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broadband subscriptions, but digital skills training opens doors
to household internet use for jobs and learning**

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August 2019

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Introduction and Summary of Findings

Not so long ago, “closing the digital divide” primarily meant getting people online, and a steady upward trend in adoption is evidence of progress on that front. Yet gaps in broadband adoption remain – particularly for low-income households – and closing those gaps is about more than simply offering a low-cost internet service. Even with the availability of low-cost offers, it remains a challenge to encourage the remaining disconnected people to sign up for broadband service. And we still have limited understanding of how newly-connected low-income people use the internet and how it affects their lives.

This research project addresses these concerns. Using an original survey of participants in a low-income broadband program operated by Comcast, it identifies why certain formerly-unconnected low-income households subscribed and examines the effects of being digitally included. The sample of respondents comes from subscribers to the Comcast Internet Essentials (IE) program, which was established in 2011 as a voluntary condition of Comcast’s acquisition of NBCUniversal. The large number of households (over 1.5 million) who have subscribed presents

a valuable research opportunity for learning more about the benefits of home broadband adoption.

The project includes two survey waves. The first, reported here, focuses on how subscribers differ from a similar group that did not subscribe to IE, addresses whether training encourages more use of online resources, and sets a baseline of community engagement to compare against the results of a second survey wave. The second wave, to be completed later in 2019, will make it possible to evaluate how being connected has changed the way low-income subscribers work, play, and engage with their communities. We are grateful to Comcast for making the survey possible. The views expressed in the report are those of the author's and do not necessarily reflect those of Comcast or TPI.

[The Evolving Digital Divide](#)

A decade ago, half of all Americans had broadband at home and there seemed to be a clear recipe for getting the other half online. Upward adoption trends meant some non-users were bound to get online simply with the passage of time. Others would benefit from education on the internet's potential relevance to them. For the lowest earners among us, discounted internet offerings would help, along with training on the use of digital tools.

The past decade has challenged some aspects of this narrative. As noted, home broadband adoption gaps still remain – particularly among low-income populations. 2017 [American Community Survey](#) data shows 65.6% of households with annual incomes below \$35,000 (about 30% of all households) had a home broadband subscription, compared with 95.0% of homes with annual incomes at or greater than \$75,000. Encouraging low-income households to subscribe can be a challenge. [Experiments](#) run by the FCC and several ISPs in 2014 found signing up unconnected, low-income households to be more difficult than expected despite very low-priced offerings, suggesting cost is not the only barrier to adoption.

Additionally, the composition of adoption is changing. Broadband subscriptions have grown by about 10 percentage points since 2013, to 83.5% today. Smartphone adoption has also grown at a greater rate, from 53% in 2013 to 77% [in early 2018](#). At the same time, some stakeholders worry that smartphones are not adequate for students to do their [homework](#) and in that context worry that low-income households are more likely to be reliant on a smartphone solely for internet access than upper-income ones. Some 31% of households with annual incomes under \$30,000 are “smartphone dependent” for internet access, while 9% of households whose incomes exceed \$75,000 annually are smartphone dependent.

Thus, the last several years have left us with a puzzle about how to connect households who live in areas with access to home broadband but who do not subscribe to it. It is no surprise, then, that policymakers continue to focus on closing gaps in broadband adoption. FCC Chairman Ajit Pai has focused largely [on infrastructure gaps](#) that may inhibit broadband adoption, while FCC Commissioner Jessica Rosenworcel has highlighted the “[homework gap](#)” – the [15% of all school-age children](#) who do not have broadband internet at home (35% for low-income households with school-age children).

Summary of Findings

This report presents new research on how low-income households obtain home broadband and how it impacts their lives. The research is based on a survey of 1,275 users of Comcast’s Internet Essentials (IE) product. IE offers discounted (\$9.95 per month) service, the option to purchase a subsidized internet-ready computer for less than \$150, and free digital literacy training (online, in person, and in print). Those eligible to subscribe are:

- families with children who are eligible for free or reduced-price lunches at school,
- those in U.S. Housing and Urban Development (HUD) low-income housing units,
- those receiving HUD housing benefits (such as Section 8 vouchers), and
- low-income veterans.

Comcast has also initiated pilot programs for low-income seniors and community college students in select markets.

Survey respondents had subscribed to IE in the three months prior to the survey, which was conducted in June and July of 2018. The control group consists of 200 respondents who began the IE sign-up process but did not complete it. The strong majority of respondents in this survey have school-age children at home, with the remaining respondents likely coming from groups in the expanded eligibility pool noted above. The margin of error for the main survey of 1,275 respondents is plus or minus 3 percentage points; for the control group it is plus or minus 7.5 percentage points.

The survey and analysis of its data yield several key high-level findings:

- **IE households are more likely than households in the control group to focus on the benefits of broadband to their children. Among respondents in each group with school-age children at home:**
 - 92% of IE households say their child(ren) at least occasionally uses the internet to get online, compared with 74% of the control group;
 - 79% of IE households say the internet helps them be more responsive to the goings on in their child's school, compared with 54% of the control group; and
 - 71% of IE households say someone in the home uses the internet for schoolwork, compared with 51% of the control group.
- **IE households are more interested in obtaining additional training on using the internet than are respondents from control households that use the internet.**
 - 66% of IE respondents are interested in training on how to protect their privacy and security, compared with 52% of the control group.

- 60% of IE respondents say they would be interested in training on how to communicate with their child's school, compared with 34% of control group respondents.
- 52% of IE respondents are interested in training to improve workforce skills, compared with 37% for control group respondents.
- **Controlling for a propensity to engage in offline activities such as volunteering in their community or attending community meetings, the 35% of IE respondents who have had formal computer or internet training are more likely to engage in a variety of online activities.**
 - 72% of IE respondents with formal training have used the internet to do schoolwork compared with 57% without formal training.
 - 46% of IE respondents who have had formal training have used the internet to look for or apply for a job compared with 35% without formal training.
 - 32% of those who have had formal training used the internet to access government services compared with 24% of IE respondents without formal training.

This portion of the analysis takes into account that people who pursue training may simply be highly motivated people; that characteristic is reflected in their tendencies to volunteer, attend community meetings, or use community resources at local non-profits or places of worship. This means that differences which emerge for those who have pursued training may not be attributable to the training itself, but by the offline pursuits noted above. Using statistical techniques that use those offline pursuits as a proxy for external motivation, the analysis finds that having had training on how to use the internet makes a significant difference in the incidence of the activities noted above.

- **Most IE users see home broadband access as a valuable way to save time on day-to-day activities and as a tool to help manage their family’s schedules.**
 - 58% of IE respondents say the statement “the internet helps me save time for day-to-day activities describes them “very well,” compared with 43% of the control group.
 - 53% of IE respondents say the internet helps “a lot” in how they manage their schedule, so they can better meet their family’s needs.

A key takeaway from this research is how motivation and training can interact to draw people to internet use that can impact their lives. For stakeholders, this means being aware of the different motivations people may have as they sign up for service. Many low-income households in this sample want broadband for their children’s school work. Others seeking out a broadband subscription may have job-training at top-of-mind as a reason to get service. Whatever the motivation, new broadband subscribers generally overcome a number of barriers before getting service. A dearth of digital skills, not seeing the internet’s relevance, and cost are the main ones; non-subscribers often cite more than one of them when asked about why they do not have service. The IE offer itself helps them overcome one barrier to having service – the [cost of service](#). IE also gives subscribers the option to purchase a low-cost internet-ready computer, as well as access to digital skills training.

As people become household internet subscribers – either for the first time or after some interval without service – these users may see training on how to use broadband as a seamless part of the process of obtaining service. Given that this research shows that training on how to use the internet expands the suite of online activities that new users pursue, an important insight for stakeholders is the importance of integrating training into “onboarding” new broadband users. Whether new users want broadband to better stay in touch with their child’s school or to improve job skills, encouraging them to pursue training should help them reach

their goals faster. For both groups, training on how to use the internet and computers is a difference-maker. For IE users in particular, those who have had online training use the internet for education and economic advancement at a rate higher than those who have not pursued training. That effect holds up irrespective of whether people who pursue training are simply highly motivated individuals.

The remainder of the report discusses the analysis, methodology, and detailed results that support the high-level conclusions listed above. First, however, is a discussion about choices in research design and how the research takes aim at exploring how information and communications technology impacts people's aspirations for changing their lives.

[Researching Broadband Adoption and its Impacts](#)

Almost since the dawn communications technologies, the tools that connect people and information to one another have been heralded as gateways to learning. The telephone would allow lectures to be delivered to homes gathered around a receiver.¹ The television opened audio-visual avenues to knowledge. The internet began as a research tool for scholars and its early mass appeal was very much about knowledge exchange and sharing.

Although the internet and learning often go hand-in-hand, that pairing is more common among those with more online access tools and higher levels of educational attainment – in other words, people [higher up the socio-economic ladder](#). Like any normal economic good, especially one that was introduced relatively recently, it is not surprising to see higher wage earners adopt the internet before their lower-income counterparts. The unfortunate irony in the case of internet access is that while those on the lower end of the socio-economic spectrum may stand to gain the most from using it, especially in an economy where jobs often depend on ongoing skills development and digital skills, they are also less likely to adopt it.

¹ Ithiel de Sola Pool, [Forecasting the Telephone: A Retrospective Technology Assessment of the Telephone](#). Norwood, N.J.: Ablex Publishing Corporation, 1983. P. 146.

Additionally, the *lack* of access to information may reinforce challenging circumstances for low-income people—research describes this as a “[bandwidth tax](#)” (though this does not refer to the internet). The problem is that many low-income people must focus on immediate problems (e.g., putting food on the table, keeping current on rent), which leaves them with little or no time or capacity to manage other parts of their lives and make long-term plans that might result in positive change. Internet access by itself will not alleviate the bandwidth tax – but by opening doors to information and giving people a tool to better manage their time, it may ease its burden.

The survey asks respondents whether the internet has an impact on learning, but people’s reported behaviors are useful only to a point. Self-reporting may not be accurate, but more importantly, what people say about their learning behavior may not have a tight connection to whether that behavior makes a difference to them. The research plan addresses this in two ways:

- **Longitudinal design**: The research reported here is the first survey of this set of IE respondents, with another wave of interviews planned for the future. Tracking respondents’ perspectives on the internet through time allows for stronger inferences to be made about results than if analysis focuses only on a single set of interviews. People’s likelihood of pursuing learning may be associated with whether they have had training on how to use the internet – and a single survey may find that. If, however, people’s likelihood of pursuing learning increases over time—as a longitudinal design may find—and analysis shows changes in the incidence of training has some connection to that, there is a stronger basis to conclude that training on how to use the internet impacts learning.
- **Aspirations**: [Research](#) has shown that aspirations, for many people, translate into action. In other words, people who aspire to improve their lives often take steps to do just that,

which in turn pays off in tangible results (e.g. better health, more education). This survey asks respondents how they view their lives and future prospects – the results of which will be particularly powerful in the second wave of interviews. This will permit analysis of whether online access has influenced aspirations – a proxy for real change in people’s lives.

The research reported here is a baseline for the ongoing research that will rely on the longitudinal design. The findings in this initial report, though, are crucial for a number of reasons. First, they show what IE respondents do online (with comparison to a control group). As noted, IE respondents largely subscribe for their children, but embrace the internet for its time-saving capabilities and learning opportunities. Second, the research shows the importance of context as internet use unfolds for recent subscribers. Those who have had training on how to use the internet and computers engage in a wider range of online activities – and not because people who pursue training are simply highly motivated individuals.

The Survey Sample and Analysis Methodology

The control group consists of households that began the process of signing up for IE, but for unknown reasons, never finished the process. The control group and the set of IE respondents differ in a number of ways, as the table below shows. It is important to note that the control group is, to some degree, a convenience sample. Ideally, the control group would emerge from a survey of households in low-income neighborhoods Comcast serves, but who are known to have no interest in IE or are unaware of the product. This control group, however, consists of people who at least had some interest in the IE product.

As Table 1 shows, compared to the control group, IE respondents are more likely to have school-age children at home, be Hispanic, and be female. The IE respondents are less likely than the control to be employed full-time and be college graduates. In addition, IE respondents are less

well-off economically, although both groups are relatively low-income. [Telephone surveys](#) typically find that about one-third (30%) of people report household incomes over \$75,000 annually, a similar number (31%) report incomes below \$30,000 per year, and 29% have college degrees.

As to their technology profile, 56% of the control group reports having a high-speed internet subscription at home, while another 19% say they access the internet with a smartphone or tablet. 16% have no home internet access and 4% have dial-up. Nine in ten (91%) of the control group has a smartphone compared with 82% of IE respondents.

Table 1: Respondent demographics

	Internet Essentials	Control Group
Gender		
Male	24%	34%
Female	76%	66%
Age		
18-29	23%	25%
30-49	59%	50%
50-64	13%	16%
65+	6%	9%
Average	39.2	40.7
Marital status		
Married	28%	34%
Living with a partner	14%	14%
Divorced	13%	14%
Separated	8%	5%
Widowed	4%	2%
Never been married	31%	29%
School-age children at home		
Yes	77%	55%
Education		
Less than high school	23%	10%
High school graduate	34%	27%
Some college (includes community college)	27%	36%
College degree or more	13%	24%
Employment status		
Employed full-time	37%	45%
Employed part-time	19%	13%
Not employed	43%	41%
Retired	15%	26%
Race/ethnicity		
White	44%	42%
Hispanic	43%	26%
Black or African-American	33%	34%
Income		
Less than \$10,000	20%	14%
\$10,000 to under \$20,000	28%	15%
\$20,000 to under \$30,000	20%	15%
\$30,000 to under \$40,000	10%	13%
\$40,000 to under \$50,000	4%	6%
\$50,000 to under \$75,000	2%	10%
\$75,000 to under \$100,000	1%	4%
\$100,000 or more	1%	3%
Don't know/Refused	15%	20%

Given the differences between the control and treatment groups, it is important to control for other factors that might affect the outcomes we want to measure. Thus, to evaluate the robustness of the results and their statistical significance, we also run regressions for each comparison. Because the relevant dependent variables of interest are all binary (yes/no), we estimate a probit model as follows:

$$y_i = \beta_0 + \beta_1(IE_i) + \beta_2(income_i) + \beta_3(race_i) + \beta_4(has\ kids_i) + \varepsilon_i$$

Where i indicates respondent i , y_i is the relevant dependent variable, such as “stream educational content”; IE_i is whether the respondent is an IE subscriber or in the control group ($IE = 1$ if respondent i subscribes to IE and 0 if i in the control group); $income_i$ is household income; $race_i$ is race of the respondent; and $has\ kids_i$ is whether school-age children live in the respondent’s household.² The full set of regression results are presented in the appendix, and the following sections discuss the components of each major finding in detail.

IE Participants Are More Likely to Focus on the Benefits of Broadband to Their Children

Perhaps the starkest difference between IE households and the control group is their focus on the relationship between internet access and their children’s education (Table 2). In both sets of respondents, majorities say they have school age children at home, with 77% of IE respondents saying this and 55% of the control group. Since the following questions probe attitudes about the internet and its impact on children, the reported results are *only* for those with school age children at home in both groups.

Across several questions, a majority of IE respondents cite benefits of online access that pertain to education, with 79% saying IE helps them be more responsive to their child’s school and 71% saying their kids use IE to complete schoolwork in a typical week.

² Income and race are both categorical variables. Income has 11 categories indicating income ranges including “don’t know” and “refused to answer.” Race has eight categories including “don’t know” and “refused to answer.” Both of these variables are thus actually a set of dummy variables, each with a coefficient estimated separately.

Table 2: Online Educational Activities: Respondents with school-age children

	Internet Essentials	Control Group	Is the difference between groups statistically significant?³
A child connects to the internet at least occasionally	92%	74%	Yes
Internet helps me be more responsive to things going on at my child's school	79%	54%	Yes
Do schoolwork	71%	51%	Yes
Interested in training on how to communicate with your child's school	68%	48%	Yes
Stream educational content	55%	50%	Yes

Table 2 shows the figures for IE respondents are uniformly higher than those for the control group. Since the comparison for both groups is for respondents with school-age children, the differences indicate that IE respondents have a stronger orientation toward the educational uses of the internet for their children in comparison to the control group. This finding is buttressed by the regression analysis, which shows a statistically significant difference for IE respondents for these activities while controlling for demographic and socio-economic factors that might influence responses.

Apart from the comparison between the control and IE respondents, IE respondents report that having broadband at home helps their children with schoolwork. Three quarters (73%) say having IE at home helps their kids with schoolwork “a lot” and another 10% says it helps

³ Statistical significance determined using a value of $\alpha = 0.1$.

“somewhat.” Finally, 55% of IE respondents stream educational content, such as Khan Academy, compared with 50% of the control group that identifies as internet users.

IE Households are More Interested in Additional Training on How to Use the Internet than are Control Households that Use the Internet

As Table 3 shows, IE respondents are generally more interested in additional training on how to use the internet. Two-thirds (66%) of IE respondents, versus just over half (52%) of the control group, are interested in training to protect privacy and security. 60% are interested in training to communicate with their child’s teachers and schools, and a majority are interested in training to improve their workforce readiness.

Table 3: Interest in Digital Skills Training

	Internet Essentials	Control Group	Is the difference between groups statistically significant?
Protect your privacy and security	66%	52%	Yes
Communicate with your children’s teachers and school	60%	34%	Yes
Improve your skills for the workforce, such as building a resume	52%	37%	Yes
Learn to better manage your money and finances	50%	37%	No
Learn about how to access government services through the internet	45%	34%	Yes

Overall, 78% of IE respondents say they would be interested in training in at least one of the five areas listed; the comparable figure for the control group is 62%. Those who answered “no” may not be indifferent to training, but some may simply not have found the time to obtain it or already have the necessary skills.

IE and Control Households Engage in Non-Educational Online Activities at about the Same Rates

While IE households are more likely than the control group to focus on the relationship between the internet and their kids' education, the treatment and control groups engage in non-educational activities at about the same rate.

Table 4 shows the rates at which IE respondents and the control group engage many common non-educational online activities, including job searching, gaming, accessing government services, and starting or marketing a business, are statistically indistinguishable.

Table 4: Non-Educational Online Activities

	Internet Essentials	Control Group	Is the difference between groups statistically significant?
Stream videos to your TV or other internet-connected devices	59%	60%	No
Play games online	57%	62%	No
Get access to banking and financial services	42%	55%	Yes
Use a service such as 311 to report a specific problem to your local government	4%	5%	No
Get access to government services	27%	31%	No
Look for or apply for a job	38%	43%	No
Start a business or market an existing business	5%	11%	No

Entertainment (streaming video and playing online games) is the most popular online activity among both groups, followed by online banking, job-hunting, and accessing government services. Reporting problems via a city’s 311 service online and starting an online business remain relatively uncommon among both groups.

Formal Computer and Internet Training May Increase Use of Online Services

To date, [only a small body](#) of empirical research examines the effects of digital literacy training. This survey was designed to shed some light on the question of whether training affects internet use. The key problem is causality. If a survey finds that people who receive training are, for example, more likely to use the internet to find a job, is it because the training was helpful or

because the kind of people who use the internet to find a job are the same ones who are more likely to also seek out training?

To address this endogeneity issue, the survey included questions about respondents' offline activities. If the same individual characteristics that make someone likely to seek out computer and internet training are those that cause people to engage in offline activities, then participation in offline activities can serve as an instrumental variable in a two-stage model. The control group was not asked about training, so we do not know whether the rates of formal training differ between the two groups. Instead, we examine differences between IE subscribers with training and those without. The two-stage model is as follows:

$$(1) \text{ formal training}_i = \beta_0 + \beta_1(\text{Community engagement}_i) + \beta_2(\text{income}_i) + \beta_3(\text{race}_i) + \beta_4(\text{has kids}_i) + \varepsilon_i$$

$$(2) y_i = \beta_0 + \beta_1(\widehat{\text{formal training}}_i) + \beta_2(\text{income}_i) + \beta_3(\text{race}_i) + \beta_4(\text{has kids}_i) + \varepsilon_i$$

Because of concerns about the endogeneity of formal training, we use having volunteered in the community as an instrument to identify the estimation of the coefficient on formal training. We posit that people with a tendency to volunteer have the same personality traits that would lead them to obtain formal internet training. Thus, volunteering can help predict formal training but would not affect the outcomes of the training except to the extent it identifies the relevant personality characteristics.

As it turns out, this instrumental-variables approach increases the magnitude of the estimated effect of training, providing some empirical evidence in support of a causal effect of training influencing internet use. The analysis shows that when comparing the incidence of the likelihood of using the internet to, for example, search or apply for a job, those with formal training on how to use the internet are more likely to have searched or applied for a job. One might reasonably suspect the difference is not due to the training, but to something else.

However, the instrumental-variables approach does not support that suspicion. In other words, the instrumental variables technique supports the inference that formal training on how to use the internet (defined below) significantly increases the chances of people using the internet for job search and applications.

Incidence of Formal Training

As noted in the summary of findings above, training on digital skills is generally associated with higher levels of online activity, as well as measures of offline activity. The survey captured the issue of training by asking whether respondents had sought out training or help on how to use computers or the internet since subscribing to IE. Here is what they said:

- 39% received help from their children;
- 24% found help from another family member;
- 21% went to a school, university, or community college for help;
- 15% visited a local public library for help;
- 14% found help at their jobs;
- 9% received help from a community program; and
- 9% found help from someone in their neighborhood.

Types of training fall into two categories: informal and formal training. People can reach out informally for help from family, friends, and neighbors and half (49%) of respondents say they have done this since subscribing to IE service. They can also take advantage of more structured training resources at local schools, libraries, or community centers--35% of IE respondents have had such formal training. Altogether, 58% of IE respondents have reached out for internet tips informally from family, friends, or others in their community, as well as more formal settings such as schools or libraries.

Volunteering and Community Involvement

Our identification strategy uses community involvement to control for respondents' general proclivity towards engaging in activities. To this end, the survey explored how respondents interact with their communities – either through using resources such as local non-profits, by attending local meetings, or volunteering. Generally, both the control and treatment groups engage with their communities, with the control group participating at slightly higher rates. Altogether, 56% of IE subscribers and 65% of the control group do at least one activity listed in Table 5. While higher percentages of the control group engage in these activities, the differences are not statistically significant except for the broad “volunteered in your community” variable.

Table 5: Community Participation

	Internet Essentials	Control Group	Is the difference between groups statistically significant?
Volunteered in your community	34%	52%	Yes
Attended meetings on crime, schools, or other local matters	26%	29%	No
Used resources at local non-profit organization	23%	31%	No
Used resources at a church, synagogue, mosque, or other place of worship	23%	26%	No

Results: Training and Online Activities

As Table 6 and Table 7 show, formal training is associated with an increased likelihood that people participate in some of the online activities noted above (as well as offline activities pertaining to learning and community participation).

Table 6: Online Activities and Formal Training

	All IE	IE with Formal Training	IE without Formal Training	Is the difference between groups statistically significant in two-stage model?
Do schoolwork	63%	72%	57%	Yes
Access banking and financial services	42%	44%	42%	Yes
Look for or apply for a job	38%	46%	35%	Yes
Access government services	27%	32%	24%	Yes
Start a business or market an existing business	5%	7%	4%	Yes
Use a service such as 311 to report problems to your local government	4%	6%	3%	Yes

Several results stand out in the table above. Formal training has the greatest impact (15 percentage points) on a member of the household doing schoolwork. Training also comes prominently into play for looking or applying for a job and accessing government services. This makes sense, since formal internet training programs often focus on specific tasks, such as job search, as opposed to general “how to” programs on computer or internet use. Another notable finding is that formal online training closes several gaps in comparison to the control group – most notably for job search and accessing government services.

Those who have not pursued training of any sort – 42% of all respondents – are less likely to have sought out learning opportunities.

Table 7: Learning Pursuits and Formal Training

	All IE	IE with Formal Training	IE without Formal Training	Is the difference between groups statistically significant?
Taken a course or attended a training to improve your job skills	28%	40%	21%	Yes
Taken a course or attended a training for a license or certification for your job	24%	35%	20%	Yes

Across the board there are large differences in learning pursuits when comparing those with formal training to those without such training. Online training may not have a direct link to, say, taking courses for personal interest or to improve job skills. But having pursued learning in one area (computers and the internet) may be an indicator of a high interest in learning that shows up in offline contexts.

Digital Readiness and Online Behavior

Digital readiness is another part of whether people are online and what they do once they are.

Digital readiness is comprised of two aspects of people's capacities to use the internet:

- The skills and knowledge necessary to initiate an online session, surf the internet, and share content online.
- Beliefs about their own capacity to determine the trustworthiness of information online and safeguard personal information.

To measure digital readiness, the survey asked respondents questions about their comfort with computers, the internet, and trust in online information. Among IE respondents, those with high levels of digital skills:

- Responded “yes” to a question about confidence in using digital tools to carry out online tasks. Some 58% of IE respondents said they are very confident in their abilities to use digital tools to execute online tasks.
- Showed little worry in their ability to troubleshoot electronic devices. Some 50% said a statement about needing help setting up new devices described them “not too well” or “not well at all.”
- Said they did not find it difficult to determine the trustworthiness of online information. One third (32%) said a statement about having difficulty knowing whether they could trust online information described them “very well ” or “somewhat well.”

To have a high level of digital skill, a respondent must answer affirmatively for *each* of the items noted above – very confident about using digital tools to carry out online tasks, having little worry about troubleshooting new devices, and not having difficulty determining the trustworthiness of online information. Based on this criteria 15% of IE respondents have a *high* level of digital skills. That is not a large figure, but it is [comparable](#) to the share of people in other survey work that examines the issue. In this research, a strong majority of IE respondents experience challenges in using digital tools to some degree.

The IE and control groups show some differences in digital skills. Some 22% of the control group reports high levels of digital skills – higher than the 15% figure for IE respondents. More than half (58%) of both groups say they are very confident with computers, the internet, and other electronic devices. A noticeably larger share of control group respondents, however, say the statement “I usually need someone else to set up” a new electronic device describes them “not too well” or “not at all well” – by a 69% to 50% margin relative to IE respondents. Additionally, 36% of the control group said the statement about having difficulty knowing whether they could trust online information described them “very well” or “somewhat well,” higher than the 32% number for IE respondents. The higher level of digital skills for the control

group may explain why this group has generally lower levels of interest in pursuing online training in specific areas compared to IE respondents.

As Table 8 shows, a comparison of online activity between those with high and low digital skills reveals consistent, if not always large, statistically significant gaps. The gap for schoolwork is small (and not statistically significant) whereas activities such as looking for work, accessing financial services, and accessing government services are larger. A plausible and logical explanation is that survey respondents are providing answers about their own digital skills and about anyone in the household—most likely their kids—doing schoolwork.

Table 8: Online Activities by Level of Digital Skill, IE Only

	All IE	High Digital Skills	Low Digital Skills	Is the difference between groups statistically significant?
Do schoolwork	63%	64%	63%	No
Stream videos to your TV or other internet-connected devices	59%	75%	56%	Yes
Play games online	57%	68%	55%	Yes
Get access to banking and financial services	42%	60%	39%	Yes
Look for or apply for a job	38%	55%	35%	Yes
Get access to government services	27%	34%	25%	Yes
Start a business or market a business you have	5%	6%	4%	No
Use a service such as 311 to report a specific problem to your local government	4%	4%	4%	No

Other Benefits of Access: Saving Time, Managing Schedules

To this point, the report has focused mostly on tangible benefits IE respondents report, such as using the internet to apply for a job or how respondents see home access impacting their kids' schoolwork. However, the survey also asked about online access and its time-saving and scheduling managing potential. The majority of IE subscribers say home internet access helps them save time and manage their schedules.

- 58% say that the statement “the internet helps me save time for day-to-day activities” describes them “very well.”
 - This is significantly higher than the figure (43%) for the control group.
- 53% say the internet helps them “a lot” in how they manage their schedule so they can better meet family needs.

As noted earlier in the report, the need for low-income households to spend a lot of time managing their scarcity of resources can cause decision-making and long-term planning to be unnecessarily difficult or burdensome—this so-called “bandwidth tax” can manifest itself through information deficits. Low-income people dealing with the day-to-day of making ends meet with limited funds may not have the time to research or pursue opportunities (e.g., workforce training) that might open productive doors for their futures.

The findings on time-saving and help managing schedules do not mean IE has lifted the “bandwidth tax” low-income households may face. But they do show the potential is clearly there for many IE users, in that having home online access has helped them save time and improved their ability to manage their schedules.

Implications: What Does this Mean for Digital Inclusion?

The barriers to online access are well-known. Some people do not find it relevant, others lack skills to use the internet, and for some it is not affordable. Less well-understood is what happens

after people surmount these barriers. Are hopes for the internet opening the door to learning met with disappointment?

This research shows that many low-income households who clear the adoption barrier do so for their children; parents want kids to be able to carry out school assignments and pursue other learning activities using the internet. Thereafter, people herald the time-saving benefits of home high-speed access, stream a lot of video (including educational content), and use the internet to bolster their job prospects.

The other part of the picture is the impact of training on how people use the internet.

Controlling for a number of factors, the research finds that training boosts people's predilections to use the internet for learning, job search, and improving job skills. This formal training takes place online as well as in local schools, community colleges, libraries, community centers, and non-profit organizations. These anchor institutions offer a way for new subscribers to get more out of their internet experience.

For the field of digital inclusion, these findings underscore the importance of partnerships in devising ways to increase broadband adoption in a community. A discounted internet offering is a start – but ensuring there are resources to train people to use the internet for a range of needs (e.g., job search, workforce skills, understanding privacy and security) is crucial, as well. To a significant extent, the finding in this research that training has an effect on people's online use rests on the existence of partnerships. The places where people turn for training – public libraries, local schools, or community programs – are the kinds of institutions that are ideal for partnerships to foster digital inclusion. Entities that provide a discounted internet offer should consider coordinating with community anchor institutions to encourage new subscribers to take advantage of training opportunities.

Appendix

Appendix 1: Both Groups Frequently Stream Video

IE and control group households are active streamers of video. Some 45% of IE households and 40% of control households pay for an internet streaming service to watch video and another 15% of IE households and 9% of control households use a free streaming service. When asked how they usually watch television, the responses among IE households broke down as follows:

- 45% said they use an internet streaming service for which they pay a monthly fee (e.g., Netflix or Hulu);
- 31% use a digital antenna;
- 24% have a cable or satellite subscription, and;
- 15% use a free streaming service.

These numbers differ considerably from the general population, at least when looking at a [2017 survey](#) from the Pew Research Center. That survey found 59% of Americans have a cable or satellite subscription and 9% use a digital antenna. Pew captured streaming by simply asking if people use a “streaming service on the internet”; 28% of respondents in their study said they did. A comparison of IE users and control group respondents is also illuminating. Members of the control group are more likely to have a cable or satellite subscription. This is likely due to respondents from the control group having higher incomes than the IE sample. Additionally, 56% of the control group say they connect to the internet with a high-speed connection – and in many cases the home high-speed internet subscription may be bundled with a cable or satellite TV plan.

Table 1-1: Television Connection, by Group

	Internet Essentials	Control Group	Is the difference between groups statistically significant?
An internet streaming service I pay a monthly fee for (like Netflix, Hulu, etc.)	45%	40%	No
Digital antenna	31%	14%	Yes
A cable or satellite subscription	24%	47%	Yes
A free streaming service	15%	9%	No

When asked what type of content they stream, IE and control respondents cast their nets widely.

Table 1-2: Streaming Preferences, by Group

	Internet Essentials	Control Group	Is the difference between groups statistically significant?
Entertainment (e.g., movies or TV shows)	71%	75%	No
Education (homework, documentaries, ABCMouse, Khan academy)	52%	41%	Yes
News	49%	47%	No
Teaching yourself how to do something new (e.g., home repair, craft projects)	34%	35%	No
Pursue a hobby or personal interest	19%	32%	No
I don't stream content from the internet	9%	14%	No

Consistent with other findings, formal training makes a difference on some streaming behaviors, especially when it comes to learning. For those who have had formal digital skills training, 57% stream content such as Khan Academy or other educational resources and 40% stream content to teach themselves how to do something new. Also consistent with other findings is how IE respondents and the control group differ when it comes to education and personal hobbies. IE respondents are more active with streaming for educational purposes relative to the control, while the control group is substantially more likely to stream for content related to a hobby or personal interest. Streaming is important for IE respondents, just as it is more broadly. IE respondents were given a “forced choice” question that asked them to choose which of two options came closer to their views about their IE service. The question was relevant to streaming because it asked whether their IE service would be better if it were cheaper or if the speed were faster. Just 16% said having a lower monthly service fee would make their service better, while 71% said having a faster network speed would make their service better. Given that IE costs only \$9.95 per month, it is understandable that relatively few IE respondents cited monthly cost as something that would improve service. Note also that preference for a faster speed was a bit more pronounced for those who stream; 75% of streamers said a faster network speed would make their service better versus 66% of non-streamers who said the same thing.

Appendix 2: IE and Control Households Engage in Offline Work or Hobby Activities at About the Same Rates

The survey of IE users who have recently become subscribers to broadband service at home depicts the dynamics of learning for this group of online users. In general, IE users and the control group do not differ much when it comes to taking a course or participating in a book club. The one notable – and significant – exception is taking a course about a hobby or personal interest, where the control group is much more likely to do this.

Table 2-1: Learning Pursuits of Internet Users, by Group

	Internet Essentials	Control Group	Is the difference between groups statistically significant?
Taken a course or attended a training to improve your job skills	28%	32%	Yes
Taken a course or attended a training for a license or certification for your job	24%	30%	No
Attended a meeting where you learned new information such as a book club	21%	25%	No
Attended a convention or conference where you learned about something of personal interest	16%	22%	No
Taken a course related to your personal interest or hobbies	20%	32%	Yes

Half (49%) of respondents have done at least one of the five learning activities included in the survey. About a third – 35% - have taken a course for either job skills or a license or certification. Of those who have taken some sort of course (whether that is for job skills, a license or certification, or for personal interests), 36% took the course in-person, 24% did it primarily online, and 31% used a combination of both. This means a majority (55%) of all respondents use the internet when they are taking a course to learn something.

IE respondents are less likely to engage in learning activities than the control group, but the differences, for the most part, are not statistically significant. The one exception is that households in the control group were more likely than the IE respondents to report taking a class related to their interests.

Appendix 3: Regression Results

Table 3-1: Online Educational Activities

	A child connects to the internet at least occasionally	Internet helps me be more responsive to things going on at my child's school	Do school work	Interested in training on how to communicate with your child's school	Stream educational content
IE Subscriber	0.838*** (5.46)	0.678*** (5.98)	0.434*** (4.12)	0.432*** (4.10)	0.200* (1.97)
Has kids		1.484*** (16.78)	0.726*** (8.96)	0.914*** (11.02)	0.418*** (5.21)
Income (< \$10k excluded category)					
\$10k to under \$20,000	0.137 (0.80)	0.0873 (0.71)	0.0772 (0.74)	0.0580 (0.55)	0.0842 (0.83)
\$20k to under \$30,000	0.0828 (0.48)	0.212 (1.54)	0.258* (2.27)	-0.0983 (-0.87)	0.0901 (0.83)
\$30k to under \$40,000	0.103 (0.52)	0.130 (0.80)	0.179 (1.33)	-0.266* (-2.00)	-0.113 (-0.87)
\$40k to under \$50,000	0.409 (1.24)	-0.00864 (-0.04)	-0.0168 (-0.09)	-0.137 (-0.73)	-0.164 (-0.90)
\$50k to under \$75,000	0.531 (1.51)	-0.0376 (-0.16)	0.462* (2.14)	-0.230 (-1.13)	-0.256 (-1.28)
\$75k to under \$100,000	0.183 (0.40)	0.366 (0.95)	0.390 (1.17)	-0.141 (-0.43)	0.377 (1.14)
\$100k to under \$150,000	0.546 (0.82)	0.350 (0.65)	0.443 (1.00)	-0.507 (-1.09)	0.174 (0.40)
>=\$150,000		0.516 (0.87)	0.140 (0.29)	-0.275 (-0.51)	0.451 (0.82)
Do not know	0.0240 (0.10)	0.149 (0.81)	-0.103 (-0.71)	-0.186 (-1.25)	-0.212 (-1.46)
Refused to answer	0.612* (2.04)	0.202 (1.16)	0.259 (1.72)	-0.125 (-0.83)	-0.189 (-1.30)
Race					
Black or African-American	0.136 (1.01)	0.0342 (0.35)	0.0812 (0.98)	0.0551 (0.66)	0.323*** (4.02)
Asian or Pacific Islander	-0.224 (-0.62)	0.267 (0.88)	0.262 (1.06)	0.172 (0.68)	0.406 (1.67)
Mixed race	0.115 (0.35)	-0.237 (-1.08)	0.0982 (0.48)	-0.114 (-0.58)	0.261 (1.34)
Native American/American Indian	0.0987 (0.22)	0.242 (0.59)	-0.256 (-0.89)	-0.639* (-2.16)	0.0796 (0.28)
Other	0.194 (0.85)	0.405* (2.31)	0.200 (1.48)	-0.0923 (-0.70)	0.177 (1.37)
Do not know	0.261 (0.99)	0.542* (2.37)	0.177 (1.13)	0.410* (2.45)	-0.407** (-2.58)
Refused to answer	-0.348 (-1.17)	0.292 (1.15)	0.198 (0.91)	0.685** (3.02)	0.267 (1.29)
Hispanic/Latino origin	-0.0451 (-0.63)	-0.111* (-2.28)	-0.0635 (-1.50)	-0.209*** (-4.65)	0.138** (3.26)
Constant	0.479* (2.18)	-0.779*** (-4.71)	-0.706*** (-4.68)	-0.496** (-3.26)	-0.811*** (-5.54)
Observations	1082	1475	1456	1475	1475
Pseudo R-squared	0.056	0.277	0.074	0.116	0.050
t statistics in parentheses					
* p<0.05, ** p<0.01, *** p<0.001					

Table 3-2: Interest in Digital Skills Training

	Protect your privacy and security	Communicate with your children's teachers and school	Improve your skills for the workforce, such as building a resume	Learn to better manage your money and finances	Learn about how to access government services through the Internet	
IE Subscriber	0.270* (2.48)	0.398*** (3.49)	0.227* (2.09)	0.195 (1.79)	0.257* (2.31)	
Has kids	0.165* (2.00)	0.881*** (10.45)	0.279*** (3.44)	0.281*** (3.48)	0.00876 (0.11)	
Income (< \$10k excluded category)	\$10k to under \$20,000	0.0430 (0.40)	0.0754 (0.70)	0.00735 (0.07)	-0.0406 (-0.40)	-0.0492 (-0.48)
	\$20k to under \$30,000	-0.0901 (-0.79)	-0.0833 (-0.72)	-0.0239 (-0.22)	0.0858 (0.78)	-0.109 (-1.00)
	\$30k to under \$40,000	-0.194 (-1.45)	-0.291* (-2.16)	-0.186 (-1.43)	-0.0431 (-0.33)	-0.341** (-2.59)
	\$40k to under \$50,000	-0.0543 (-0.29)	-0.125 (-0.66)	-0.0357 (-0.20)	0.0680 (0.38)	-0.182 (-0.99)
	\$50k to under \$75,000	0.145 (0.66)	-0.214 (-1.02)	-0.165 (-0.80)	0.130 (0.63)	-0.136 (-0.65)
	\$75k to under \$100,000	-0.449 (-1.39)	-0.150 (-0.46)	-0.171 (-0.53)	-0.132 (-0.41)	-0.235 (-0.71)
	\$100k to under \$150,000	-0.134 (-0.31)	-0.478 (-1.00)	-0.297 (-0.66)	-0.318 (-0.71)	-0.158 (-0.35)
	>=\$150,000	-0.814 (-1.45)	-0.272 (-0.51)	-0.145 (-0.29)	-1.022 (-1.66)	-0.0875 (-0.17)
	Do not know	-0.281 (-1.88)	-0.163 (-1.07)	-0.187 (-1.27)	-0.146 (-1.01)	-0.204 (-1.40)
	Refused to answer	-0.288 (-1.92)	-0.0737 (-0.48)	-0.165 (-1.11)	-0.212 (-1.43)	-0.379* (-2.51)
Race	Black or African-American	0.156 (1.88)	0.0550 (0.65)	0.236** (2.92)	0.131 (1.62)	0.210** (2.60)
	Asian or Pacific Islander	0.177 (0.70)	0.148 (0.59)	0.174 (0.73)	0.129 (0.54)	-0.0261 (-0.11)
	Mixed race	-0.0820 (-0.41)	-0.171 (-0.84)	-0.121 (-0.62)	0.104 (0.53)	0.0912 (0.47)
	Native American/American Indian	-0.376 (-1.29)	-0.593* (-1.96)	-0.0935 (-0.32)	-0.0467 (-0.16)	-0.0263 (-0.09)
	Other	-0.321* (-2.44)	-0.119 (-0.89)	-0.304* (-2.32)	0.0704 (0.55)	-0.290* (-2.16)
	Do not know	0.329* (1.99)	0.363* (2.16)	0.340* (2.19)	0.311* (2.04)	0.259 (1.72)
	Refused to answer	0.253 (1.18)	0.646** (2.85)	0.544* (2.56)	-0.000629 (-0.00)	0.485* (2.31)
Hispanic/Latino origin	-0.110** (-2.65)	-0.208*** (-4.61)	-0.156*** (-3.59)	-0.105* (-2.39)	-0.143** (-3.26)	
Constant	0.258 (1.68)	-0.437** (-2.72)	-0.173 (-1.13)	-0.282 (-1.84)	-0.112 (-0.72)	
Observations	1429	1430	1437	1442	1442	
Pseudo R-squared	0.032	0.104	0.034	0.027	0.025	
t statistics in parentheses						
* p<0.05, ** p<0.01, *** p<0.001						

Table 3-3:

	Stream videos to your TV or other internet-connected devices	Play games online	Get access to banking and financial services	Use a service such as 311 to report a specific problem to your local government	Get access to government services	Look for or apply for a job	
IE Subscriber	0.0335 (0.32)	-0.127 (-1.21)	-0.169 (-1.64)	-0.161 (-0.91)	-0.0905 (-0.83)	-0.208 (-1.95)	
Has kids	0.296*** (3.66)	0.299*** (3.70)	-0.0622 (-0.77)	0.215 (1.43)	0.0727 (0.84)	0.386*** (4.58)	
Income (< \$10k excluded category)	\$10k to under \$20,000	0.0543 (0.53)	0.0659 (0.64)	0.0480 (0.47)	-0.0596 (-0.36)	-0.0610 (-0.57)	0.0408 (0.39)
	\$20k to under \$30,000	0.184 (1.65)	0.0730 (0.65)	0.255* (2.31)	-0.238 (-1.28)	-0.104 (-0.90)	0.0625 (0.56)
	\$30k to under \$40,000	0.214 (1.61)	-0.0443 (-0.34)	0.337** (2.59)	-0.286 (-1.27)	-0.146 (-1.07)	0.148 (1.13)
	\$40k to under \$50,000	-0.151 (-0.83)	0.136 (0.73)	0.231 (1.28)	-0.319 (-0.94)	-0.195 (-1.01)	-0.187 (-0.98)
	\$50k to under \$75,000	0.404 (1.89)	-0.0196 (-0.10)	0.759*** (3.60)	-0.585 (-1.32)	0.171 (0.84)	0.0992 (0.48)
	\$75k to under \$100,000	1.406** (2.71)	-0.0990 (-0.30)	0.535 (1.65)	-0.103 (-0.20)	-0.117 (-0.35)	-0.185 (-0.55)
	\$100k to under \$150,000	0.589 (1.22)	0.455 (0.90)	0.463 (1.00)	0.211 (0.36)	0.380 (0.82)	-0.239 (-0.54)
	>=\$150,000	0.221 (0.41)	0.684 (1.15)	0.301 (0.60)	0.435 (0.70)	-0.304 (-0.57)	0.333 (0.64)
	Do not know	-0.345* (-2.38)	-0.199 (-1.37)	-0.548*** (-3.42)	-0.819* (-2.04)	-0.621*** (-3.58)	-0.281 (-1.83)
	Refused to answer	-0.0167 (-0.11)	-0.219 (-1.48)	-0.0224 (-0.15)	-0.176 (-0.69)	-0.545** (-3.26)	-0.338* (-2.16)
Race	Black or African-American	0.184* (2.22)	0.181* (2.21)	0.167* (2.06)	0.354* (2.44)	0.195* (2.28)	0.582*** (7.10)
	Asian or Pacific Islander	-0.0779 (-0.32)	-0.499* (-2.08)	0.195 (0.79)	0.347 (0.95)	0.270 (1.07)	-0.306 (-1.13)
	Mixed race	0.218 (1.08)	0.401 (1.94)	0.241 (1.23)	0.331 (1.06)	0.147 (0.70)	0.369 (1.89)
	Native American/American Indian	0.659* (2.04)	0.0248 (0.09)	0.262 (0.93)	0.0735 (0.15)	0.478 (1.69)	0.231 (0.80)
	Other	0.243 (1.84)	0.0664 (0.51)	0.243 (1.88)	0.277 (1.24)	0.313* (2.29)	0.464*** (3.56)
	Do not know	-0.163 (-1.08)	-0.514** (-3.28)	-0.480** (-2.79)	-0.0682 (-0.21)	-0.212 (-1.17)	-0.133 (-0.80)
	Refused to answer	-0.0295 (-0.14)	-0.0661 (-0.31)	-0.0845 (-0.39)	0.182 (0.49)	0.183 (0.82)	0.234 (1.09)
Hispanic/Latino origin	0.148*** (3.32)	0.137** (3.15)	0.123** (2.93)	-0.00902 (-0.10)	0.0976* (2.19)	0.120** (2.83)	
Constant	-0.387* (-2.56)	-0.155 (-1.04)	-0.333* (-2.25)	-1.728*** (-6.51)	-0.703*** (-4.54)	-0.830*** (-5.47)	
Observations	1441	1435	1440	1445	1430	1453	
Pseudo R-squared	0.042	0.036	0.050	0.040	0.031	0.068	

t statistics in parentheses
* p<0.05, ** p<0.01, *** p<0.001

Table 3-4:

	Volunteered in your community	Attended meetings on crime, schools, or other local matters	Used resources at local non-profit organization	Used resources at a church, synagogue, mosque, or other place of worship	
IE Subscriber	-0.381*** (-3.78)	-0.0803 (-0.75)	-0.115 (-1.06)	0.0481 (0.44)	
Has kids	0.112 (1.37)	0.274** (3.11)	-0.133 (-1.54)	0.0504 (0.57)	
Income (< \$10k excluded category)	\$10k to under \$20,000	0.236* (2.24)	0.00698 (0.06)	0.0702 (0.62)	0.130 (1.17)
	\$20k to under \$30,000	0.134 (1.18)	-0.0638 (-0.54)	0.276* (2.33)	0.0446 (0.37)
	\$30k to under \$40,000	0.243 (1.84)	0.267* (1.98)	-0.0759 (-0.52)	-0.0853 (-0.59)
	\$40k to under \$50,000	0.333 (1.80)	0.0670 (0.35)	0.0977 (0.49)	0.00126 (0.01)
	\$50k to under \$75,000	0.522** (2.59)	0.222 (1.07)	0.493* (2.39)	0.636** (3.09)
	\$75k to under \$100,000	0.268 (0.84)	-0.0554 (-0.16)	0.363 (1.09)	0.116 (0.33)
	\$100k to under \$150,000	0.173 (0.39)	0.563 (1.28)	-0.0496 (-0.10)	0.688 (1.57)
	>=\$150,000	0.128 (0.25)	0.528 (1.07)	0.331 (0.65)	0.132 (0.26)
	Do not know	0.0599 (0.39)	-0.0998 (-0.63)	-0.334 (-1.84)	-0.142 (-0.85)
	Refused to answer	0.403** (2.74)	0.193 (1.26)	0.0729 (0.46)	0.210 (1.34)
Race	Black or African-American	0.191* (2.35)	0.209* (2.46)	0.305*** (3.53)	0.274** (3.15)
	Asian or Pacific Islander	0.399 (1.68)	-0.110 (-0.41)	0.0837 (0.32)	0.0937 (0.36)
	Mixed race	0.251 (1.29)	-0.193 (-0.88)	0.128 (0.59)	-0.0263 (-0.12)
	Native American/American Indian	0.444 (1.57)	-0.0836 (-0.27)	1.175*** (4.08)	0.547 (1.90)
	Other	-0.0942 (-0.70)	-0.202 (-1.37)	0.205 (1.43)	0.181 (1.29)
	Do not know	-0.569** (-3.18)	0.205 (1.30)	-0.280 (-1.41)	-0.0651 (-0.37)
	Refused to answer	0.0980 (0.47)	0.149 (0.68)	-0.317 (-1.21)	0.360 (1.62)
Hispanic/Latino origin	0.118** (2.72)	0.00470 (0.10)	0.172*** (3.79)	0.0209 (0.46)	
Constant	-0.547*** (-3.71)	-0.893*** (-5.71)	-1.010*** (-6.45)	-1.032*** (-6.50)	
Observations	1468	1470	1459	1464	
Pseudo R-squared	0.044	0.024	0.053	0.024	
t statistics in parentheses					
* p<0.05, ** p<0.01, *** p<0.001					

Table 3-5

	Do schoolwork	Get access to banking and financial services	Look for or apply for a job	Get access to government services	Start a business or market a business you have	Use a service to report to your government
IE Subscriber	2.172*** (10.41)	2.198*** (14.84)	2.083*** (8.80)	2.198*** (10.92)	2.383*** (34.83)	2.312*** (19.12)
Has kids	0.305* (1.99)	-0.184** (-2.77)	0.0749 (0.75)	-0.108 (-1.48)	-0.225** (-3.01)	-0.011 (-0.15)
Income (< \$10k excluded category)	\$10k to under \$20,000	0.0838 (0.94)	0.0401 (0.47)	0.0602 (0.67)	0.00542 (0.06)	0.00122 (0.01)
	\$20k to under \$30,000	0.158 (1.55)	0.128 (1.30)	0.0701 (0.73)	-0.0242 (-0.25)	0.127 (1.24)
	\$30k to under \$40,000	0.233* (2.05)	0.295* (2.56)	0.257* (2.28)	0.101 (0.85)	0.288* (2.42)
	\$40k to under \$50,000	-0.0945 (-0.60)	0.0403 (0.26)	-0.142 (-0.88)	-0.161 (-1.00)	-0.0148 (-0.09)
	\$50k to under \$75,000	0.386* (2.16)	0.573** (2.92)	0.311 (1.78)	0.325 (1.90)	0.492** (2.70)
	\$75k to under \$100,000	0.585* (2.10)	0.725** (2.67)	0.396 (1.37)	0.425 (1.51)	0.788** (2.78)
	\$100k to under \$150,000	0.414 (1.11)	0.524 (1.36)	0.236 (0.62)	0.498 (1.27)	0.673 (1.73)
	>=\$150,000	0.136 (0.33)	0.164 (0.40)	0.229 (0.53)	-0.126 (-0.29)	0.448 (0.93)
	Do not know	-0.00731 (-0.06)	-0.212 (-1.47)	-0.0998 (-0.73)	-0.272 (-1.59)	-0.0562 (-0.36)
	Refused to answer	0.304* (2.39)	0.204 (1.64)	0.0404 (0.27)	-0.0578 (-0.34)	0.0581 (0.36)
Race	Black or African-American	-0.0403 (-0.54)	-0.0334 (-0.45)	0.236 (1.85)	0.000652 (0.01)	0.0168 (0.20)
	Asian or Pacific Islander	0.174 (0.82)	0.158 (0.76)	-0.161 (-0.71)	0.217 (1.01)	0 (.)
	Mixed race	-0.372* (-2.03)	-0.302 (-1.70)	-0.197 (-0.96)	-0.305 (-1.64)	-0.279 (-1.51)
	Native American/American Indian	-0.200 (-0.81)	0.0872 (0.36)	0.112 (0.45)	0.218 (0.85)	0 (.)
	Other	0.0315 (0.26)	0.0155 (0.14)	0.181 (1.29)	0.118 (0.93)	-0.0264 (-0.22)
	Do not know	-0.0115 (-0.08)	-0.341* (-2.40)	-0.203 (-1.48)	-0.233 (-1.65)	-0.0838 (-0.57)
	Refused to answer	-0.0416 (-0.22)	-0.169 (-0.94)	0.0354 (0.18)	-0.0467 (-0.24)	0.0277 (0.14)
Hispanic/Latino origin	-0.0969* (-2.56)	0.00419 (0.11)	0.0248 (0.56)	0.00494 (0.11)	-0.0502 (-1.24)	
Constant	-0.507*** (-4.69)	-0.518*** (-4.67)	-0.897*** (-5.40)	-0.742*** (-5.02)	-0.927*** (-4.64)	-1.051*** (-3.81)
Observations						
Pseudo R-squared						
t statistics in parentheses						
* p<0.05, ** p<0.01, *** p<0.001						

Table 3-6

	Taken a course or attended a training to improve your job skills	Taken a course or attended a training for a license or certification for your job
IE Subscriber	1.929*** (4.92)	2.422*** (41.51)
Has kids	0.112 (0.99)	-0.129 (-1.93)
Income (< \$10k excluded category)	\$10k to under \$20,000	0.0411 (0.44)
	\$20k to under \$30,000	0.00934 (0.09)
	\$30k to under \$40,000	0.000107 (0.00)
	\$40k to under \$50,000	-0.0939 (-0.57)
	\$50k to under \$75,000	-0.0208 (-0.10)
	\$75k to under \$100,000	0.228 (0.71)
	\$100k to under \$150,000	-0.0509 (-0.12)
	>=\$150,000	-0.0663 (-0.14)
	Do not know	-0.103 (-0.74)
	Refused to answer	0.0370 (0.24)
Race	Black or African-American	0.0878 (0.93)
	Asian or Pacific Islander	0.151 (0.69)
	Mixed race	-0.454* (-2.40)
	Native American/American Indian	-0.165 (-0.64)
	Other	-0.321* (-2.56)
	Do not know	0.170 (1.03)
	Refused to answer	0.253 (1.15)
	Hispanic/Latino origin	-0.183*** (-3.88)
Constant	-0.244 (-1.89)	
Observations	1463	1466
Pseudo R-squared		
t statistics in parentheses		
* p<0.05, ** p<0.01, *** p<0.001		

Table 3-7:

	Do schoolwork	Stream videos to your TV or other internet-connected devices	Play games online	Get access to banking and financial services	Look for or apply for a job	Get access to government services	Start a business or market a business you have	Use a service such as 311 to report a specific problem to your local government
High Digital Skills	-0.0652 (-0.61)	0.413*** (3.73)	0.287** (2.69)	0.440*** (4.25)	0.421*** (4.07)	0.173 (1.63)	0.0779 (0.46)	-0.0926 (-0.50)
Has kids	0.805*** (8.96)	0.253** (2.82)	0.268** (2.99)	-0.142 (-1.58)	0.422*** (4.50)	0.121 (1.25)	-0.0366 (-0.23)	0.520** (2.66)
\$10k to under \$20,000	0.0805 (0.73)	0.0402 (0.37)	0.0671 (0.62)	0.00721 (0.07)	0.0234 (0.21)	-0.0323 (-0.29)	-0.294 (-1.43)	-0.174 (-1.00)
\$20k to under \$30,000	0.268* (2.22)	0.167 (1.40)	0.0705 (0.59)	0.229 (1.95)	0.0405 (0.34)	-0.103 (-0.83)	0.214 (1.14)	-0.360 (-1.79)
\$30k to under \$40,000	0.188 (1.28)	0.277 (1.88)	-0.0589 (-0.41)	0.404** (2.83)	0.132 (0.93)	-0.126 (-0.84)	0.227 (1.03)	-0.292 (-1.24)
\$40k to under \$50,000	0.0684 (0.33)	-0.0628 (-0.31)	0.184 (0.90)	0.360 (1.79)	-0.0525 (-0.25)	-0.159 (-0.74)	-0.0627 (-0.17)	-0.290 (-0.81)
Income (< \$10k excluded category)	0.575* (1.98)	0.241 (0.92)	-0.0650 (-0.26)	0.745** (2.84)	0.0309 (0.12)	0.0514 (0.20)	0.566 (1.72)	0 (.)
\$75k to under \$100,000	0.560 (1.14)	0 (.)	0.116 (0.25)	0.539 (1.21)	-0.660 (-1.34)	-0.00660 (-0.01)	0.930 (1.80)	0.159 (0.26)
\$100k to under \$150,000	0.242 (0.32)	0.154 (0.19)	0 (.)	-0.364 (-0.47)	-0.299 (-0.39)	0.830 (1.09)	0 (.)	0 (.)
>=\$150,000	0.283 (0.54)	0.167 (0.30)	0.640 (1.04)	0.195 (0.36)	0.180 (0.32)	-0.0764 (-0.13)	0.710 (1.05)	0.427 (0.65)
Do not know	-0.134 (-0.87)	-0.292 (-1.91)	-0.174 (-1.14)	-0.547** (-3.18)	-0.217 (-1.34)	-0.615*** (-3.31)	-0.370 (-1.12)	-0.869* (-2.10)
Refused to answer	0.0934 (0.55)	-0.119 (-0.72)	-0.324 (-1.93)	-0.172 (-1.00)	-0.362* (-2.03)	-0.617** (-3.14)	-0.723 (-1.64)	-0.552 (-1.59)
Race	0.0396 (0.44)	0.138 (1.54)	0.148 (1.67)	0.112 (1.28)	0.477*** (5.37)	0.146 (1.57)	0.352* (2.30)	0.322* (2.00)
Asian or Pacific Islander	0.281 (1.05)	-0.200 (-0.75)	-0.525* (-2.02)	0.127 (0.48)	-0.230 (-0.80)	0.189 (0.69)	0 (.)	0.424 (1.09)
Mixed race	0.150 (0.67)	0.271 (1.18)	0.390 (1.72)	0.110 (0.50)	0.488* (2.26)	0.154 (0.67)	0.562 (1.79)	0.408 (1.23)
Native American/American Indian	-0.202 (-0.63)	0.355 (1.01)	0.0249 (0.08)	-0.0234 (-0.07)	0.0238 (0.07)	0.633* (2.01)	0 (.)	0.186 (0.36)
Other	0.246 (1.68)	0.188 (1.33)	0.00233 (0.02)	0.217 (1.57)	0.399** (2.85)	0.305* (2.08)	0.272 (1.11)	0.303 (1.22)
Do not know	0.213 (1.27)	-0.236 (-1.49)	-0.459** (-2.81)	-0.652*** (-3.40)	-0.217 (-1.22)	-0.318 (-1.62)	0.0369 (0.11)	-0.292 (-0.69)
Refused to answer	0.336 (1.28)	-0.0235 (-0.09)	0.0140 (0.05)	-0.162 (-0.62)	0.221 (0.86)	0.115 (0.42)	0.323 (0.76)	-0.0193 (-0.04)
Hispanic/Latino origin	-0.0582 (-1.27)	0.148** (3.10)	0.109* (2.37)	0.136** (2.95)	0.128** (2.78)	0.118* (2.44)	0.0591 (0.71)	0.0563 (0.58)
Constant	-0.325* (-2.46)	-0.345** (-2.58)	-0.241 (-1.84)	-0.476*** (-3.61)	-1.094*** (-8.02)	-0.878*** (-6.30)	-1.950*** (-8.24)	-2.143*** (-7.90)
Observations	1262	1240	1239	1247	1260	1239	1218	1219
Pseudo R-squared	0.072	0.044	0.037	0.066	0.073	0.038	0.073	0.062

* p<0.05, ** p<0.01, *** p<0.001

Table 3-8:

	Do schoolwork	Stream videos to your TV or other internet-connected devices	Play games online	Get access to banking and financial services	Look for or apply for a job	Get access to government services	Start a business or market a business you have	Use a service such as 311 to report a specific problem to your local government	
IE Subscriber	0.176 (0.68)	-0.168 (-0.56)	0.151 (0.58)	-0.0400 (-0.16)	-0.139 (-0.56)	-0.0127 (-0.05)	-0.729* (-2.00)	0.223 (0.36)	
Has kids	0.836*** (3.45)	0.313 (1.25)	-0.0327 (-0.14)	0.0670 (0.30)	0.447 (1.94)	-0.153 (-0.65)	-0.233 (-0.67)	-0.0339 (-0.07)	
Income (< \$10k excluded category)	\$10k to under \$20,000	-0.678* (-2.21)	-0.0879 (-0.27)	0.134 (0.44)	-0.293 (-1.03)	0.110 (0.38)	-0.221 (-0.78)	-0.440 (-0.89)	0.599 (1.05)
	\$20k to under \$30,000	0.0167 (0.05)	-0.0109 (-0.03)	0.111 (0.37)	-0.262 (-0.93)	0.160 (0.57)	-0.116 (-0.41)	-0.00700 (-0.02)	-0.118 (-0.19)
	\$30k to under \$40,000	-0.143 (-0.44)	0.386 (1.05)	-0.0457 (-0.14)	0.0800 (0.26)	0.470 (1.54)	-0.286 (-0.92)	-0.0346 (-0.08)	0.624 (1.06)
	\$40k to under \$50,000	-0.339 (-0.61)	-1.060* (-2.07)	0.351 (0.61)	-0.0462 (-0.09)	-0.310 (-0.64)	-0.370 (-0.72)	0.170 (0.26)	
	\$50k to under \$75,000	-0.0684 (-0.14)	0.418 (0.68)	0.130 (0.26)	0.478 (0.91)	0.294 (0.61)	0.351 (0.76)	0.846 (1.48)	
	\$75k to under \$100,000	0.111 (0.20)		-0.632 (-1.17)	0.111 (0.20)	-0.441 (-0.79)	-0.345 (-0.62)	0.690 (1.08)	
	\$100k to under \$150,000	-0.532 (-0.57)				0.200 (0.22)	0.260 (0.28)	1.542 (1.46)	
	>=\$150,000								
	Do not know	-1.460** (-2.64)	-0.724 (-1.44)	-0.697 (-1.40)	-0.848 (-1.70)	0.0742 (0.15)	-0.271 (-0.54)		
	Refused to answer	0.249 (0.60)	-0.528 (-1.24)	-0.467 (-1.11)	-0.335 (-0.85)	-0.108 (-0.28)	-0.914* (-2.07)		0.579 (0.77)
Race	Black or African-American	0.286 (1.35)	-0.425 (-1.80)	0.0232 (0.11)	0.126 (0.62)	0.635** (3.13)	0.0787 (0.38)	0.556 (1.51)	0.399 (0.97)
	Asian or Pacific Islander		0.0511 (0.08)	0.338 (0.51)	0.648 (0.96)	-0.0543 (-0.09)	0.892 (1.42)		
	Mixed race	-0.701 (-1.26)	0.0878 (0.13)	0.703 (1.04)	-0.262 (-0.48)	0.490 (0.88)			
	Native American/American Indian	-0.506 (-1.09)		-0.0896 (-0.19)	-0.170 (-0.38)	0.277 (0.61)	0.573 (1.28)		
	Other	-0.130 (-0.36)	-0.295 (-0.75)	1.098* (2.12)	-0.387 (-1.10)	0.546 (1.50)	0.372 (1.04)	0.0241 (0.03)	
	Do not know	0.369 (0.71)	-0.751 (-1.55)	-1.313* (-2.57)	-0.355 (-0.79)	0.313 (0.69)	-0.319 (-0.62)	0.605 (0.96)	
	Refused to answer	0.264 (0.30)	-1.230 (-1.35)	-1.504 (-1.82)	-0.292 (-0.37)	0.213 (0.26)	-0.174 (-0.21)	1.779 (1.88)	
Hispanic/Latino origin	-0.210 (-1.53)	0.345* (2.02)	0.160 (1.35)	0.0203 (0.18)	-0.0193 (-0.16)	0.101 (0.83)	-0.210 (-0.52)	0.219 (0.39)	
Constant	0.0265 (0.06)	0.300 (0.63)	0.108 (0.27)	0.366 (0.97)	-0.539 (-1.41)	-0.304 (-0.78)	-0.525 (-0.61)	-2.724* (-2.20)	
Observations	229	215	230	231	234	224	190	154	
Pseudo R-squared	0.119	0.105	0.094	0.043	0.070	0.042	0.170	0.071	

t statistics in parentheses
* p<0.05, ** p<0.01, *** p<0.001

Table 3-9:

	An internet streaming service I pay a monthly fee for (like Netflix, Hulu, etc.)	Digital antenna	A cable or satellite subscription	A free streaming service	
IE Subscriber	0.153 (1.48)	0.566*** (4.70)	-0.738*** (-7.23)	0.153 (1.19)	
Has kids	0.365*** (4.50)	-0.0723 (-0.86)	-0.0389 (-0.45)	0.0795 (0.81)	
Income (< \$10k excluded category)	\$10k to under \$20,000	0.0892 (0.88)	-0.0388 (-0.37)	0.106 (0.93)	-0.0903 (-0.74)
	\$20k to under \$30,000	0.105 (0.96)	0.0651 (0.58)	0.161 (1.33)	-0.136 (-1.02)
	\$30k to under \$40,000	0.113 (0.88)	-0.197 (-1.42)	0.334* (2.41)	0.0813 (0.54)
	\$40k to under \$50,000	-0.340 (-1.80)	-0.274 (-1.35)	0.829*** (4.43)	-0.0574 (-0.26)
	\$50k to under \$75,000	0.509* (2.51)	-0.401 (-1.66)	0.326 (1.56)	-0.0258 (-0.11)
	\$75k to under \$100,000	0.584 (1.79)	-0.424 (-1.06)	0.676* (2.09)	-0.162 (-0.39)
	\$100k to under \$150,000	0.413 (0.93)	0.732 (1.69)	0.118 (0.25)	-0.102 (-0.18)
	>=\$150,000	-0.577 (-1.11)	0.0381 (0.07)	0.337 (0.64)	0.732 (1.48)
	Do not know	-0.129 (-0.89)	-0.0183 (-0.12)	0.156 (0.99)	0.0538 (0.31)
Refused to answer	-0.312* (-2.08)	0.117 (0.77)	0.182 (1.15)	-0.149 (-0.82)	
Race	Black or African-American	0.218** (2.73)	0.0323 (0.38)	-0.0788 (-0.90)	0.316** (3.27)
	Asian or Pacific Islander	-0.431 (-1.69)	0.0190 (0.08)	-0.155 (-0.58)	0.500 (1.89)
	Mixed race	0.257 (1.33)	-0.126 (-0.60)	-0.0926 (-0.44)	0.232 (1.01)
	Native American/American Indian	0.249 (0.88)	-0.0851 (-0.28)	-0.321 (-0.98)	0.264 (0.80)
	Other	0.198 (1.53)	-0.151 (-1.08)	0.0385 (0.28)	-0.000430 (-0.00)
	Do not know	-0.400* (-2.49)	-0.0265 (-0.17)	0.0323 (0.20)	-0.0562 (-0.28)
	Refused to answer	-0.0583 (-0.28)	0.123 (0.56)	-0.0755 (-0.34)	0.428 (1.81)
Hispanic/Latino origin	0.121** (2.94)	-0.0727 (-1.63)	-0.0567 (-1.21)	0.0149 (0.31)	
Constant	-0.847*** (-5.76)	-0.861*** (-5.34)	-0.0318 (-0.21)	-1.369*** (-7.72)	
Observations	1475	1475	1465	1475	
Pseudo R-squared	0.045	0.025	0.058	0.022	
t statistics in parentheses					
* p<0.05, ** p<0.01, *** p<0.001					

Table 3-10:

	Entertainment (e.g., movies or TV shows)	Education (homework, documentaries, Khan academy)	News	Teaching yourself how to do something new (e.g., home repair, craft projects)	Pursue a hobby or personal interest	I don't stream content from the internet	
IE Subscriber	-0.0326 (-0.30)	0.200* (1.97)	0.114 (1.12)	0.00417 (0.04)	0.108 (1.04)	-0.223 (-1.68)	
Has kids	0.161 (1.92)	0.418*** (5.21)	0.101 (1.27)	-0.00462 (-0.06)	0.0115 (0.14)	-0.356*** (-3.35)	
Income (< \$10k excluded category)	\$10k to under \$20,000	0.0199 (0.19)	0.0842 (0.83)	0.0641 (0.64)	0.164 (1.55)	0.114 (1.09)	0.0771 (0.54)
	\$20k to under \$30,000	0.0950 (0.81)	0.0901 (0.83)	-0.0166 (-0.15)	0.183 (1.61)	0.226* (2.04)	-0.0118 (-0.07)
	\$30k to under \$40,000	0.0963 (0.69)	-0.113 (-0.87)	-0.0501 (-0.39)	0.222 (1.67)	0.0160 (0.12)	0.00987 (0.05)
	\$40k to under \$50,000	-0.467* (-2.54)	-0.164 (-0.90)	-0.449* (-2.39)	-0.165 (-0.84)	0.0198 (0.11)	0.665** (3.07)
	\$50k to under \$75,000	-0.0780 (-0.37)	-0.256 (-1.28)	-0.0681 (-0.34)	-0.0464 (-0.22)	-0.0423 (-0.20)	0.215 (0.82)
	\$75k to under \$100,000	0.912 (1.83)	0.377 (1.14)	0.384 (1.20)	0.557 (1.73)	0.611 (1.90)	
	\$100k to under \$150,000	0.0835 (0.18)	0.174 (0.40)	0.281 (0.65)	0.0277 (0.06)	0.145 (0.33)	0.101 (0.18)
	>=\$150,000	0.452 (0.75)	0.451 (0.82)	0.107 (0.21)	-0.00844 (-0.02)	0.560 (1.12)	0.457 (0.70)
	Do not know	0.0199 (0.13)	-0.212 (-1.46)	-0.0993 (-0.70)	-0.114 (-0.72)	-0.0130 (-0.09)	0.175 (0.89)
Refused to answer	-0.0344 (-0.23)	-0.189 (-1.30)	0.222 (1.53)	-0.00775 (-0.05)	-0.0116 (-0.08)	-0.0419 (-0.20)	
Race	Black or African-American	0.131 (1.53)	0.323*** (4.02)	0.143 (1.80)	0.494*** (6.02)	0.304*** (3.74)	-0.165 (-1.49)
	Asian or Pacific Islander	0.395 (1.42)	0.406 (1.67)	-0.143 (-0.60)	0.453 (1.90)	0.185 (0.76)	-0.397 (-1.04)
	Mixed race	0.0938 (0.44)	0.261 (1.34)	-0.262 (-1.34)	0.554** (2.86)	0.313 (1.61)	-0.138 (-0.50)
	Native American/American Indian	0.0775 (0.25)	0.0796 (0.28)	0.540 (1.87)	1.198*** (4.02)	0.359 (1.26)	
	Other	-0.0709 (-0.53)	0.177 (1.37)	0.107 (0.84)	0.398** (3.03)	0.144 (1.08)	-0.185 (-1.00)
	Do not know	-0.101 (-0.65)	-0.407** (-2.58)	0.128 (0.86)	-0.956*** (-3.94)	-0.0673 (-0.42)	-0.718* (-2.34)
	Refused to answer	0.229 (0.99)	0.267 (1.29)	0.996*** (4.31)	0.336 (1.60)	0.417* (2.00)	-1.518* (-2.44)
Hispanic/Latino origin	-0.0237 (-0.55)	0.138** (3.26)	0.0140 (0.31)	0.105* (2.45)	0.0333 (0.80)	0.133 (1.84)	
Constant	0.525*** (3.48)	-0.811*** (-5.54)	-0.324* (-2.19)	-0.909*** (-6.08)	-0.798*** (-5.39)	-1.044*** (-5.13)	
Observations	1475	1475	1475	1475	1475	1437	
Pseudo R-squared	0.016	0.050	0.026	0.068	0.019	0.058	

t statistics in parentheses
* p<0.05, ** p<0.01, *** p<0.001

Table 3-11

		Taken a course or attended a training to improve your job skills	Taken a course or attended a training for a license or certification for your job	Attended a meeting where you learned new information such as a book club	Attended a convention or conference where you learned about something of personal interest	Taken a course related to your personal interest or hobbies
IE Subscriber		0.241* (2.38)	-0.0802 (-0.74)	0.00672 (0.06)	-0.140 (-1.23)	-0.309** (-2.89)
Has kids		0.301*** (3.76)	0.151 (1.70)	-0.0598 (-0.68)	-0.0531 (-0.57)	0.0143 (0.16)
Income (< \$10k excluded category)	\$10k to under \$20,000	-0.00100 (-0.01)	0.0334 (0.29)	0.0455 (0.40)	0.0563 (0.46)	-0.130 (-1.14)
	\$20k to under \$30,000	-0.0302 (-0.28)	0.299* (2.53)	0.129 (1.07)	0.161 (1.26)	0.0597 (0.50)
	\$30k to under \$40,000	-0.173 (-1.35)	0.208 (1.49)	-0.0260 (-0.18)	-0.0758 (-0.48)	0.0197 (0.14)
	\$40k to under \$50,000	-0.0349 (-0.19)	0.109 (0.55)	-0.375 (-1.63)	0.145 (0.69)	-0.190 (-0.90)
	\$50k to under \$75,000	-0.233 (-1.15)	0.494* (2.41)	0.400 (1.92)	0.177 (0.77)	0.0992 (0.46)
	\$75k to under \$100,000	-0.171 (-0.53)	0.939** (2.88)	0.147 (0.42)	0.400 (1.16)	0.131 (0.39)
	\$100k to under \$150,000	-0.291 (-0.65)	0.299 (0.66)	0.690 (1.57)	0.872* (1.97)	0.128 (0.28)
	>=\$150,000	-0.141 (-0.28)	1.252* (2.34)	0.981* (1.97)	1.023* (2.04)	0.948 (1.86)
	Do not know	-0.205 (-1.42)	-0.340 (-1.87)	-0.168 (-0.99)	-0.121 (-0.66)	-0.259 (-1.50)
	Refused to answer	-0.154 (-1.06)	-0.0407 (-0.25)	0.204 (1.29)	0.0908 (0.54)	-0.0685 (-0.42)
Race	Black or African-American	0.214** (2.67)	0.358*** (4.14)	0.269** (3.02)	0.261** (2.78)	0.346*** (3.83)
	Asian or Pacific Islander	0.169 (0.71)	0.498* (2.05)	0.201 (0.77)	-0.0598 (-0.20)	0.382 (1.49)
	Mixed race	-0.111 (-0.58)	0.653*** (3.33)	0.176 (0.83)	0.755*** (3.79)	0.406* (1.98)
	Native American/American Indian	-0.160 (-0.56)	0.0687 (0.22)	0.487 (1.64)	0.513 (1.68)	0.351 (1.15)
	Other	-0.318* (-2.43)	0.210 (1.47)	0.353* (2.54)	0.198 (1.29)	0.369** (2.63)
	Do not know	0.353* (2.29)	-0.364 (-1.76)	-0.0408 (-0.23)	-0.112 (-0.55)	-0.113 (-0.60)
	Refused to answer	0.541* (2.55)	0.168 (0.74)	0.224 (0.98)	0.214 (0.90)	0.263 (1.15)
Hispanic/Latino origin	-0.158*** (-3.65)	0.133** (3.04)	-0.0115 (-0.25)	0.0625 (1.37)	-0.0572 (-1.09)	
Constant	-0.186 (-1.28)	-1.234*** (-7.82)	-0.931*** (-5.80)	-1.127*** (-6.83)	-0.594*** (-3.66)	
Observations	1470	1472	1475	1475	1471	
Pseudo R-squared	0.036	0.060	0.023	0.035	0.031	
t statistics in parentheses						
* p<0.05, ** p<0.01, *** p<0.001						