JOINT CENTER
FOR
POLITICAL AND ECONOMIC STUDIES

BROADBAND AND JOBS:

AFRICAN AMERICANS RELY HEAVILY ON MOBILE ACCESS AND SOCIAL NETWORKING IN JOB SEARCH

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FOREWORD

In the wake of the Great Recession and after several years of recovery, policymakers continue to wrestle with the challenge of delivering jobs and opportunity to low-income communities across the country. Earlier this year, the Joint Center for Political and Economic Studies noted in a report that unemployment among African Americans remained significantly higher than pre-recession levels and was nearly twice the jobless rate for the nation at large.

Amid all this, there is great promise in broadband and mobile Internet technologies, which have already proven themselves as key drivers of economic and employment growth in many areas. Online applications and services not only offer new and compelling opportunities for businesses to form, expand and break through geographic limitation, but also ease access to the job market for the unemployed.

In this study, funded by the Joyce Foundation, the Joint Center explored the importance of Internet access to job search among African Americans. We found that African Americans are more likely than other segments of the population to use the Internet to seek and apply for employment, and are more likely to consider the Internet very important to the success of their job search.

We also found that confidence in one's own digital skills correlates with higher likelihood of using the Internet for job search, leading us to suggest that efforts to improve digital literacy would allow more people to take advantage of the dynamic employment tools that the Internet has to offer. This is particularly important given the high and ever-growing proportion of job openings that are found *only* online.

The data in our *Broadband and Jobs* report illuminates the myriad ways that broadband and mobile technologies assist with finding employment – from online job listings and applications to connecting with friends, family and colleagues. Expanding Internet access and digital literacy training can provide all Americans with the tools they need to find work in the 21ˢᵗ Century economy.

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EXECUTIVE SUMMARY

In recent years, as the Internet has emerged as a key tool for finding and applying for employment in the U.S., African Americans as a group have become among the most active users of online job search.

In a survey of 1,600 Americans conducted in May 2013 (with an oversample of African Americans),[1] the Joint Center Media and Technology Institute queried respondents on how they use the Internet for job search. The survey shows that all Americans have come to understand the importance of using the Internet to find jobs. Although personal contacts remain the most important factor, nearly one-third of those who have recently been without work cited the Internet as the most important ingredient to a successful job search.

The survey found that African Americans are more likely than average to rely on the Internet for job search and to say the Internet was *very important* to landing a job. Of particular interest is that African Americans are relying on social media and on mobile devices for job search at higher rates than the general population.

More specifically:

- 50% of African American Internet users said the Internet was *very important* to them in successfully finding a job, significantly higher than the 36% average for the entire sample.

- 46% of African American Internet users used the Internet at some point when they were last looking for a job, either by online search, emailing potential employers or using social networking sites. This compares to 41% for all respondents.

- 36% of African Americans said they applied for a job online the last time they were on the job market, compared with 26% for all respondents.

- 31% of African Americans said social networking sites are *very important* to job search, which is 7 percentage points greater than the entire sample (24%).

The survey also focused on the use of the Internet for job search during the Great Recession. Some 22% of all respondents said that they had been out of work within the past six years, a figure that was 28% for African Americans and 32% for Latinos. When focusing on African Americans who were out of work during that time:

- 77% of this group of African Americans cited the Internet as *very important* to job search, compared with the 67% average for the entire sample.

- 59% of African Americans who were out of work within the past six years applied for a job online, compared with 56% for the entire sample.

- 35% of African Americans who were out of work within the past six years said they have used social networking sites such as LinkedIn or Facebook to look for a job, compared to 25% for all respondents.

Smartphones turned out to be an important part of the job search process for African Americans. Among those who had used the Internet for job search:

- 47% of African Americans said they have used their smartphone for job search.

- 36% of Latinos said they have used their smartphone for job search.

- 24% of whites said they have used their smartphone for job search.

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1 For the entire sample, the margin of error is plus or minus 2.5 percentage points (i.e., there is a 95% probability that reported results are within 2.5 points). For African Americans, the margin of error is plus or minus 5.5 percentage points; for Latinos the margin of error is 7 points.

It is worth noting that, while the Internet is an important job search tool for all Americans – and African Americans especially – more traditional means of looking for work remain important. Among all Americans who have been out of work in the past six years:

- 48% said personal contacts with family and friends were most important to them in their job search; 46% of African Americans said this.
- 29% said information they found online was most important; the same share of African Americans said this.
- 9% said public or private employment agencies were most important.
- 7% mentioned ads in print publications as most important.

In terms of general perceptions about the Internet's importance in job search:

- 61% of African Americans said those lacking access to the Internet were at a *major disadvantage* in conducting a job search, only slightly above the 59% average.
- 34% of African Americans said being without a mobile device is at a *major disadvantage* in job search, roughly the same as the 32% average.

Given the findings identified above, the survey has two major implications for policymakers and other stakeholders:

- Efforts to **improve people's digital literacy and skills** are likely to improve their capacity to use the Internet effectively for job search. Using different measures of digital skills and literacy, this research finds that those with high levels of digital skills are *two-thirds more* likely to use the Internet for job search and say it was important to helping them land a job. They are *twice* as likely to say the Internet was the most important factor in leading them to a job.
    - ▫ Programs to improve digital literacy and skills would especially benefit **low-income people** and those with **lower levels of educational attainment**; those groups score significantly lower than average on measures of digital skills and literacy. Measures for digital skills and literacy for African Americans, who, according to the survey, are more reliant on the Internet for job search, are modestly lower than the average.
- **Libraries have a role to play** in providing access points for the Internet as well as digital skills and literacy training. While the survey found that 15% of all adults had used the Internet at a public library in the previous 12 months, that figure that was 21% for African Americans and 23% for Latinos. For poor Americans (those with household incomes less than $15,000 per year), 24% have used the Internet at a public library in the past year.

INTRODUCTION

With unemployment persistently high, even in the face of the economic recovery that has followed the Great Recession, policymakers are keen to explore ways to open up job opportunities for those who need work. This is a particularly urgent issue in African American communities. As the Joint Center for Political and Economic Studies has documented, unemployment for African Americans is nearly twice the national rate, with unemployment for African Americans at 13.5% in May 2013, compared with 7.5% nationally. Among African American youth, unemployment is at crisis levels, with nearly 42.6% of African Americans between the ages of 16 and 19 out of work in April 2013, twice the rate for Americans in that age group.[1]

Broadband and mobile information and communications technologies (ICTs) have the potential to boost economic growth and employment in a number of ways. First, investments in high-speed networks (either wireline or wireless) can support direct employment of those who plan, design, build and operate them. These new or upgraded networks also support business and employment growth by fostering the development, marketing and sales of new online applications and services, as well as new channels for improving business operations or selling goods and services to consumers.

Another way broadband and ICTs can help is by giving people better access to the labor market. As former Federal Communications Commission Chairman Julius Genachowski often pointed out, the vast majority accept applications for employment *only* through the Internet,[2] so even the simplest parts of the job application process can be highly challenging for someone who lacks broadband access. Research also finds that those with broadband access tend to stay in the job market longer. While the most recent recession was characterized by large numbers of workers exiting the job market out of discouragement, having broadband has been shown to reduce the rate at which discouragement drives people away from job search.[3]

This report focuses on broadband and mobile technologies and how they factor into unemployed individuals' job searches and outcomes. In doing so, the Joint Center conducted a national survey of adult Americans asking about whether they have been out of work in recent years and, if so, about the role ICTs have played in their search for work. In light of the high unemployment rate for African Americans, the report has a special focus on how broadband and mobile technologies factor into job searches for this segment of the population. Overall, 1,600 Americans were interviewed for the Joint Center's May 2013 survey, with an oversample of 300 African Americans, and 200 Latinos.

BACKGROUND

During the past 15 years, the Internet has evolved from being primarily a tool for the tech elite into a widely available communications platform used by the vast majority of Americans. In 1998, some 23% of Americans counted themselves as Internet users, a figure that rose to 85% by 2013.[4] Access technology has also changed, from the dial-up modem and large desktop computer of the 1990s to today's high speed broadband (which two-thirds of U.S. households have), often delivered wirelessly via home routers and cell towers to an array of laptop or desktop computers, smartphones (more than half of Americans have one) and tablets or e-readers (roughly a third of Americans have one or the other).

For African Americans, Latinos and lower-income Americans, the trend-lines over time are similar to the nation at large, but they trail in home broadband adoption. By 2012, 69% of white Americans had broadband at home, compared to 57% of African Americans and 45% of Latinos. Among lower-income households – those whose annual household incomes are $30,000 or below – 41% have broadband.[5]

The key difference in access patterns comes in mobile. Whereas African Americans and Latinos trail the national rates of home broadband adoption, the picture is different for smartphones. According to our survey, 58% of both African Americans and Latinos own these mobile devices, ahead of the national rate of 53% and the rate for whites of 51%. These figures are roughly similar to 2013 survey data from the Pew Research Center, which show 64% of African Americans and 60% of Latinos having smartphones, ahead of a national rate of 56%.[6]

When it comes to accessing the Internet by whatever means, African Americans, Latinos and whites have similar overall rates. According to the Joint Center survey reported here, 90% of whites say they use the Internet while 81% of African Americans and 84% of Latinos do.

I. JOB SEARCH AND INFORMATION & COMMUNICATIONS TECHNOLOGIES

A. THE INTERNET AND JOB SEARCH

Past surveys have established the importance of the Internet when people are looking for work. According to the Pew Research Center's Internet & American Life Project, 56% of Internet users (age 18 or older) in 2011 had "looked online for information about a job."[7] The National Telecommunications and Information Administration's *Exploring the Digital Nation* report, which used data gathered by the Census Bureau in a Current Population Survey Computer and Internet Use supplemental survey, found that 34% of Internet users age 25 and over "go online when conducting a job search."[8] Our survey shows that people are generally attuned to the importance of the Internet in looking for work. Among Internet users, 24% say that, at some point, they have used the Internet to look for information about or apply for a job. Narrowing the scope to only those who have been without work in the past six years, 38% in that group say they have used the Internet to look for employment information or apply for a job.

The differences in results across the three surveys are likely due to how the survey questions are phrased. For example, Pew's broadly worded question might capture Internet users who are not actively looking for work, but perhaps, at some point, have looked for information about a job out of curiosity, without serious intent of pursuing it. The NTIA wording is narrower in that it invites respondents to consider the question in the context of a job search they may be undertaking. The Joint Center question is narrower still, focusing not just on job search but also the act of applying for a job online – something people may not do even if they use the Internet to find a posting to which they apply. All this notwithstanding, it seems fair to say that the different survey results show, as the NTIA puts it, that looking for work is a "relatively frequent activity for Americans using the Internet."[9]

Although the survey finds that 24% of all Internet users have used the Internet to get information about a job or apply for one, the figure varies across different groups, with 36% of African Americans and 35% of Latinos saying they had done this.

Lower income online users are less likely than others to use the Internet for job search. For poor Americans – those whose annual household incomes are $15,000 or less – who are online, just 8% have used the Internet for job search or applications. A similar, if less dramatic pattern holds true for education; less educated Americans are less likely to use the Internet for job search than those with higher levels of educational attainment. Here are detailed breakouts, against the 24% average:

SHARE OF INTERNET USERS WHO HAVE USED THE INTERNET TO GET INFORMATION ABOUT OR APPLY FOR A JOB

Income	
Under $15K	8%
$15K to $35K	19
$35K to $60K	23
$60K to $75K	16
$75K to $90K	31
Over $90K	42
Education	
Less than high school	22%
High school grads	20
Some college	23
College +	29

Respondents also understand the Internet's importance in the process of finding a job. When asked, generally, about the last time they were looking for work:

- 36% said the Internet was important to helping them successfully land a job (21% said it was *very important* and 16% said it was *somewhat important*).
- 30% of Internet users said they contacted people online (e.g. email) in the course of their search.
- 26% of all respondents say that, the last time they were looking for a job, they submitted an employment application online.

When asked to think broadly about the importance of ICTs in job search, a majority of Americans say that it would be a *major disadvantage* in a job search to be without Internet access. In fact, three in five Americans (59%) say that not having the Internet would be a major disadvantage in a job search, with another 20% saying it would be a minor disadvantage. Americans also believe a mobile device is important. Fully, 32% of Americans say that being without a mobile device would be a *major disadvantage* in a job search, with another 36% saying it would be a minor disadvantage.

In terms of specific dimensions of the Internet and their importance in job search, among Internet users:

- 78% say emailing contacts is important (39% very, 38% somewhat).
- 76% say using search engines is important (40% very, 36% somewhat).
- 59% say emailing someone they know at a company is important (24% very, 35% somewhat).
- 58% say social networking sites are important (24% very, 34% somewhat).

In questions directed to Internet users, online access played a large role, but phone calling and postal mailing remain important to job seekers, as well. Among Internet users who were asked generally about job search:

- 55% called contacted potential employers via the telephone.
- 34% sent letters.
- 34% used the Internet to search for a job.
- 30% contacted people using the Internet or via email.
- 12% of all Internet users, when most recently looking for work, used a social networking site such as LinkedIn or Facebook.

Overall, combining the Internet-centric means for reaching out for job search, 41% of Internet users put the Internet to work for them in their job search at some point in the past, either through social networking online, email or general online search.

It is worth noting that in spite of Americans' clear belief in the importance of the Internet in job search, personal contacts still matter most. When asked what was *most* important to them the last time they were looking for a job, a majority (54%) cited personal contacts such as family and friends. The Internet was a distant second, with 13% saying this was most important, 9% saying ads in a print publication and 8% an employment agency. Of course, it is likely that email or other online communications tools are means people employ to take advantage of personal contacts in job search.

B. THOSE WHO HAVE BEEN OUT OF WORK WITHIN THE PAST SIX YEARS

Although Americans clearly see the value of ICTs in job search, focusing on those who have been out of work recently sheds additional light on the issue. The survey asked respondents if they had been out of work in the prior six years (corresponding roughly to the Great Recession) and 22% responded that they had. As the following list shows, those who fall into this category used a range of techniques in their job search.

- 85% sent out resumes or filled out job applications.
- 65% contacted an employer directly to seek out employment.
- 65% reached out to friends or relatives.

- 49% answered advertisements.
- 42% contacted a public or private employment agency.
- 35% did some other job-seeking activity.
- 22% contacted a school or university employment center.
- 18% checked union or professional registers.

For those who have been without jobs sometime in the past six years, the Internet looms very large in their approach to finding a job. Nearly three quarters – 72% – say they use the Internet or email for job search, and another one-quarter – 24% – use social media (e.g. Facebook or LinkedIn) in the course of their job search. These figures are significantly higher than when all Internet users are asked this question in a general context, with reference to the last time they were looking for work. In that context, 34% cited the Internet as a tool they used and 12% pointed to social media such as LinkedIn or Facebook. This suggests that when job search has urgency about it – that is, people are without work and not just looking for a different or better job – the <u>Internet becomes critically important to one's job search strategy</u>.

The Internet's importance to unemployed job seekers is evident in other ways. Though more than two-thirds (69%) of these respondents said they used the telephone to contact people about job opportunities, 56% used the Internet or email to contact people about jobs, nearly twice the rate (30%) at which all Internet users said this. Very tellingly, a clear majority of respondents (56%) who were out of work in the past six years said they have submitted a job application online.

When asked about what has been important in their job search, 67% of those who have been unemployed at some point in the past six years say the Internet is *very important*, much higher than the 36% of all Internet users who give this answer. When asked what is *most* important in job search, here is what those out of work within the past six years said:

- 48% said personal contacts with family and friends are most important.
- 29% said information found online is most important.
- 9% said public or private employment agencies are most important.
- 7% mentioned ads in print publications as most important.

The share of respondents citing the Internet as most important, among those unemployed at some point in the past six years, is more than twice the rate of all Internet users, 13% of whom said the Internet was most important to job search.

The importance of the Internet in job search, as the preceding data shows, takes on greater prominence in people's minds when they are facing unemployment and needing to take immediate action to look for work. When the context of the questioning centers on the Internet's role in a more general sense, similar differences emerge for the recently-unemployed, although those differences are smaller compared to those among responses of the broader online population. In thinking about the importance of the Internet, 87% say those without Internet access are at a disadvantage in job search; 66% said it would be a major disadvantage and 21% said minor. This compares to 79% of all Internet users who said lack of online access would be a disadvantage in job search. In thinking about the importance of mobile access, 73% say lacking it is a disadvantage in job search (34% major, 39% minor), while 68% of all online users said the lack of access to a mobile device would be a disadvantage in job search.

Turning to specific online uses in the course of jobs search, among those who have been without work at some point since 2007:

- 83% said emailing contacts was important (42% very and 41% somewhat).
- 81% said using search engines important (42% very and 39% somewhat).
- 65% said emailing someone at a company whom they do not know is important (26% very, 39% somewhat).
- 63% said LinkedIn or Facebook important (24% very and 39% somewhat).

II. FOCUS ON AFRICAN AMERICANS

A close look at African Americans shows that they are active in using the Internet for job search, which has a lot to do with African Americans having higher rates of unemployment. Fully, 28% of African Americans in the survey said that they had been without work at some point in the past six years. By various measures, African Americans are more likely than the population at large to use the Internet in the course of job search. Among African American Internet users who were asked generally about job search:

- 57% contacted potential employers via the telephone.
- 26% sent letters.
- 42% used the Internet to search for a job.
- 31% contacted people using the Internet or via email.
- 14%, when most recently looking for work, used a social networking site such as LinkedIn or Facebook.

Compared with the all respondents, African Americans are less likely to send letters in a job search, but more likely to use the Internet. Combining various online means for job search (basic Internet search, contacting others using email or other online communications tools or social networking), 46% of African American Internet users take advantage of those means. The result for all Internet users is 41%. Finally, 36% of African Americans, when most recently looking for work, said they applied for a job online compared to 26% for the entire sample.

Perhaps most notably, half (50%) of African Americans said that when they were last looking for a job, the Internet was important (32% said it was very important and 18% said it was somewhat important). This compares to 36% for all respondents, for which 21% of all respondents said broadband was *very important* to them last time they were looking for work. In other words, African Americans are half again more likely to see broadband as *very important* to finding a job as the typical respondent. When asked what was most important to finding a job, African Americans are most likely to cite contacts with family and friends (53% do), while 17% cited the Internet, which is higher than the 13% average.

On other measures of the importance of the Internet to job search, African Americans are generally in line with all respondents.

- Among African American respondents, 75% think that people without the Internet are at a disadvantage in looking for a job (61% say major disadvantage and 13% say minor disadvantage).
  - This compares with the 79% average, in which 59% said lacking the Internet would be a major disadvantage.
- Among African American respondents, 71% say that being without a mobile device (i.e., smartphone or tablet) was a disadvantage in job search (34% major, 37% minor disadvantage).
  - This compares to the 68% average, in which 32% said lacking a mobile device would be a major disadvantage.

In terms of the importance of different dimensions of the Internet for African American respondents:

- 80% say using search engines is important (38% very, 42% somewhat);
- 79% say emailing contacts is important (40% very, 39% somewhat);
- 62% say of African Americans social networking sites are important (31% very, 31% somewhat);
- 58% say emailing someone they know at a company is important (29% very, 29% somewhat).

All these figures roughly align with results shown above for all respondents, with African Americans notably above the norm in saying social networking sites are *very important*; they are 7 percentage points above the average.

For the 28% of African Americans in the survey who were out of work in the prior six years, the results are, in some cases, striking, although the sub-sample is small at only 83 cases. Yet some of the results are statistically significant and convey the extent to which African Americans have turned to the Internet for job search to a degree greater than the general population when faced with unemployment.

To take one example, although African Americans who have been out of work in the past six years are as likely as others to say they have used the Internet or email for job search (73% of African Americans versus the 72% average), they are more likely to use social media such as Facebook or LinkedIn in job search. Some 35% of African Americans use those tools against the 24% average. African Americans are also more likely than average to cite the Internet as important to getting a job by a 77% to 67% margin. African Americans are about as likely as all respondents to say that *lacking* Internet access and mobile access are disadvantages in job search.

The table below summarizes responses for all respondents in the survey, African Americans, and all others in the sample who are not African American.

AFRICAN AMERICANS VERSUS REST OF SAMPLE

	All respondents	African Americans	All others in sample
Out of work in past six years	22%	28%	21%
Among those out of work in past 6 years			
Contact employer directly	65%	57%	67%
Public/private employment agency	42	44	42
Reach out to friends/relatives	65	65	65
School/university employment center	22	17	23
Send out resumes/fill out applications	82	92	83
Answer ads	49	42	50
Check union or professional registers	18	28	16
Other means of job search	35	22	38
Asked among all Internet users in context of "last time you were looking for work"			
Use the Internet or email for job search	34%	42%	33%
Social networking sites	12	14	11
Contact specific people using Internet or email	30	30	29
Call people on telephone	55	57	55
Send letters or resume through the mail	34	26	35

Asked of all respondents			
	All respondents	African Americans	All others in sample
Submit a job application online (last time looking for work)	26%	36%	24%
Lacking Internet for job search major disadvantage	59	61	59
Lacking Internet for job search minor disadvantage	20	13	21
Lacking mobile device for job search major disadvantage	32	34	32
Lacking mobile device for job search minor disadvantage	36	37	36
Social networking sites very important	24	31	22
Social networking sites somewhat important	34	31	35
Emailing contacts very important	39	40	39
Emailing contacts somewhat important	39	39	39
Using search engines very important	40	38	40
Using search engines somewhat important	37	42	36
Emailing someone you know very important	24	29	23
Emailing someone you know somewhat important	35	29	36
Overall using the Internet was very important to job search	21	32	19
Overall using the Internet was somewhat important to job search	16	18	16
Personal contacts were most important	54	53	54
Internet was most important	13	17	12

III. DEVICES USED IN JOB SEARCH

Our age of pervasive connectivity means many people have the capacity to do things on the Internet with different access means. Many of us have multiple ways to go online – the laptop or tablet computer on the go, the desktop at home or the smartphone from most anywhere. As the following table shows, different groups of Americans have different levels of access to devices that enable surfing online. Two-thirds of Americans have broadband at home and just more than half have smartphones. Consistent with past surveys, African Americans and Latinos lag in broadband adoption at home, but lead the way in smartphones. They also report higher rates of adoption of tablet devices, while they trail in e-readers.

BROADBAND AND ONLINE ACCESS DEVICE ADOPTION

	Broadband at home	Smartphone	Tablet	E-Reader
All				
	67%	**53%**	**29%**	**25%**
Gender				
Male	69	55	34	26
Female	64	51	25	24
Race/Ethnicity				
White	68	51	27	26
African American	60	58	31	22
Latino	63	58	35	20
Income				
Under $15K	31	40	6	11
$15K to $35K	54	44	13	14
$35K to $60K	72	57	28	23
$60K to $90K	81	57	38	33
Over $90K	90	78	56	49
Education				
Less than high school	37	35	16	11
High school grads	60	49	21	18
Some college	73	56	34	28
College +	82	63	40	36

These patterns of device ownership translate to online job search in consistent ways. African Americans and Latinos come in above the national average in use of portable devices for job search. The table below shows what, among those who use the Internet for job search, respondents in the different racial/ethnic categories say they use for this activity.

USE OF SPECIFIC DEVICES FOR JOB SEARCH
(AMONG THOSE WHO USE INTERNET, EMAIL, OR SOCIAL NETWORKING TO LOOK FOR JOBS)

	Desktop Computer	Laptop Computer	Tablet Computer	Smartphone
All				
	69%	**55%**	**17%**	**30%**
Race/Ethnicity				
White	70	51	15	24
African American	66	67	22	47
Latino	62	65	28	36

IV. INTERNET USE OUTSIDE THE HOME

Although smartphones make overall access levels for African Americans and Latinos comparable to levels for white Americans, home broadband adoption levels for African Americans and Latinos still lag behind the national average. Given that a larger screen (e.g., on a desktop or laptop) can be helpful in looking for job ads or filling out applications, alternative places to use the Internet such as libraries or community centers are still worthwhile even as mobile access increases.

The survey asked respondents if they had, in the past 12 months, used the Internet at a library or other place (such as a community center or church). Here is what respondents said.

- 15% of all adults said they had used the Internet in a <u>library</u> in the past 12 months.
  - □ 14% of whites said this.
  - □ 21% of African Americans said this.
  - □ 23% of Latinos said this.
  - □ 24% of poor Americans (those in households with an annual income of less than $15,000 annually) said this.
- 13% of all adults said they had used the Internet at a local place such as a <u>community center</u> or <u>church</u> in the past 12 months.
  - □ 13% of whites had done this.
  - □ 10% of African Americans had done this.
  - □ 18% of Latinos had done this.
  - □ 16% of poor Americans (those in households with an annual income of less than $15,000 annually) said this.

Given the reliance by minorities in these places for Internet access, the findings indicate that policymakers and other stakeholders should devote resources to computer and Internet access at libraries, community centers and other community access points.

V. HOW WELL RESPONDENTS THOUGHT JOB ADS SUITED THEIR SKILL LEVELS

The survey asked respondents what they thought about the match between ads and their skills. Specifically, the survey inquired whether respondents thought that, when they were looking for work, they felt the advertisements for job openings aligned with their skills.

As the table below indicates, a majority of all respondents thought that the fit of ads to their skills was either excellent or good. For African Americans, 62% said this, compared to the 70% of all others who said this. African Americans are also about twice as likely as everyone else to say job ads were a poor fit for their skills, although the rate at which respondents said this was low (11% for African Americans compared with 6% for all others).

	All respondents	African Americans	All others in sample
Ads' fit of skills were <u>excellent</u>	31%	30%	31%
Ads' fit of skills was <u>good</u>	38	32	39
Ads' fit of skills was <u>fair</u>	13	11	13
Ads' fit of skills were <u>poor</u>	7	11	6

VI. MEASURES OF DIGITAL LITERACY & SKILLS

Understanding the frequency with which people go online for job search is one thing, but going behind that to explore what may be associated with the tendency to use the Internet for job search is important, too. In this section, the discussion centers on measures of respondents' digital skills and literacy, accompanied by an analysis of whether there is a link between those measures and use of the Internet for job search.

A. RESULTS FOR AFRICAN AMERICANS COMPARED TO ALL RESPONDENTS

The survey asked respondents a series of questions about their knowledge of technology/Internet terms as a way to assess people's digital skills. This approach is a tested and reliable way to probe into people's digital literacy.[10] In this survey, respondents were asked how familiar they were with the following terms or concepts:

- What an Internet browser cookie is.
- What spyware or malware are.
- What an app is.
- What refresh and reload are.
- What WiFi is.
- What a QR code is.

Here are the responses for all those surveyed compared to African Americans.

HOW WELL DO YOU UNDERSTAND WHAT AN INTERNET BROWSER COOKIE IS?

	All	African Americans
Very well	28%	26%
Somewhat well	30	27
Not too well	18	22
Not at all well	23	23

HOW WELL DO YOU UNDERSTAND WHAT SPYWARE OR MALWARE ARE?

	All	African Americans
Very well	33%	29%
Somewhat well	28	30
Not too well	16	17
Not at all well	21	21

HOW WELL DO YOU UNDERSTAND WHAT AN APP IS?

	All	African Americans
Very well	40%	39%
Somewhat well	30	38
Not too well	11	9
Not at all well	17	12

HOW WELL DO YOU UNDERSTAND WHAT REFRESH AND RELOAD ARE?

	All	African Americans
Very well	44%	39%
Somewhat well	28	39
Not too well	10	10
Not at all well	15	11

HOW WELL DO YOU UNDERSTAND WHAT WIFI IS?

	All	African Americans
Very well	44%	36%
Somewhat well	30	38
Not too well	10	13
Not at all well	13	13

HOW WELL DO YOU UNDERSTAND WHAT A QR CODE IS?

	All	African Americans
Very well	9%	8%
Somewhat well	9	10
Not too well	18	27
Not at all well	59	52

The results do not show large differences between African Americans and the average, but there is a consistent pattern of African Americans being somewhat less likely to say they understand a particular term or concept *very well*. They are also consistently more likely to respond *somewhat well* in describing their level of understanding of a concept. Overall, this suggests a somewhat lower level of digital skills for African Americans. Looked at differently, across the six items asked about, 22% of all respondents said they understood *very well* more than three of them, while the rate for African Americans was 17%.

On measures of digital skills, the results are a bit more mixed. When asked how comfortable they were using a computer:

- 77% of whites said they were either very or somewhat comfortable using a computer.
- 74% of African Americans were either very or somewhat comfortable using a computer.
- 78% of Latinos were either very or somewhat comfortable using a computer.

Each of the three groups was equally likely, at 48%, to say they were *very comfortable* using a computer.

The survey probed more deeply into skills by asking how confident people were in *easily* finding information they need on a desktop or a laptop, with a separate question on finding information on a wireless device. Overall, people expressed high levels of confidence using traditional devices such as a desktop or laptop. Fully 88% of all respondents were either very or somewhat confident, with 87% of whites saying this, 90% of African Americans and 94% of Latinos saying this. Notably, however, African Americans were significantly less likely than whites to say they were *very confident* in their ability to find information on a laptop or desktop, by a 44% to 52% margin.

For mobile devices, there was a lower level of confidence among respondents in their ability to *easily* find the information they need on the mobile device they use most often. Some 58% of respondents were either very or somewhat confident in their ability to easily find the information they need using their mobile device. For African Americans, this number was 63%, for Latinos 60% and with 56% of whites saying they were very or somewhat confident. One third (32%) of African Americans were *very confident* in their ability to find information on their wireless device, compared to 30% for both whites and Latinos. It is worth mentioning, for context, that, as noted earlier, respondents are less likely to use mobile wireless devices for job search than desktops or laptops.

These findings have consequences for use of the Internet for job search. As the survey findings show, many Americans rely on the Internet for job search, with African Americans doing so disproportionately more overall, and in specific areas such as social networking and applying for a job online. Higher levels of digital literacy and skills could make the process of using the Internet for job search function better for those using online tools for job search.

B. RESULTS FOR LOWER INCOME AND LESS EDUCATED INTERNET USERS

The tables below show that, for measures of digital literacy, those who have lower levels of educational attainment and lower incomes have lower levels of digital literacy than average. For each of the terms that respondents were asked to assess their understanding, there are significant differences for those lower on the socio-economic ladder. As noted earlier, 22% of all respondents said they understood very well more than three of the terms. The figures for less educated and lower income respondents were 13% and 15%, respectively.

HOW WELL DO YOU UNDERSTAND WHAT AN INTERNET BROWSER COOKIE IS?

	All	High school grad or less	Annual household income under $35K
Very well	28%	13%	16%
Somewhat well	30	25	22
Not too well	18	19	20
Not at all well	23	39	40

HOW WELL DO YOU UNDERSTAND WHAT SPYWARE OR MALWARE ARE?

	All	High school grad or less	Annual household income under $35K
Very well	33%	18%	20%
Somewhat well	28	21	21
Not too well	16	18	23
Not at all well	21	39	35

HOW WELL DO YOU UNDERSTAND WHAT AN APP IS?

	All	High school grad or less	Annual household income under $35K
Very well	40%	25%	26%
Somewhat well	30	25	22
Not too well	11	13	17
Not at all well	17	32	32

HOW WELL DO YOU UNDERSTAND WHAT REFRESH AND RELOAD ARE?

	All	High school grad or less	Annual household income under $35K
Very well	44%	30%	29%
Somewhat well	28	24	23
Not too well	10	11	17
Not at all well	15	31	29

HOW WELL DO YOU UNDERSTAND WHAT WIFI IS?

	All	High school grad or less	Annual household income under $35K
Very well	44%	29%	28%
Somewhat well	30	27	25
Not too well	10	12	18
Not at all well	13	28	26

HOW WELL DO YOU UNDERSTAND WHAT A QR CODE IS?

	All	High school grad or less	Annual household income under $35K
Very well	9%	3%	2%
Somewhat well	9	6	5
Not too well	18	16	14
Not at all well	59	69	70

Similar differences are evident on measures of digital skills. Among those with a high school education or less, 62% are very or somewhat comfortable using a computer. Some 63% of lower income respondents (households with an annual income of less than $35,000) are somewhat or very comfortable using a computer. This compares with the 77% average.

In terms of confidence in their ability to find information on their laptop/desktops and mobile devices:

- 81% of those with high school degrees or less are very or somewhat confident in their ability to find information on their desktop or laptop; 85% of those in homes where the annual income is below $35,000 say this. This compares with the 88% average.

- 49% of those with high school degrees or less say they are very or somewhat confident in their ability to find information on their mobile devices. Some 42% of those in households where the annual income is below $35,000 say this. The average is 58%.

C. LINKING DIGITAL LITERACY TO ONLINE JOB SEARCH

The preceding analysis shows that people's online skills vary across socio-economic categories; African Americans show modestly lower levels of digital skills, with lower-income and less educated Americans exhibiting significantly lower levels of such skills and literacies. A look at how online job search patterns vary with levels of digital skills and literacy shows that high levels of digital skills and literacy are correlated with greater likelihood of using the Internet for job search.

For those who rate fairly well in digital skills – the 22% who say they understand *very well* more than three of the six tech terms asked about – there is a greater chance that they have used the Internet for job search and that they view the Internet as important to their job search. Specifically, when asked whether they used the Internet to look for a job when they were most recently looking:

- 49% of "high digital skills" respondents (those who understood *very well* more than three tech terms) had done this.
- 29% of remaining respondents (those with lower levels of digital skills as evidenced by the fact that they understood *very well* three of fewer of the six tech terms) said they had done this.

The patterns are similar when asked whether they think the Internet was important to their job search:

- 51% of "high digital skills" respondents said it was, important, with 30% saying it was very important and 21% somewhat important.
- 32% of remaining respondents said the Internet was important, with 18% saying it was very important and 14% saying it was somewhat important.

Overall, those with high levels of digital skills were twice as likely as others to cite online information as being *most important* to helping them find a job, by a 21% to 10% margin.

A similar pattern emerges when the focus is on digital skills. When asked how comfortable they are using a computer, those who expressed high levels of confidence in computer skills were more likely to use the Internet as part of their job search. Overall, 48% of respondents said they were *very comfortable* using a computer, with 29% saying they were *somewhat comfortable* using a computer, 8% saying they were only *somewhat uncomfortable* and 11% saying they were *very uncomfortable*. The table below shows how the answers to the questions play out across degrees of self-reported computer skills.

RESPONSES TO QUESTIONS ABOUT USE OF INTERNET IN JOB SEARCH BY DEGREE OF COMFORT WITH COMPUTERS

	Use the Internet in job search	Think the Internet was "very" or "somewhat" important to finding a job	Think that the Internet was <u>most</u> important factor in finding a job
Very comfortable with a computer	45%	47%	18%
Somewhat comfortable	31	36	12
Somewhat uncomfortable	16	23	1
Very uncomfortable	9	14	2

VII. FINDINGS FOR LATINOS

The tables below show results for Latinos in the sample. There was a small sample size of Latinos out of work within the past six years – 67 cases. This makes the findings more illustrative than statistically meaningful. Yet, like African Americans, Latinos are more likely than others to use the Internet for job search, use social networking sites for job search, apply for jobs online and see the Internet as very important to job search.

	All respondents	Latinos	All others in sample
Out of work in past six years	22%	32%	20%
Among those out of work in past 6 years			
Contact employer directly	65%	53%	69%
Public/private employment agency	42	37	44
Reach out to friends/relatives	65	63	66
School/university employment center	22	10	20
Send out resumes/fill out applications	82	81	86
Answer ads	49	49	49
Check union or professional registers	18	33	14
Other means of job search	35	36	35
Asked among all Internet users in context of "last time you were looking for work"			
Use the Internet or email for job search	34%	46%	32%
Social networking sites	12	24	10
Contact specific people using Internet or email	30	36	28
Call people on telephone	55	61	54
Send letters or resume through the mail	34	44	32

	All respondents	Latinos	All others in sample
Submit a job application online (last time looking for work)	26%	32%	24%
Lacking Internet for job search major disadvantage	59	62	59
Lacking Internet for job search minor disadvantage	20	14	21
Lacking mobile device for job search major disadvantage	32	34	32
Lacking mobile device for job search minor disadvantage	36	36	36
Social networking sites very important	24	29	22
Social networking sites somewhat important	34	32	34
Emailing contacts very important	39	39	39
Emailing contacts somewhat important	39	39	38
Using search engines very important	40	39	40
Using search engines somewhat important	37	34	37
Emailing someone you know very important	24	30	22
Emailing someone you know somewhat important	35	30	36
Overall using the Internet was very important to job search	21	30	19
Overall using the Internet was somewhat important to job search	16	17	16
Personal contacts were most important	54	48	55
Internet was most important	13	16	12
Ads' fit of skills were excellent	31	31	31
Ads' fit of skills was good	38	34	39
Ads' fit of skills was fair	13	9	13
Ads' fit of skills was poor	7	13	6

ENDNOTES

1   Bureau of Labor Statistics, online at: http://www.bls.gov/news.release/empsit.t02.htm.

2   See *Remarks of FCC Chairman Julius Genachowski, Comcast Internet Essentials Event, Joint Center for Political and Economic Studies*, September 24, 2012. Available online at: http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-316430A1.pdf.

3   George Ford, *Internet Use and Labor Market Participation: Additional Insights from New and Old Data*. Phoenix Center for Advanced Legal & Economic Public Policy Studies, August 2011. Available online at: http://www.phoenix-center.org/perspectives/Perspective11-04Final.pdf.

4   Pew Research Center's Internet & American Life Project chart available online at: http://www.pewinternet.org/Static-Pages/Trend-Data-(Adults)/Internet-Adoption.aspx

5   Kathryn Zickuhr and Aaron Smith, *Digital Differences*, Pew Research Center's Internet & American Life Project, April 2012. Available online at: http://www.pewinternet.org/Reports/2012/Digital-differences.aspx

6   Aaron Smith. *Smartphone Ownership 2013*. Pew Research Center's Internet & American Life Project. April 2012. Available online at: http://www.pewinternet.org/Reports/2013/Smartphone-Ownership-2013.aspx.

7   *What Internet Users Do Online*. Available at http://www.pewinternet.org/Static-Pages/Trend-Data-(Adults)/Online-Activites-Total.aspx.

8   National Telecommunications and Information Administration. *Exploring the Digital Nation: America's Emerging Online Experience*. June 2013. Available online at: http://www.ntia.doc.gov/report/2013/exploring-digital-nation-americas-emerging-online-experience.

9   Ibid at p. 6.

10   Eszter Hargittai, *An Update on Survey Measures of Web-Oriented Digital Literacy*. *Social Science Computer Review*, Volume 27, no. 1, February 2009, pp. 130–137.