A Snapshot of Federal Employees' Access to & Usage of the Internet

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United States Office of Personnel Management
Office of Insurance Programs
Washington, D.C. 20415-0001

DeBow Communications, Ltd.

Executive Summary

The U.S. Office of Personnel Management (OPM) asked Federal employees about their access to and usage of the Internet in several major surveys.[1]

OPM, through the Office of Federal Employees' Group Life Insurance (OFEGLI), contracted with DeBow Communications, Ltd. (DeBow) to review the data from these surveys to evaluate the level of Internet access and usage by Federal employees during these time periods.

DeBow also compared Internet access by Federal employees to that of the U.S. population[2] as a whole, and projected current and future access and usage by Federal employees, both at work and at home[3].

Results include the following:

Overall Internet access by Federal employees (50% in 1997 and 69% in 1998) was substantially higher than overall U.S. Population access (estimated at 34% and 55% respectively by Jupiter). Since 100% of Federal employees are by definition employed and 85% are under 55 years of age4 (two of the primary identifying characteristics of Internet users), it is reasonable to expect a higher than average access rate.

Access at home (34%) was higher than the U.S. Population (31% by Jupiter and 22% by NTIA in 1998) which is what one would reasonably anticipate. The big difference was in Internet access at work. Fifty-seven percent of Federal employees with Internet access in 1998 had access at work, compared to only 44% of the online segment (NetSmart) of the U.S. Population.

Of the 57% of Federal employees with Internet access at work in 1998, 84% had access at their desk. We know of no comparable data for the U.S. Population.

Women were somewhat more likely than Men to have Internet access at their desk, but that is the only area where Women were not trailing Men in 1998. Age data provide a very mixed message. Unexpectedly, those Under 35 and those 45-54 had essentially the same overall access. Federal employees 19-34 years old were significantly less likely to be online at home compared to the U.S. online population.

As expected, Internet access – overall and at home – tracked with Income and Education. The higher the Income and the higher the level of Education, the higher the Internet access overall and at home. In addition, married employees and employees with children under age 22 have significantly higher Internet access at home than those not-married, those without children under age 22, and the U.S. Population in general.

While Income is the most reliable predictor of Internet access overall, Age is the more reliable predictor of the propensity to utilize the access that is available. Those under age 35 and those with incomes less than $30,000 are less likely to prefer printed materials. Older Federal employees indicate a substantial preference to use printed materials.

1 The Federal Employees Health Benefits (FEHB) Program Customer Satisfaction Survey of October 1997
The Federal Employees Health Benefits (FEHB) Program Non-Participants Feedback Survey of November 1998
The Federal Employees Health Benefits (FEHB) Program Customer Feedback Survey of November 1998
The Federal Employees' Group Life Insurance (FEGLI) Program Customer Feedback Survey of October 1998

2 Data for the U.S. Population was obtained from the following published reports:
Defining the Internet Shopper – October 1998 – Jupiter Communications, NY, NY (Jupiter)
Falling Through the Net: Defining the Digital Divide – National Telecommunications and Information Administration – U.S. Department of Commerce – July 1999 (NTIA)
NetSmart Survey IV – Fall 1998 – NetSmart, NY, NY (NetSmart)

3 In some cases, direct comparisons between data were possible. More often than not, however, we had to make assumptions that we could not directly attribute to the data.

For example, the FEHB studies asked about overall Internet access, but did not differentiate between access at home or at work. The FEGLI study, conducted during the same time period, asked about overall access, and about access at home and/or at work.

Since the overall access percentage was the same, and two independent studies produced essentially the same results, we assumed that we could apply the FEGLI percentages universally to Federal employees in that instance.

In the case of the NTIA report, we considered only that data that was directly comparable to both the OPM data and the data from the independent studies. The NTIA data contained a much broader definition of "Access" (including "Community Access Center" which encompasses libraries, schools and other access points). Their data estimates also included what responses might have been had their sample contained the appropriate number of households (proportionate to the U.S. population generally) of urban and rural poor, who are generally under-represented in most consumer surveys.

4 From Civilian Personnel Data File (CPDF) status reports as of December 1997

Background

The U.S. Office of Personnel Management (OPM) asked Federal employees about their access to and usage of the Internet in several major surveys, including:

The Federal Employees Health Benefits (FEHB) Program
Customer Satisfaction Survey of October 1997

The Federal Employees Health Benefits (FEHB) Program
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The Federal Employees Health Benefits (FEHB) Program
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The Federal Employees' Group Life Insurance (FEGLI) Program
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DeBow also compared Internet access by Federal employees to that of the U.S. population[1] as a whole, and projected current and future access and usage by Federal employees, both at work and at home[2].

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4 From Civilian Personnel Data File (CPDF) status reports as of December 1997

Detailied Findings

Overall Access

Substantially higher than average overall

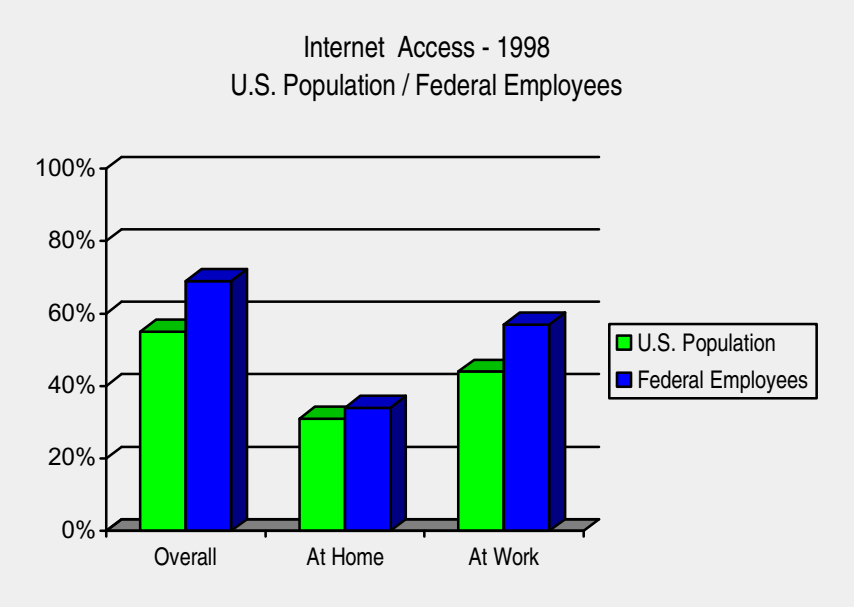
Slightly higher at home
Significantly higher at work

Overall Internet access by Federal employees (50% in 1997 and 69% in 1998) was substantially higher than overall U.S. Population access (estimated at 34% and 55% respectively by Jupiter).

Since 100% of Federal employees are by definition employed and 85% are under 55 years of age[4] (two of the primary identifying characteristics of Internet users), it is reasonable to expect a higher than average access rate.

Access at home (34%) was higher than the U.S. Population (31% by Jupiter and 22% by NTIA in 1998) which is what one would reasonably anticipate. The big difference was in Internet access at work. Fifty-seven percent of Federal employees with Internet access in 1998 had access at work, compared to only 44% of the online segment (NetSmart) of the U.S. Population.

Of the 57% of Federal employees with Internet access at work in 1998, 84% had access at their desk. Women (49%) were somewhat more likely than Men (47%) to have Internet access at their desk. We know of no comparable data for the U.S. Population.



[4]From Civilian Personnel Data File (CPDF) status reports as of December,1997

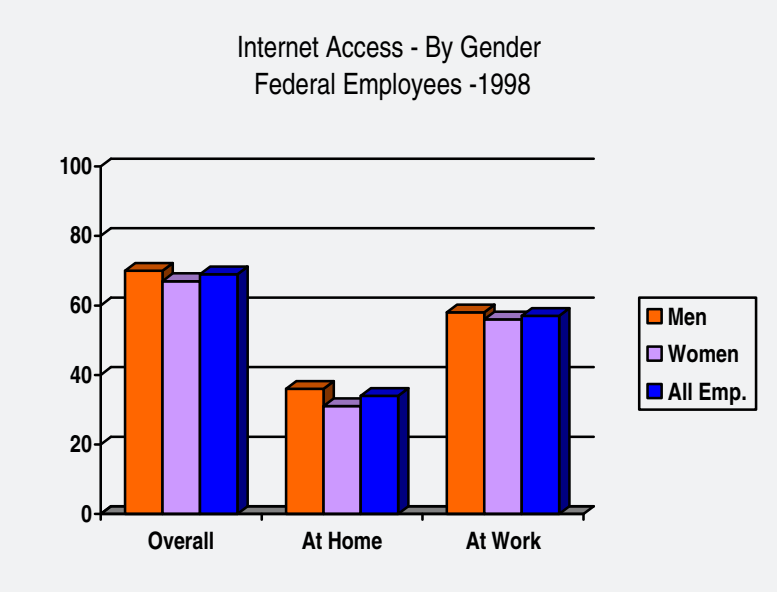
The Gender Gap

Substantial, but changing

While as noted previously, Women are somewhat more likely than Men to have Internet access at their desk, that is the only area where Women were not trailing Men in 1998. Men (70%) were more likely than Women (67%) to have access overall. Men were somewhat more likely to have access at work (58% vs. 56%), and to have access at home (36% vs. 34%).

These access at home numbers parallel the numbers for the U.S. Online Population, estimated by Jupiter in 1998 to be Men (55%) and Women (45%). These findings were essentially mirrored in the NTIA report with Men (24%) leading Women (21%) in access at home.

This is dramatically changing, however. Year-end projections for 1999 indicated that Women and Men will have equal access at home – 50% each. As online content for Women continues to expand, Women are generally forecast (both by Jupiter and NetSmart) by the year 2002 to not only have a higher overall online percentage than Men, but also to spend more time online.



Age

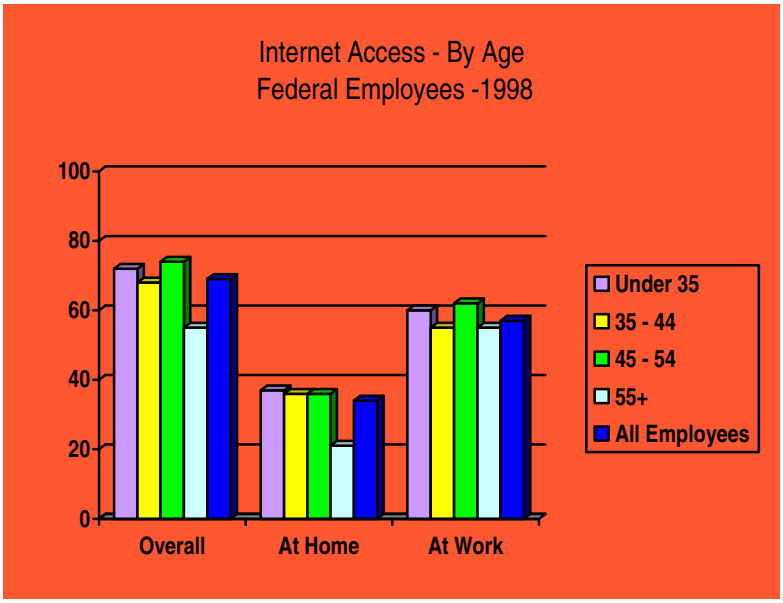
A mixed message

With overall Internet access of Federal employees at 69%, one might have expected a greater variation in access by age band. Yet those under 35 (72%) and those 45-54 (74%) were essentially the same. Employees 35-44 (68%) were somewhat, but not significantly, lower. Only those 55+ (55%) showed substantially lower overall access.

This trend remained when we looked at employee access at work. Once again those under 35 (60%) and those 45-54 (62%) were essentially the same. Employees 35-44 (55%) continued to have somewhat lower access, as did those 55+ (55%). The 55+ access at work (55%), however, is still significantly higher than the online U.S. population (44%).

But access, of course, is not necessarily usage. Since employees pay nothing for access at work, and pay an average of $200 per year, or more for Internet access at home, access at home is a more reliable predictor of usage.

When we looked at Federal employees' Internet access at home by age, the results were surprising. Employees under 35 (37%), as expected, were more likely to have Internet access at home than the average Federal employee (34%). Unexpectedly, employees 35-44 and those 45-54 (both at 36%), however, were statistically the same. Only those 55+ (21%) had statistically significant lower Internet access rates at home.



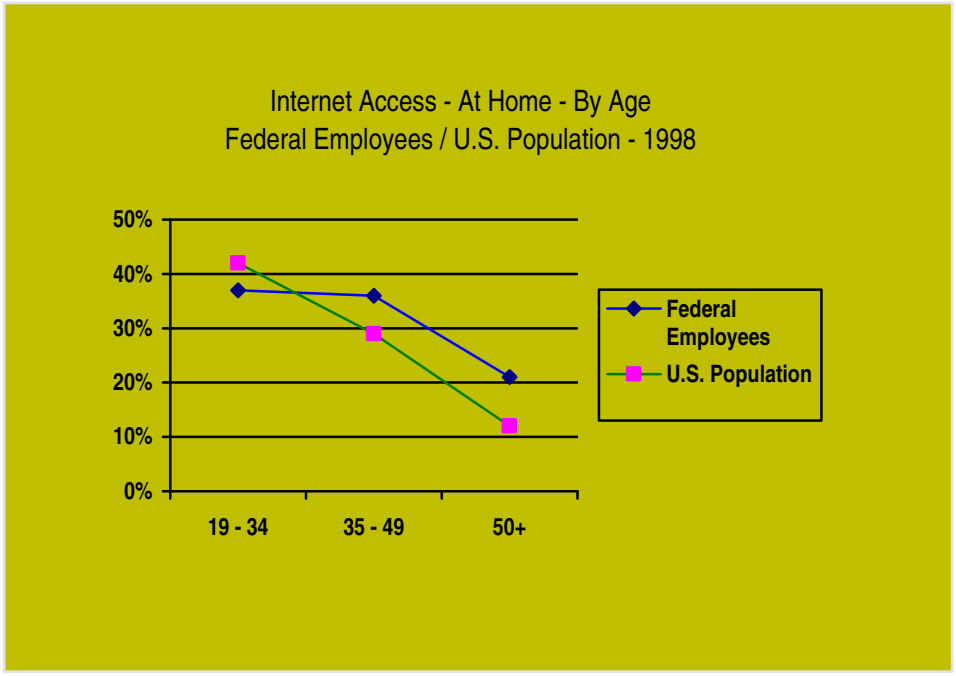
Age

A mixed message (continued)

Federal Employees / U.S. Population
Releative access improves with age

No directly comparable age bracket data for the U.S. Population was available. We recalculated the FEGLI age brackets and compared them to Jupiter's U.S. online population estimates.

Federal employees 19-34 years old were significantly less likely (37% vs. 42%) to be online at home compared to the U.S. online population. Yet those 35-49 were 24% more likely (36% vs. 29%) to be online, and those 50+ were 75% more likely (21% vs. 12%) to have Internet access at home compared to the U.S. Online population.



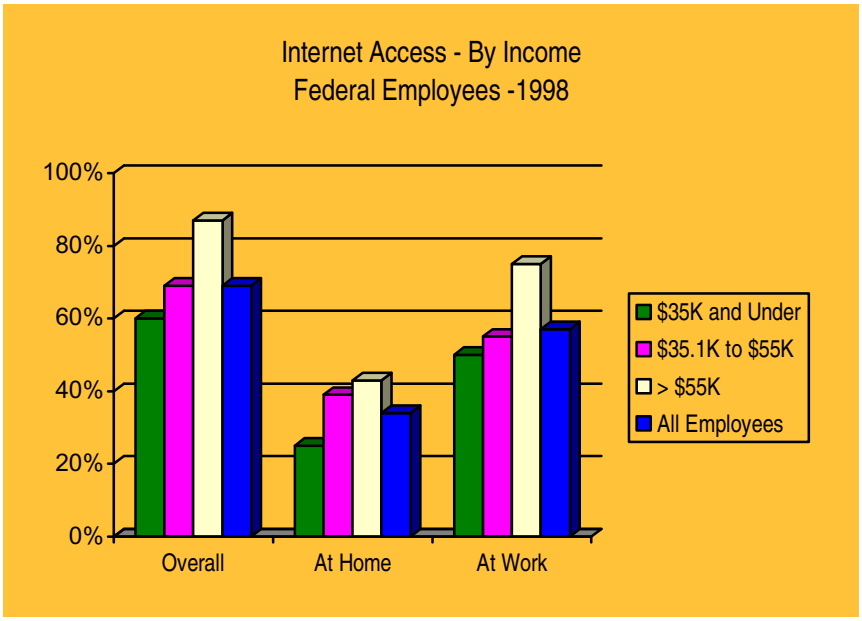
Income

No surprise, a primary access driver

Employee Income

As expected, Internet access – overall and at home – tracked with Income, and helped to explain some of the access anomalies we saw with Age. Federal employees earning $35K and under were significantly less likely to have Internet access overall (60% vs. 69%), and at home (25% vs. 34%) than Federal employees generally. Employees earning $35.1K to $55K were right at the overall average (69%), but substantially above average (39% vs. 34%) at home. Employees earning more than $55K, as expected, were significantly more likely to have access overall (87% vs. 69%) and at home (43% vs. 34%).

At work, the numbers were essentially the same, with Federal employees earning $35K and under significantly less likely to have Internet access at work (50% vs. 57%) than employees overall. Employees earning $35.1K to $55K were essentially at the same percentage (55% vs. 57%). Employees earning more than $55K, as expected, were significantly more likely to have access at work (75% vs. 57%) than employees overall.



Income

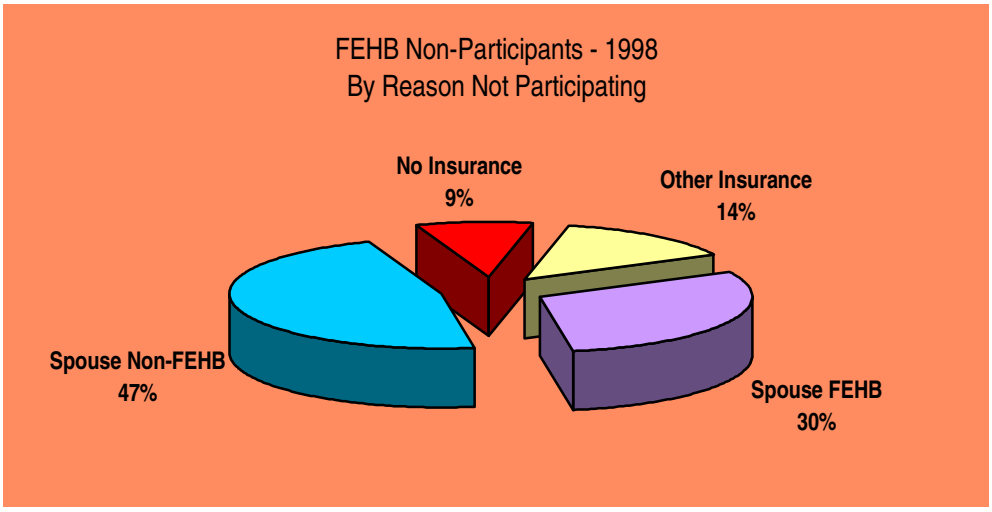
No surprise, a primary access driver (continued)

Household Income

If Income tracked, what would explain the access at home anomalies we observed in Age? Looking at Age and Income was revealing. NetSmart estimated the average Household Income for the U.S. Online Population at $61K in 1998. Among Federal employees responding to the 1998 FEGLI Survey, 59% of those 19-34 years old reported incomes of $35K or under.

Employee income, of course, is not necessarily reflective of household income (HHI). We looked at FEHB data that contained overall Internet access as well as Employee Income and HHI. As FEHB Non-Participants and Customers both reported essentially the same level of Internet access (71% and 69% respectively), we looked at both.

While one might have expected that FEHB Non-Participants have a lower overall Internet access level than Customers (on the assumption that employees that participate in employee benefit programs generally have higher incomes than those who do not), Non-Participants are not necessarily non-insured. Less than one in ten (9%) said that they had no health insurance; 14% were enrolled in other health insurance programs. More than three out of four (77%) are covered either by their spouse's FEHB policy (30%), or their spouse's non-FEHB policy (47%).



Income

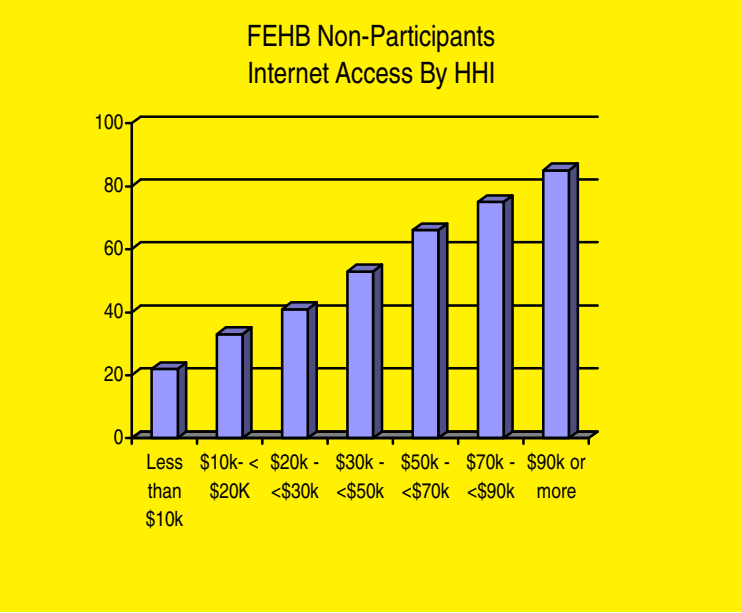
No surprise, a primary access driver (continued)

FEHB Non-Participants

As expected, the mean Employee Income of FEHB Non-Participants with Internet access was substantially higher ($36,000 vs. $27,000) than for those without Internet access. HHI produced almost the exact same results. The mean HHI for households with Internet access was substantially higher ($66,000 vs. $50,000) than for those households without Internet access.

Overall, employees with Internet access had individual and household incomes approximately 1/3 higher (33% and 32% respectively), than those without.

Looking at the question from a different perspective – Access by Household Income Band – we see that Internet access tracks almost perfectly with HHI. Ranging from a low of 22% for those earning Less than $10,000, to 85% for those with HHI of $90,000, or more.



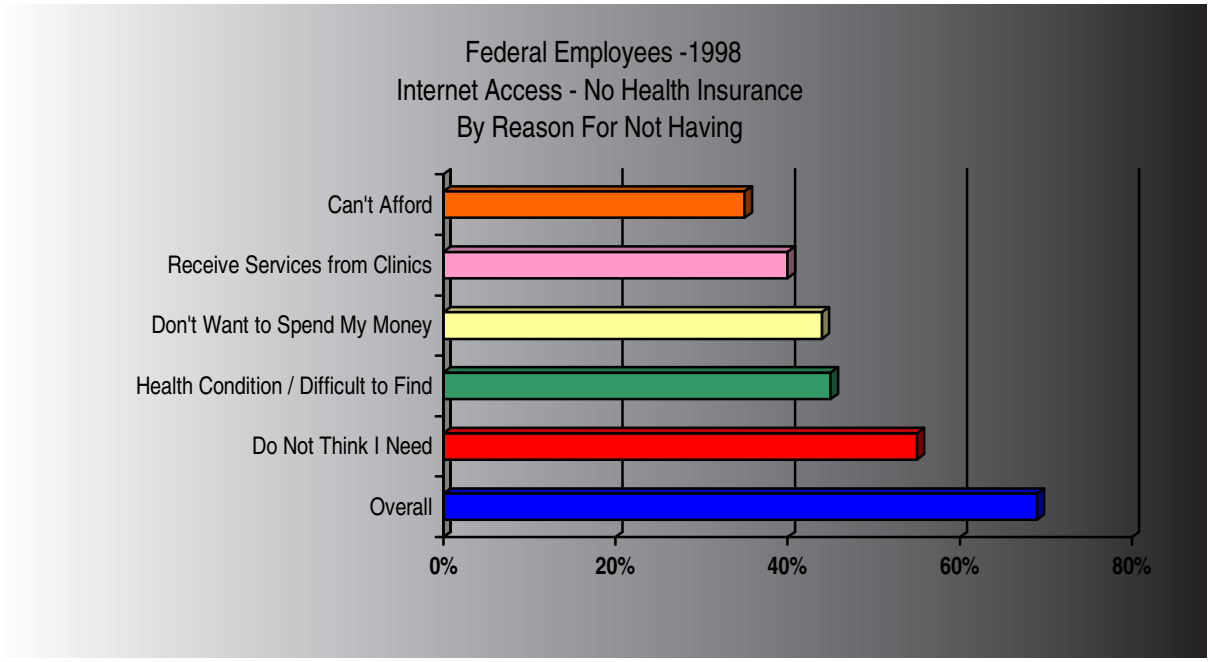
Income

No surprise, a primary access driver (continued)

FEHB Non-Participants
"No Health Insurance"

As previously discussed, Non-Participants are not necessarily non-insured. We looked at that portion of Non-Participants who said that they "…do not currently have health insurance."

Ranging from a low of 35% for those who said "Can't afford," to a high of 55% for those who said "Do not think I need," this group had substantially lower Internet access than Federal employees overall.



Income

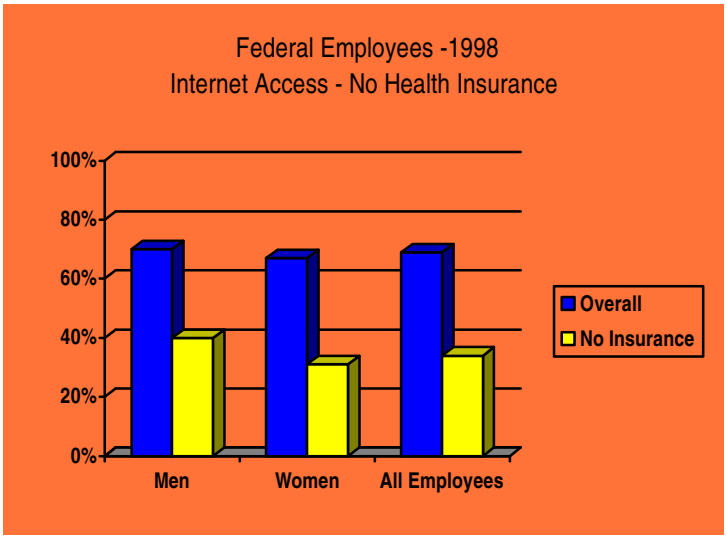
No surprise, a primary access driver (continued)

FEHB Non-Participants
"Can not afford health insurance"

We then looked at that portion of Non-Participants who said that they "Do not have health insurance," and gave as the reason, "Can not afford Health Insurance." While this is a small group (169 of 5152 or 3.3%), it is certainly a group of interest to policymakers.

Overall, this group is almost half as likely to have Internet access as Federal employees generally (35% vs. 69%). Men who said that they could not afford health insurance were less likely than Men generally to have Internet access (40% vs. 70%), and Women were even less likely than Women generally (31% vs. 67%).

Income, of course, is the most likely explanation, as 61% of this group reported HHI of less than $30,000 per year, and almost nine out of ten (89%) reported annual HHI of less than $50,000.



Income

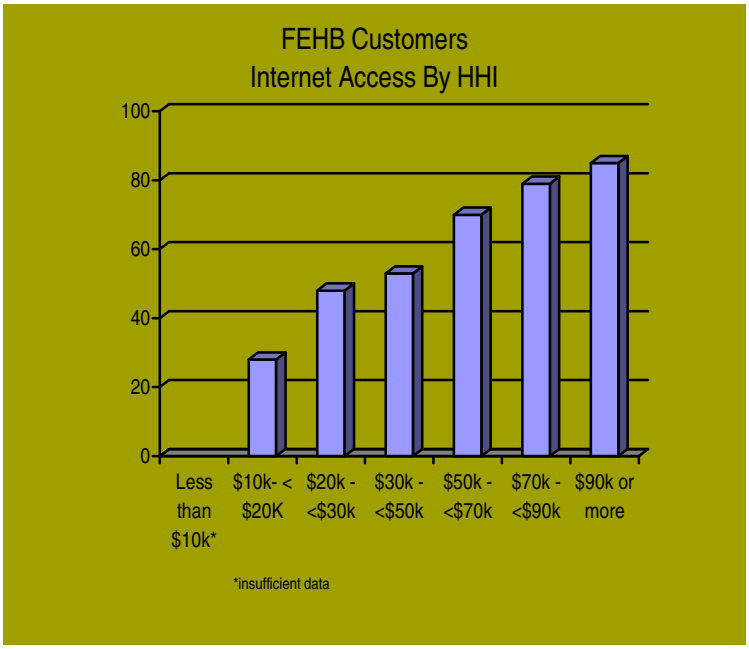
No surprise, a primary access driver (continued)

FEHB Customers

As expected, the mean Employee Income of FEHB Customers with Internet access was substantially higher ($62,500) than those without Internet access ($53,800) and for FEHB Non-Participants with Internet access ($36,000). HHI produced almost the exact same results. The mean HHI for FEHB Customer households with Internet access was substantially higher ($90,000 vs. $64,000) than for those households without Internet access, and for FEHB Non-Participants with Internet access ($66,000).

Looking at the question from a different perspective – Access by Household Income Band – we see that Internet access tracks almost perfectly with HHI. Ranging from a low of 28% for those earning $10,000 - $19,999 (there were insufficient responses from FEHB Customers earning Less than $10,000), to 85% for those with HHI of $90,000, or more.

Overall, employees with Internet access had individual and household incomes substantially higher (16% and 41% respectively), than those without. Clearly, Income is a far more reliable predictor than Age of Internet access both at work and at home.

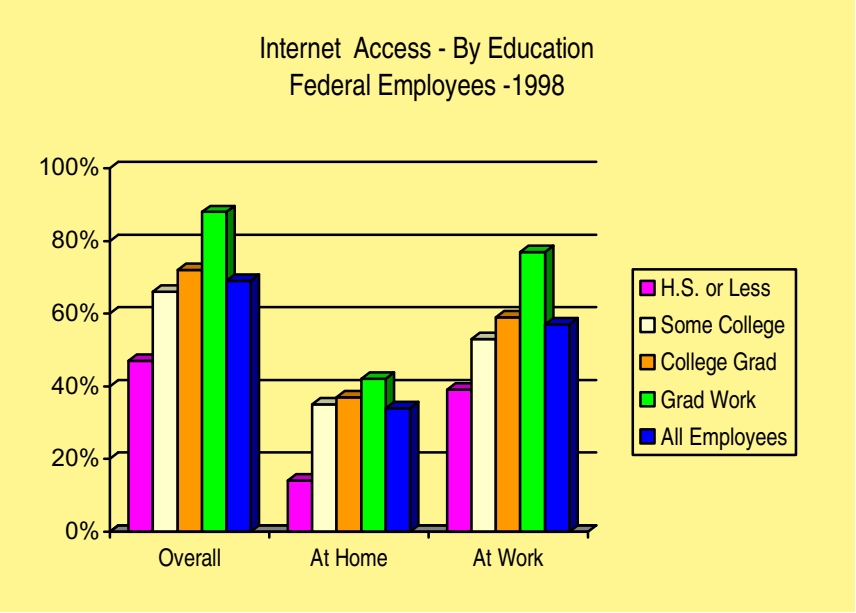


Education

Almost a perfect correlation, more education = more access

As would be expected, as Income and Education generally track together, Internet access – overall, at work and at home – tracked with Education. Federal employees with a High School education, or less, were significantly less likely to have Internet access overall compared with employees generally (47% vs. 69%), at work (39% vs. 57%) and at home (14% vs. 34%). Employees with Some College were slightly below average overall (66% vs. 69%), and at work (53% vs. 57%), but slightly above average (35% vs. 34%) to have Internet access at home.

Employees who described themselves as College Graduates were slightly more likely overall compared with employees generally (72% vs. 69%), at work (59% vs. 57%) and at home (37% vs. 34%) to have Internet access. Those having Graduate Work or more, were significantly more likely to have Internet access overall (88% vs. 69%), at work (77% vs. 57%) and at home (42% vs. 34%).



FEHB Insured Non-Participants

Revealing and Validating

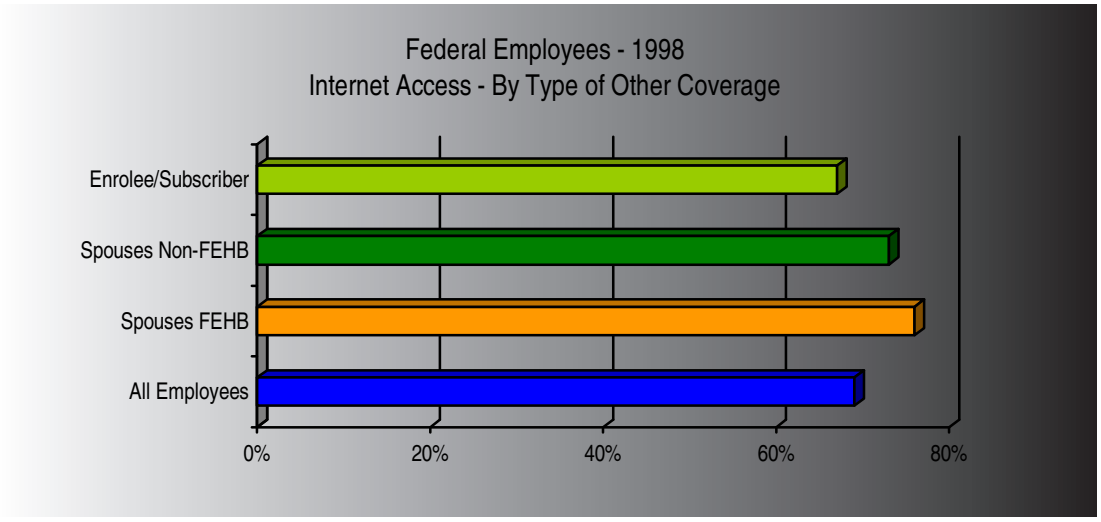
As previously discussed, FEHB Non-Participants are not necessarily non-insured. This group is comprised of four sub-groups: 1. Those who are non-insured, which were previously discussed in detail; 2. Those who are the Enrollee / Subscriber in a different health plan; 3. Those who are covered under their spouses FEHB insurance, and; 4. Those who are covered under their spouses non-FEHB insurance.

Looking at Internet access of these four sub-groups was revealing, and helped to validate many of the previous findings. Those in sub-group 1, "Those who are non-insured" regardless of the reason given had less Internet access (ranging from 35% to 55%) than Federal employees generally (69%).

Those who said that they were in sub-group 2, the "Enrollee / Subscriber in a different health plan" (67%) as expected, had essentially the same Internet access as Federal employees generally (69%).

Employees who said that they were in sub-group 3, "covered under their spouses FEHB insurance" and are by definition both married and a member of a two-income household, had substantially higher Internet access (76%) than either Federal employees generally (69%) or married Federal employees (70%).

Most interesting were those who said that they were in sub-group 4, "covered under their spouses non-FEHB insurance." As expected they had substantially higher Internet access (73%) than either Federal Employees generally (69%) or married Federal employees (70%). But they had less Internet access than those whose spouses were also Federal employees (76%), further validating the assumption that Federal employees have significantly higher Internet access at work than the U.S. population generally.

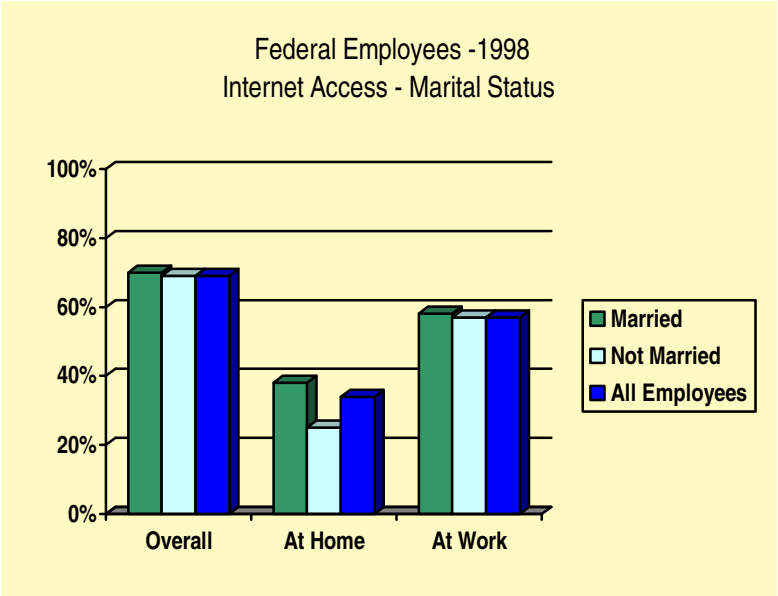


Marital Status, Presence of Children

A big factor at home

Federal employees who are Married have essentially the same access overall (70% vs. 69%), and at work (58% vs. 57%) as those who are Not-Married.

The big difference is at home, where Married employees have significantly more Internet access (38%), compared to both those who are Not-Married (25%) and the U.S. Population (31%). With Income – as previously discussed – being a primary driver of Internet access at home, and Married employees generally having higher HHI, higher Internet access levels among Married employees would be expected.



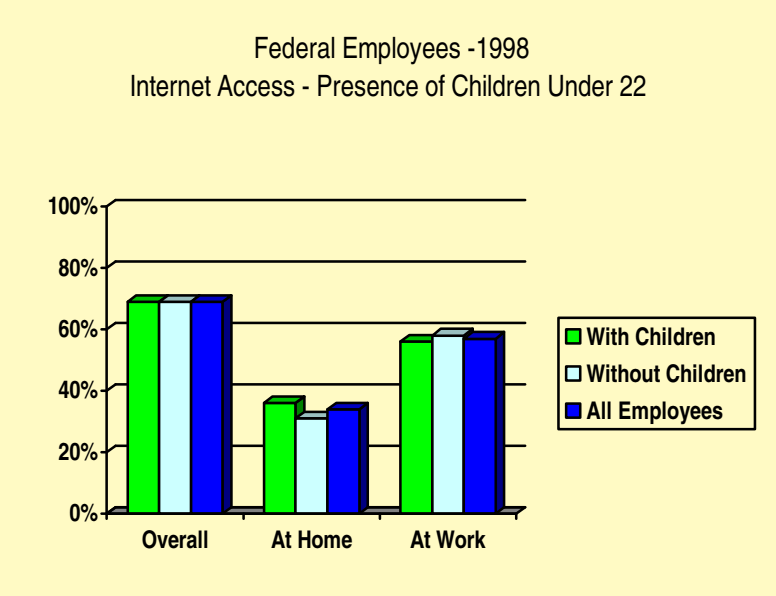
Marital Status, Presence of Children

A big factor at home (continued)

Presence of Children

Federal employees with Children under 22 living at home had the same level of Internet access overall (69%) as those without Children and Federal employees generally. Those with Children under 22 living at home had essentially the same Internet access at work (56%), as either those without Children (58%), or Federal employees generally (57%).

The presence of children, however, is considered by essentially every Internet research organization to be a major factor in Internet access at home, and it was definitely a factor among Federal employees. Employees with Children under 22 living at home were significantly more likely to have Internet access at home (36%) than Federal employees without Children under 22 living at home (31%), Federal employees generally (34%), or the U.S. population (31%).



Access vs. Usage

Propensity to use vs. printed materials

As previously discussed, Internet access is driven by Income and its traditional corollary – education. Access, however, is not necessarily Usage. Access at home provided some clues as to the disparities we found with Age, which generally tracks with Income and Education.

To gain further insight into the issue of Access vs. Usage, we looked at the question of why those FEHB Non-Participants with Internet access chose not to look at the FEHB materials that were available on the Internet. While almost four out of five employees with Internet access (78%) said that they "did not know it was there," and 2% had the traditional Internet excuses ("too slow," "couldn't find," etc.), almost one out of five overall (19%) said that they "preferred printed material."

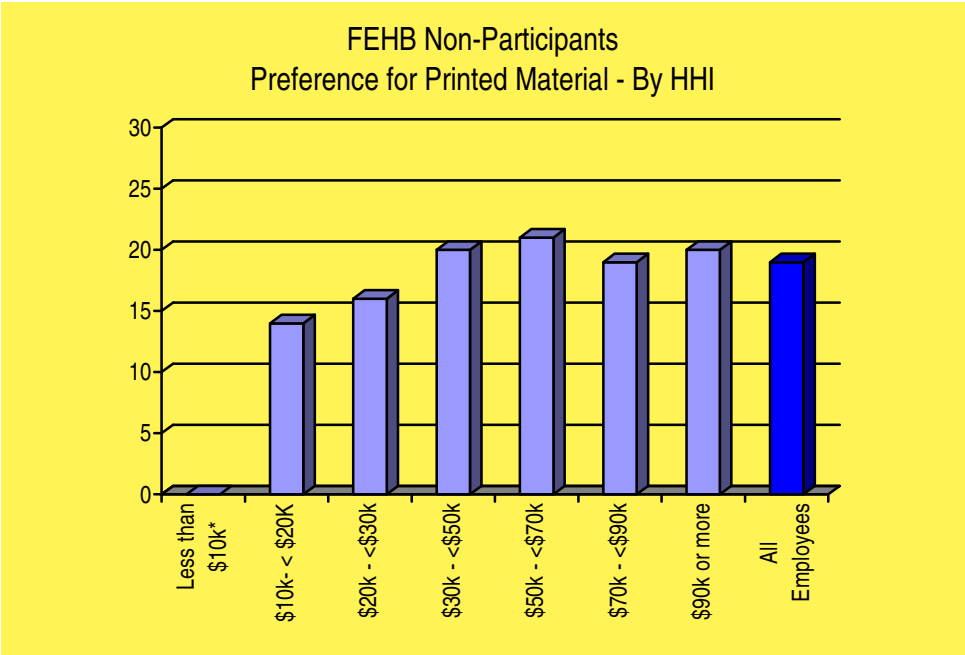
While there are many reasons why those with Internet access might prefer to use printed material (availability of a capable printer, ability to download, etc. and those listed as options on the survey), their preference for printed material is an indicator for their propensity to use, or not use, the Internet to obtain needed information.

Access vs. Usage

Propensity to use vs. printed materials

Income

When we looked at HHI, a pattern began to develop. Those with HHI of $10,000 to $19,999 (14%) were significantly less likely to prefer printed material than employees overall (19%). This trend continued at HHI of $20,000 to $29,999 (16%) and flattened out at essentially the same percentage as employees overall (19%) as HHI income rose above $30,000 with the exception of a dip to 17% at $50,000 to $69,999.

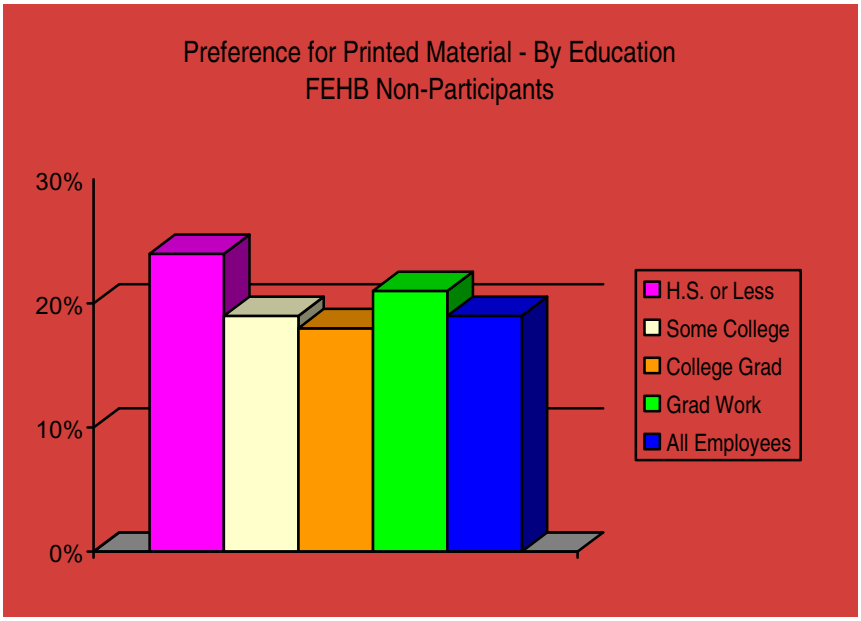


Access vs. Usage

Propensity to use vs. printed materials

Education

Education was equally revealing, and almost the reverse of Income. Those with High School education, or less, (24%), were significantly more likely to prefer printed material than employees overall (19%). Those with some College (19%), and College Graduates (18%) were statistically the same as employees generally. Employees with Post Graduate work, however, were again more likely (21% vs. 19%) to prefer printed material.



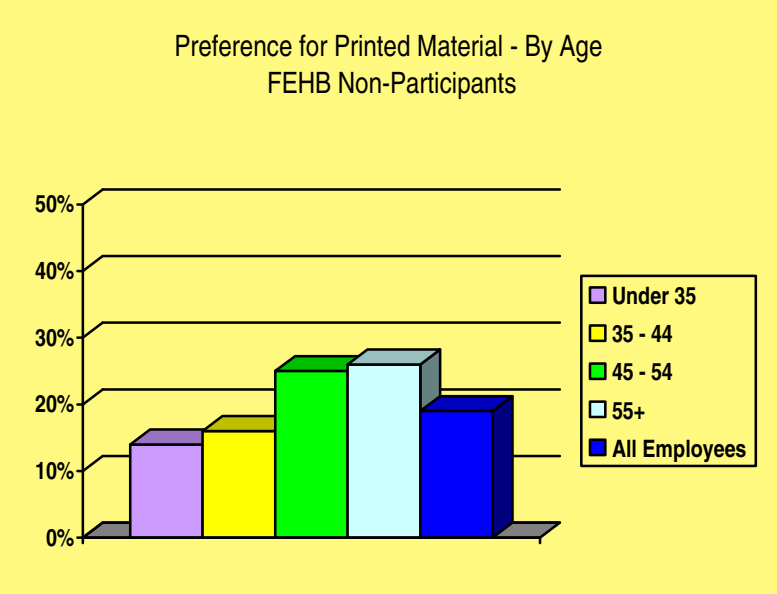
Access vs. Usage

Propensity to use vs. printed materials

Income

The answer to these seeming anomalies became clearer as we looked at Age. Employees Under 35 (14%), were again – as with the lowest income group discussed above – significantly ess likely to prefer printed material than employees overall (19%).

Employees 35-44 (16%) were substantially less likely to prefer printed material than employees overall. Employees 45-54 (25%) and 55+ (26%), however, were significantly more likely (32% and 37% more likely respectively) to prefer printed material than employees overall.



Clearly, while Income is the most reliable predictor of Internet access, Age is the more reliable predictor of the propensity to utilize the access that is available. As the data shows, those under 35 and with incomes less than $30,000, are less likely to prefer printed materials.

The unexpected dip at HHI of $50,000 to $69,000 is explained by a higher percentage of respondents in that income bracket falling at Age 35 (31%) vs. Age 55 (17%). The rise in preference for printed material of those with Post Graduate education, is once again explained by the average Age of the respondents being, as would be expected, significantly higher than that of employees generally.

Recap

Federal employees' Internet access in 1998 was substantially higher than the U.S. Population generally in every category…Overall, at Home, and at Work. While Federal employees were 10% more likely to have Internet access at home, the most dramatic difference was in Internet access at work, where Federal employees were 30% more likely to have access than the U.S. Online population.

While somewhat more likely to have Internet access at their desks, Women generally had lower Internet access levels than Men, but this gap is quickly closing. It is expected that Women will not only have more access than Men by 2002, but will spend more time online.

Income – and its traditional corollary – Education, were, as expected, the primary drivers for Internet access, both overall and at home. Married employees and employees with Children under age 22 (as expected), have significantly higher Internet access at home than those Not-Married, those without Children under age 22 and the U.S. Population in general.

Access, of course, is not necessarily usage. Age is the more reliable predictor of the propensity to utilize the Internet access that is available. Those employees under age 35 and those with incomes less than $30,000 are less likely to prefer printed materials. Older employees – irrespective of income and education – still indicate a substantial preference for printed material.

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