respondents. Interviewing was spread as evenly as possible across the days in field. Each telephone number was called at least one time during the day in an attempt to complete an interview.

For the landline sample, interviewers asked to speak with the youngest male or female ages 16 or older currently at home based on a random rotation. If no male/female was available, interviewers asked to speak with the youngest person age 16 or older of the other gender. This systematic respondent selection technique has been shown to produce samples that closely mirror the population in terms of age and gender when combined with cell interviewing.

For the cellular sample, interviews were conducted with the person who answered the phone. Interviewers verified that the person was age 16 or older and in a safe place before administering the survey. Cellular respondents were offered a post-paid cash reimbursement for their participation.

Weighting and analysis

The first stage of weighting corrected for different probabilities of selection associated with the number of adults in each household and each respondent's telephone usage patterns.²⁷ This weighting also adjusts for the overlapping landline and cell sample frames and the relative sizes of each frame and each sample.

This first-stage weight for the i^{th} case can be expressed as:

$$WT_i = \frac{1}{\left(\frac{S_{LL}}{S_{CP}} \times \frac{1}{AD_i}\right)} \text{ if respondent has no cell phone}$$

$$WT_i = \frac{1}{\left(\frac{S_{LL}}{S_{CP}} \times \frac{1}{AD_i}\right) + R} \text{ if respondent has both kinds of phones}$$

$$WT_i = \frac{1}{R} \text{ if respondent has no land line phone}$$

Where S_{LL} = size of the landline sample

S_{CP} = size of the cell phone sample

AD_i = Number of adults in the household

R = Estimated ratio of the land line sample frame to the cell phone sample frame

The equations can be simplified by plugging in the values for $S_{LL} = 1,127$ and $S_{CP} = 1,125$. Additionally, we will estimate of the ratio of the size of landline sample frame to the cell phone sample frame $R = 0.60$.

The final 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 Hispanic origin was split out based on nativity; U.S born and non-U.S. born. The White, non-Hispanic subgroup is also balanced on age, education and region. The basic weighting parameters came from a special analysis of the

²⁷ i.e., whether respondents have only a landline telephone, only a cell phone, or both kinds of telephone.

Census Bureau's 2011 Annual Social and Economic Supplement (ASEC) that included all households in the United States. The population density parameter was derived from Census data. The cell phone usage parameter came from an analysis of the July-December 2011 National Health Interview Survey.^{28,29}

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

Parameter (16+)		Unweighted	Weight
<u>Gender</u>			
Male	48.7%	47.0%	48.7%
Female	51.3%	53.0%	51.3%
<u>Age</u>			
16-24	16.0%	14.2%	16.5%
25-34	17.3%	13.2%	16.9%
35-44	16.6%	12.3%	15.6%
45-54	18.3%	16.6%	18.0%
55-64	15.4%	18.5%	15.3%
65+	16.3%	23.6%	16.5%
<u>Education</u>			
Less than HS Graduate	16.4%	11.3%	16.0%
HS Graduate	29.4%	27.1%	29.2%
Some College/Assoc Degree	27.5%	25.0%	26.6%
College Graduate	26.8%	36.1%	27.6%
<u>Race/Ethnicity</u>			
White/not Hispanic	67.4%	69.8%	66.4%
Black/not Hispanic	11.6%	10.8%	11.5%
Hisp - US born	7.0%	7.1%	7.1%
Hisp - born outside	7.3%	5.2%	7.0%
Other/not Hispanic	6.7%	5.6%	6.5%
<u>Region</u>			
Northeast	18.3%	16.6%	18.9%
Midwest	21.7%	22.6%	21.6%
South	36.8%	36.5%	36.7%
West	23.2%	24.3%	22.8%

²⁸ Blumberg SJ, Luke JV. Wireless substitution: Early release of estimates from the National Health Interview Survey, July-December, 2011. National Center for Health Statistics. June 2012.

²⁹ The phone use parameter used for this 16+ sample is the same as the parameter we use for all 18+ surveys. In other words, no adjustment was made to account for the fact that the target population for this survey is slightly different than a standard 18+ general population survey.

<u>County Pop. Density</u>			
1 - Lowest	19.9%	23.2%	20.2%
2	20.0%	18.8%	19.8%
3	20.1%	21.7%	20.2%
4	20.0%	19.8%	20.2%
5 - Highest	20.0%	16.5%	19.6%
<u>Household Phone Use</u>			
LLO	7.0%	5.6%	6.8%
Dual - few, some cell	39.0%	49.8%	39.5%
Dual - most cell	18.8%	20.3%	18.9%
CPO	35.2%	24.1%	34.6%

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 1.24.

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

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

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 (\sqrt{deff}). Thus, the formula for computing the 95% confidence interval around a percentage is:

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

where \hat{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 ± 2.3 percentage points. 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 2.3 percentage points away from their true values in the population. The margin of error for estimates based on form 1 or form 2 respondents is ± 3.3 percentage points. 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 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:³⁰

- Contact rate – the proportion of working numbers where a request for interview was made³¹
- 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 11.4 percent. The response rate for the cellular sample was 11 percent.

³⁰ PSRAI's disposition codes and reporting are consistent with the American Association for Public Opinion Research standards.

³¹ PSRAI assumes that 75 percent of cases that result in a constant disposition of "No answer" or "Busy" are actually not working numbers.

Table 2: Sample Disposition

Landline	Cell	
27,813	23,844	Total Numbers Dialed
1,100	404	Non-residential
1,120	45	Computer/Fax
8	----	Cell phone
13,815	9,183	Other not working
1,577	321	Additional projected not working
10,193	13,891	Working numbers
36.6%	58.3%	Working Rate
526	107	No Answer / Busy
3,296	4,073	Voice Mail
27	11	Other Non-Contact
6,344	9,700	Contacted numbers
62.2%	69.8%	Contact Rate
373	1,504	Callback
4,749	6,630	Refusal
1,222	1,566	Cooperating numbers
19.3%	16.1%	Cooperation Rate
40	42	Language Barrier
----	375	Screen out / Child's cell phone
1,182	1,149	Eligible numbers
96.7%	73.4%	Eligibility Rate
55	24	Break-off
1,127	1,125	Completes
95.3%	97.9%	Completion Rate
11.4%	11.0%	Response Rate