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4

## Internet Use among Older Canadians

*C. Silver*

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# Internet Use among Older Canadians

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**Production:** Lucienne Sabourin

August 2001

Catalogue No. 56F0004MIE, No. 4
ISBN: 0-662-30937-5
ISSN: 1492-7918
Frequency: Irregular

Published by the authority of the Minister responsible for Statistics Canada

# Abstract

As society uses the Internet more and more for many different purposes, older people are being marginalized. Far fewer older Canadians, aged 60 and over, surf the Internet than do young people. Moreover, few non-users appear interested to join.

Those older Internet users are an elite group, with higher levels of education and income than other older people. Older men are more likely to be online than women. While gender is a significant factor related to Internet use, education and income are more important factors.

Older surfers go online less frequently and spend less time online than younger people, especially younger men. Most of this time is spent on a home connection. Time spent on the Internet is less likely to displace other activities than it is for younger people. When it does, it tends to displace the same kinds of activities as for younger people, notably watching television.

The difference between older and younger people does not appear to be so much a divide in how they use the Internet, as it is in bridging access and skill differences. As most older people do not have access to workplace training, they have to make the effort to find other ways to learn these new technologies. Most often, they rely on their own resources to purchase a computer and get an Internet connection. Since many retired people live on low incomes, family and community resources are important ramps onto the information highway for the older generation.

# Internet Use among Older Canadians

*By C. Silver*

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## 1. INTRODUCTION

According to the 2000 General Social Survey (GSS), older Canadians are much less likely to use the Internet than young people (Statistics Canada 2001, Dryburgh 2001). Those who do, are an elite group, with higher education and incomes than other older people. Similar findings have been reported for some time among households rather than individuals (e.g. Dickinson and Sciadas 1997, Dickinson and Ellison 2000). Meanwhile, businesses and governments[1] are embracing this new technology as a means of providing services to clients and citizens. Viewed in this context, many older Canadians are being marginalized.

The largely retired group of Canadians aged 60 and over is most prone to being left behind, on the "shoulder" of the information highway. By the end of the 1990s, half of the men at 62 years of age were retired. Women tended to retire earlier than men, with half of those aged 60 being retired. As well, the median age of retirement has declined since the mid-1980s (Sunter 2001). Being retired, most older Canadians can not take advantage of resources in the workplace to learn how to use new technologies. On the other hand, older people generally face greater limits on their access to the world at large and tend to have more discretionary time. Thus, it is not immediately obvious why they should be so markedly disinclined to use the Internet compared to the young and middle age generations.

Low Internet usage among older Canadians hinders initiatives such as Connecting Canadians and Government Online (Government of Canada 1999). It is not clear when or if this group will catch up. Some may argue that it is only a matter of time. The question is not, though, whether this will occur by 'attrition' over the long term, but whether or not today's population of seniors will have the inclination, the opportunity and the means to get on board in the short run and if so to what extent? In order to contribute towards answering such a question, it is important to know the profile and characteristics of those older Canadians who do use the Internet, as well as the perceptions of those who do not. This study looks at the incidence of Internet use among older Canadians, men and women aged 60 and over, examines how they use it, why, and what impact it has on their use of time. In addition, the paper uncovers and analyzes the characteristics that distinguish older Internet users from the population at large, explores barriers to use and provides information on how older Internet users acquired their skills. Whenever relevant, it also offers comparisons with younger users.

1 -- In the 1999 Speech from the Throne the federal government set the goal to be known as the government most connected to its citizens by 2004 (Government of Canada 1999).

## NOTE TO READERS

This article is based on Cycle 14 of the General Social Survey on "Access to and Use of Information Communication Technology". The GSS is an annual telephone sample survey covering the non-institutionalized population aged 15 and over in all provinces, but not the territories. The focus in 2000 was on the use and impact of computer and Internet technology on Canadians. Data were collected over a 12-month period, with a different sample each month. Internet penetration rates were estimated on the basis of the respondent's reported use during the previous year, from the time of the survey. Data on use were estimated based on the respondent's use during the previous month.

The representative sample had 25,090 respondents, representing an 81% response rate. The survey results include information from 6,178 persons aged 60 and over, 2,403 men and 3,775 women. These were weighted to represent 2,191,600 men and 2,676,200 women in this age group.

The GSS surveyed individual Canadians about their personal use of computers and the Internet, the impact of technology on privacy, access to information and the social cohesion of families and communities. Data from the 2000 GSS complement other Statistics Canada surveys on this topic, particularly the Household Internet Use Survey (Statistics Canada 2000), which collects information from Canadian households and is administered to a sub-sample of households included in the Labour Force Survey.

## 2. INCIDENCE OF USE AND PLANNED USE

**Only 1 in 8 persons aged 60 and over was online in 2000**

In 2000, Internet users among older Canadians were very much in the minority. Only 13% (614,000) of those aged 60 and over had used the Internet during the previous year. By contrast, more than nine out of ten individuals aged 15 to 17 had.

Generally, the proportion of Internet users declines with age (Chart 1). The decline becomes steepest past age 60, with fewer than one-quarter of those in their early 60s having used the Internet. This drops to fewer than one in ten for individuals in their early 70s and one in twenty among those aged 75 and older.

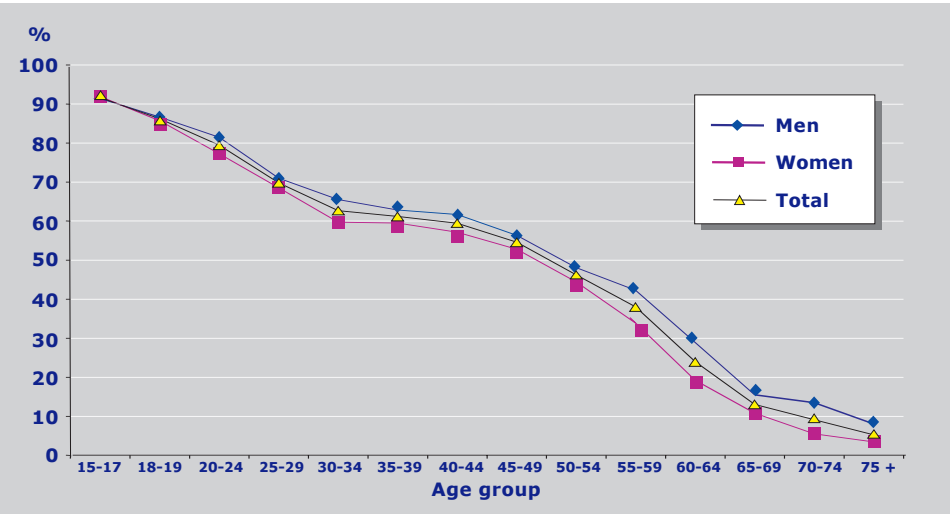



**Chart 1.**
*Internet use, by age and gender, 2000*

Moreover, a gender gap exists within the age gap. Although such a gap does not exist among the school aged, it sets in early and widens in older age groups. Among those aged 60 and over, men were twice as likely (17%) as women (9%) to be Internet users. (These proportions represent about 368,000 men and 246,000 women).

**The geographical dimension**

Older people living in British Columbia used the Internet proportionately more than those in other provinces, with one in five users. By comparison, 13% of older Ontario residents, 11% of those in the Prairie provinces and Quebec, and 8% of those in the Atlantic provinces had used the Internet[2]. The relatively higher use in British Columbia was not age-related as, on average, the age distribution of older Internet users there were not much different than in other regions. Also, the gender difference was at least as strong as in other regions.

**Older Canadians fastest growing group online but still far to go**

The 2000 GSS does not have trend data. However, it does provide some information about how recently individuals began using the Internet. This can be used as a retrospective means of measuring recent increases. Internet use is growing fastest among those aged 60 and over, particularly women[3] - more older women (43%) than men (25%) began using the Internet within the previous 12 months. These rates of recent uptake were higher than those experienced by any of the younger age groups (Chart 2), but are based on low penetration rates.

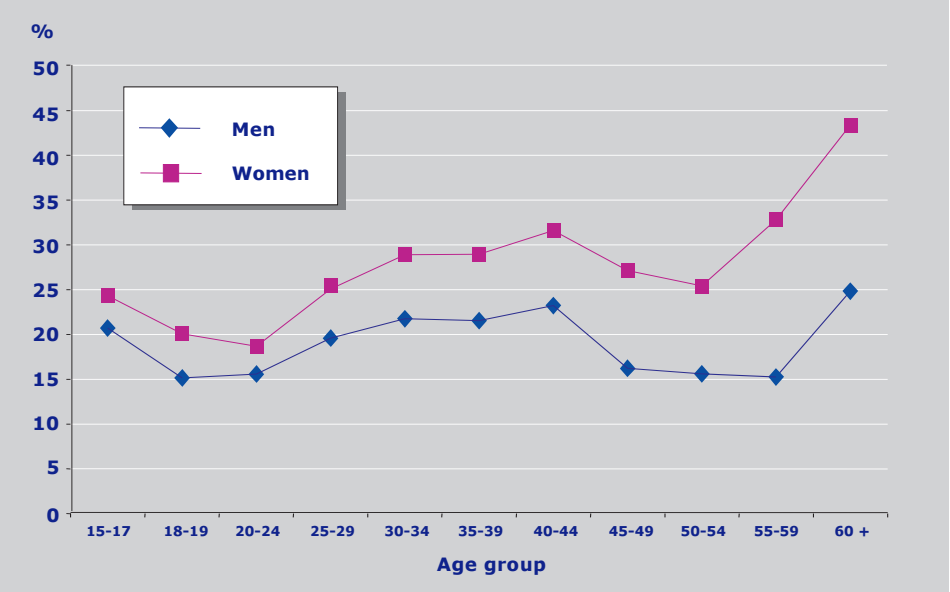



**Chart 2.**
*Proportion of Internet users that started to use the Internet in the past year, by age and gender*

**Frequency and intensity of use**

Not only is the incidence of Internet use lower among older Canadians, but so are the frequency and intensity of use. Older users who had used the Internet during the previous month from any location (home, work, school or other places) spent an average 5.7 hours the previous week compared with 8.3 hours for those aged 15 to 59. However, the difference was smaller for Internet time logged at home - 5.6 hours per week versus 6.9[4].

2 -- The sample size, while adequate to provide some regional breakdowns, does not allow the detailed analysis of use by age and by province.

3 -- Analysis based on the Household Internet Use Survey (HIUS) also reveals that households headed by a senior had the highest growth rates in Internet use (Dickinson and Ellison 2000). The data from the 2000 GSS, while consistent with those of HIUS, suggest higher uptake rates for older individuals compared to those for households headed by a senior. User households, though, may well have members who still do not use the Internet. For example, an older woman may begin using the Internet after her husband or child does.

4-- The closeness of the figures for older users shows that, overwhelmingly, use takes place at home. Moreover, since these averages include the zero hours for those who were Internet users that month but did not use during the previous week, they are also indicative of regular use.

Variation in the average amounts of time spent online at home was smaller among older users. Although, on average, men under age 60 spent more time on the Internet at home (7.7 hours) than women (5.9 hours), among older surfers, men spent 5.8 hours per week compared with 5.3 hours for women. However, these averages are affected by a group of relatively heavy users. For instance, almost half of older users went online every day and averaged more than an hour a day (Chart 3).

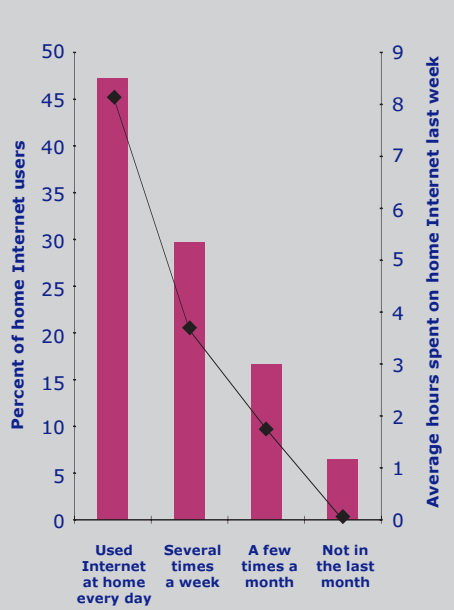
**Location of use**

Home access among older Canadians was more common than among younger users. For instance, only two-thirds of users aged 15 to 34 were connected at home, while 84% of users aged 60 and over had a home connection (87% for men and 79% for women). With limited access to school and workplace connections and with more mobility and transportation problems to deal with, a home connection appears to be the "window to the world" of choice for older surfers.

**Perceptions and planned use**

Older Canadians are less likely to consider it important that everyone in Canada has access to the Internet (28% compared with 52% of those under age 60). Though not a barrier to use, this indicates that they are not as ready to embrace this new technology as are younger people. Older women (25%) were less likely than older men (32%) to feel that universal access was very important. There was no difference between younger men and women in this belief.

Consistent with this attitude, older people who have never used the Internet are not interested in using it in the future. Only 8% of those aged 60 and over were interested, compared with 34% of those under age 60. Even though the relatively small number of older Internet users appears to be growing quickly, this lack of interest among so many suggests that the numbers may taper off without reaching high penetration rates, unless there is a change in attitudes.




Moreover, 78% of those few older people who were interested in using the Internet in the future expected to use it at home, compared to 19% who expected to use it at a friend's or relative's place. This expectation was prevalent among both men (85%) and women (71%). Very few prospective Internet users expected to use it at a public place. This was also true among non-users who did not expect to use the Internet, with more than 9 out of 10 saying that they would not use the Internet from a public library or other public place. This suggests that, although such points of access are important in bridging the digital divide, older people tend to rely on private rather than public community resources.

The median value provides another perspective on the time spent per week by older Canadian surfers: the point where half spent more time and half spent less was 4 hours for men and 3 hours for women.

**Chart 3.**
*Frequency and intensity of Internet use among Canadians 60 and over, 2000*

## 3. HOW OLDER CANADIANS USE THE INTERNET

**Purpose of use**

Most surfing among older Canadians was for personal interest or entertainment. Such use was prevalent among both men (83%) and women (78%) aged 60 and over who used the Internet in the previous month. While 32% of men used the Internet for household management, such as paying bills or financial planning, only 15% of women surfers used it for these purposes[5].

Among the minority of older surfers who were employed during the previous month, six out of ten of both men and women, used the Internet for work-related activities. As expected, very few used the Internet for school-related activities.

**Type of use**

In general, smaller proportions of older surfers reported using the various categories of content and services listed in the survey. However, their ranking of them was similar to that of younger people. Older users surfed the Internet primarily to search for information on goods and services. News sites were also popular, followed by health and medical information. With respect to the latter, older users were mostly interested in information about specific diseases (65%), while information about drugs was the next most commonly sought (27%). Interest in lifestyle information (diet, exercise, health promotion) was at 23%. Less than one in five users accessed government information – about the same as the number of users playing games. A low proportion of older surfers used the Internet to buy goods or services. Few older surfers participated in a listserv or newsgroup. Online chat services were plainly the preserve of the young. Table 1 shows the proportions of older surfers by type of use and gender.

Fully 50% of older surfers searched the Internet in the past month for travel information. Many older people searched for information on arts, entertainment or sports (41%). One-third looked for business or economic news. One-quarter (26%) checked telephone listings, whereas one in five looked for information concerning computers or the Internet (21%). The same number looked for information concerning local community services or activities. As would be expected, few older people searched for information on education or the labour market.

5 -- These rates are based on the number of Internet users who had made any use of the Internet during the previous month, whether at home, at work or elsewhere. However, these data do not account for frequency of visits or time spent on these activities.

**Table 1.**
*Type of use of the Internet, individuals aged 60 and over, by gender, 2000*

| | % used in the previous month | | |
|---|---|---|---|
| | **Total** | **Men** | **Women** |
| Search for information on goods or services | 57 | 65 | 45 |
| Access online news sites | 54 | 58 | 47 |
| Search for health and medical information | 38 | 38 | 40 |
| Play games | 20 | (15) | 28 |
| Access information on government programs or services | 19 | 20 | (17) |
| Electronic banking | 19 | 23 | (11) |
| Purchase goods or services | 12 | 17 | -- |
| Subscribe to a newsgroup or listserv | (9) | (9) | (8) |
| Use online chat services | (8) | (8) | (8) |

*() lower reliability estimates due to sample size.*
*-- = sample size too small to produce estimates.*

**E-mail: a new tool for maintaining ties with family and friends**

The vast majority of older Canadians who were online at home had used e-mail during the previous year (92%). This represents 12% of all older Canadians (15% of men and 10% of women aged 60 and over). About one-third of them used e-mail every day.

The high use of e-mail among older Canadians is also revealed by the finding that 69% of those who had used it in the previous month used it at least several times a week, a proportion not far off that for younger people (76% of those under age 60). However, older people used e-mail more often to communicate with family than did younger people. Most older users (84%) used e-mail to communicate with family or relatives in the previous month (87% of men and 81% of women) and about half did so at least several times a week. In comparison, less than one-third of younger e-mail users communicated with family so frequently.

Apart from a desire to maintain family ties, there are structural reasons for e-mail users aged 60 and over to communicate with relatives outside their household more often. Older people tend to have more surviving children and grandchildren than younger people have surviving parents and grandparents. In addition, the Internet use rates reported in this study indicate that it is more probable for an older e-mail user to have younger relatives who are also online than vice-versa.

Older Canadians also used e-mail (77%) to communicate with friends - the same proportion as for younger people. They communicated with their friends via e-mail less often than did younger people though, with 36% using e-mail several times a week or daily compared with 47% of younger people. As was the case for communicating with family, gender differences were less pronounced. Most older men (81%) and women (71%) communicated by e-mail with friends. Almost half of these did so often (39% of men and 32% of women).

Older e-mail users were also likely to use the telephone often to communicate with family and friends. Over two-thirds (68%) of e-mail users were on the phone with family or relatives several times a week or every day and 70% were on the phone with friends this often. Regular mail was not used as often as e-mail. However, many did communicate by regular mail, including greeting cards, a few times a month. Older e-mail users used the regular mail more often than their younger counterparts. Over one-third (37%) of older e-mail users communicated with family or relatives by mail during the previous month, and 24% did so with friends.

Older users were less likely to communicate by e-mail with people in their local community than were younger people. Somewhat similar proportions of e-mail users aged 60 and over communicated often with people in their community (19%), elsewhere in the same province (25%), outside their province (22%), or outside Canada (23%).

**Exchanging one screen for another**

As one would expect, spending time on the Internet is at the expense of other activities. Most likely to be displaced was watching television: over one-quarter of older Canadians who used the Internet during the previous month said they spent less time watching television (15 hours a week, including watching while doing something else). This was the same average viewing time as for those whose television watching remained unchanged. This may mean that those who did not substitute their television watching were watching less than other older people in the first place.

These viewing habits are consistent with findings from time use diaries (Statistics Canada 1999b), which indicated that persons aged 60 and over who had used the Internet for reasons other than paid work or studies in the past 12 months, spent about 2 hours per day watching television (as a primary activity).

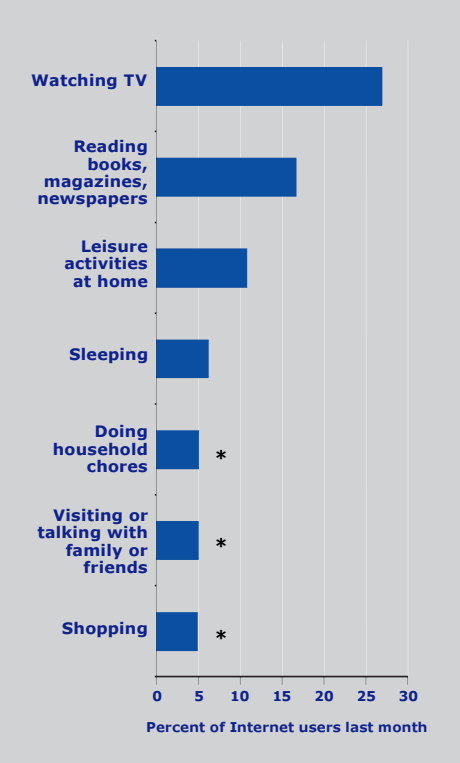
Those who had not used the Internet for personal pursuits spent more time (3.4 hours) watching. While Internet users may have been less likely to watch television, regardless of the time spent surfing, the 2000 information indicates that part of this difference is due to time spent on the Internet.

Reading printed books, magazines and newspapers also decreased (Chart 4).

The proportions of older surfers reducing the time spent on all these activities were not significantly different than for those under age 60. On the other hand, older surfers were less likely than younger surfers to substitute Internet time for sleeping, household chores, talking with family or friends, shopping or engaging in other leisure activities outside the home.

Older surfers may be less likely to displace these other activities because they do not spend as much time online as younger ones. However, older people are generally less pressed for time. With most living outside the time regimentation of the workplace or school, they would also have more scheduling flexibility, as well as more leisure time. In addition, more older people (13% in all) reported that every day they felt they have time on their hands that they did not know what to do with compared with only 6% of younger adults (Statistics Canada 1999a).

Many older surfers are doing substantially similar activities but through the new medium. For example, some reading appears to be moving from print to electronic form. Over one-third who had used the Internet at home or another location other than work or school in the past month said they read books, magazines or newspapers through the Internet. Similarly, the Internet provides content previously obtained through traditional broadcast media or recordings. Over one-quarter of these older surfers listened to music through the Internet and about one-sixth listened to news or sports broadcasts. However, few older surfers said they watched television or talked on the phone through the Internet.




* Lower reliability estimates due to sample size.

**Chart 4.**
*Activities displaced by the use of the Internet, among users 60 and over*

## 4. CHARACTERISTICS OF OLDER INTERNET USERS

### Education

Among adults, having a university education is an important determinant of whether or not they use the Internet. This is particularly true among older Canadians, even though fewer of them have post-secondary education.

Higher education was closely associated with Internet use, both for men and women. Almost half (48%) of men aged 60 and over with a university education were Internet users. The rate was much lower for university-educated women (28%).

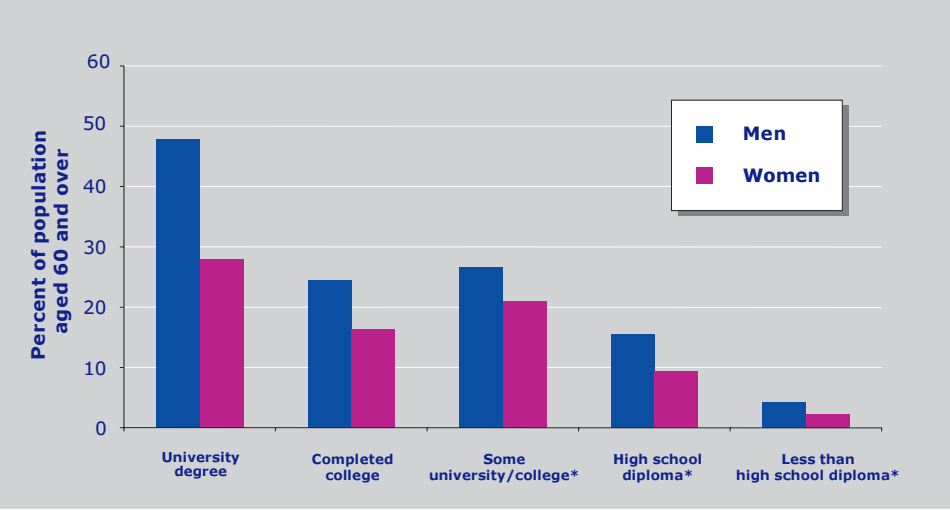



**Chart 5.**
*Internet use among older Canadians, by education and gender, 2000*

* Lower reliability estimates due to sample size.

Nonetheless, university-educated men and women were each 3 times more likely to use the Internet than those with only high-school education (Chart 5).

Although more older Canadians obtained a college diploma than had completed a university degree, college was not as strongly associated with Internet use. Overall, college-educated men and women aged 60 and over were less than twice as likely as those with a high-school diploma to use the Internet.

Among Canadians aged 60 and over, almost half have not completed high-school, something that may present its own barriers for getting more older people online, as it has implications for skills and incomes. Since in the general population there is a well-established positive correlation between education and incomes, the relationship between education and Internet use may well be related to affordability.

**Income**

People living in higher income households were more likely to have used the Internet than those in lower income households. This income gap in Internet use increases dramatically with age. Older Canadians with household incomes over $40,000 were 4 times more likely to use the Internet (34%) than those with incomes under $40,000 (8%). In comparison, those aged 45 to 54 with household incomes of $40,000 or more were only twice as likely to use the Internet than those in lower income groups. Income made little difference among young people under 25. Higher income assumes additional importance among older people because they are much more likely to rely on their own resources (as opposed to work and school) to gain access to the Internet.

Older Canadians whose main activity in the previous year was employment were more likely to use the Internet (28%) than those with other main activities, including retirement or household work (10%). Of course, this is also related to age differences between the two groups. Among those aged 60 to 64, 46% of men and 24% of women reported that their main activity during the last year was working at a paid job. However, only 13% of men and 5% of women aged 65 to 69 had this attachment to the labour market.

**Important determinants of Internet use**

Considering the inter-relationship between several variables and the use of the Internet, logistic regression models were used to study the influence of gender, main activity, age, income, education and living arrangements on Internet use among those aged 60 and over. This technique helps to isolate the

influence of each variable by controlling for all other ones. For example, the influence of income is examined among those with the same level of education, age and other characteristics. The results are presented in Table 2.

Having a university degree exerted the strongest influence on the odds of being an Internet user. The odds of a university graduate were 13 times those of a person with less than a high-school diploma. Income, though significant in its own right, had less of an effect. The odds for those with a higher household income ($40,000 or more) were about 2.5 times those with a lower income. Older Canadians who lived only with a spouse or common-law partner had odds that were 1.5 times those for older people living alone.

Being elderly (75 or over), not employed as a main activity or being a woman were negatively related to Internet use. The odds of elderly people being users were one-third of those aged 60 to 64. Those whose main activity in the previous year was something other than employment had odds that were three-quarters of those whose main activity was working for pay. Similarly, the odds of women using the Internet were less than three-quarters those of men. This gender effect is independent of age, living arrangements, employment status, income and education.

**Table 2.**
*Analysis of determinants of Internet Use*

| Characteristic | Persons aged 60 and over<br>*Odds ratio estimate* |
|---|---|
| **Gender** | |
| Women | 0.7 |
| Men | **1.0** |
| **Main activity in past year** | |
| Working at a paid job or business | **1.0** |
| Other main activity | 0.7 |
| Not stated | * |
| **Age** | |
| 60 to 64 | **1.0** |
| 65 to 74 | * |
| 75 and over | 0.3 |
| **Household income** | |
| $40,000 or more | 2.5 |
| Less than $40,000 | **1.0** |
| Not stated | 1.0 |
| **Level of education** | |
| University degree | 13.2 |
| College certificate or diploma | 5.8 |
| Some post-secondary | 7.0 |
| High school diploma | * |
| Less than high school diploma | **1.0** |
| Not stated | 0.7 |
| **Living arrangements** | |
| Living alone | **1.0** |
| Living with spouse only | 1.5 |
| Other | * |

* *Results not statistically significant from the benchmark group.*

*Note: This table presents the odds that a person aged 60 and over used the Internet the past 12 months, relative to the odds that a benchmark group used the Internet (odds ratio) when all other variables in the analysis are held constant.*

## 5. BARRIERS

In addition to painting a profile of older Internet users, this paper analyzes survey questions concerning barriers among non-users. The analysis differentiates between non-users with and without a home connection.

Older people were less likely than younger people to take advantage of a home connection. While over 95% of those under 35 with a home connection used the Internet, only two-thirds of those aged 60 and over did. Most of them lived with their children or others, as opposed to living alone or only with their spouse.

Lack of time and lack of skills were most often cited as the greatest barriers by non-users with a home connection who said they were interested in starting to use the Internet. These findings indicate that household connectivity does not guarantee use for everyone and that skills do not necessarily get diffused to everyone within a household.

Among non-users without a home connection but interested in using the Internet, the four main barriers reported were: access to a computer or the Internet (30%), cost (26%), not enough time (15%) and lack of skills or training (14%).

Much like Internet use, the likelihood of having computer experience drops steadily with age. Only 27% of older Canadians said they had ever used a computer, most in the past year. More men (31%) than women (23%) had. Among those older people who had used a computer, 47% were Internet users. Even with computer experience, women were less likely to use the Internet than men (39% and 54%, respectively).

Moreover, half of older computer users aged 60 and over (51%) rated their skills as poor or only fair. There was no difference among men and women. While this was almost twice the proportion among young people aged 15 to 24, it was not much lower than for middle-aged people, where the proportion with low skills exceeded 40% for those in their early 40s.

Older people who had used a computer but not the Internet tended to be even less skilled (64% with low skills) than Internet users (37%). Also, 68% of those older computer users with a home connection who did not use the Internet rated their skills as low. This would be expected since the skills barrier counters the home access advantage.

## 6. ACQUISITION OF SKILLS

Since having computer skills is closely related to spending time online, an understanding of how older people acquired those skills is relevant to our understanding of their access to and use of the Internet. Among the general population, work and school are important settings for learning computer skills. However, fewer older people would have recent exposure to these. Over half (54%) of older Internet users reported that they first acquired their computer skills for reasons related to personal interest. However, many also learned because of work needs (43%). Few first learned because of school or study needs.

When asked about their use of a variety of methods of learning computer skills, about half (48%) of older Internet users reported some training obtained through their employment. By contrast, 62% of those under 60 were trained this way. Large proportions of both older women (42%) and men (52%) on the Internet acquired computer skills through an employer. About 1 in 6 older Internet users (17%) did not learn through employment but had taken a formal course at an educational institution. Only youths aged 15 to 24 were more likely to rely on a formal course (over one-third).

Many older surfers (35%) obtained neither employment-related nor formal courses. They could be characterized as 'self-taught'. This includes using manuals, online help and tutorials provided by manufacturers or software firms (about two-thirds), informal help from a friend or relative, web-based training and, almost universally, trial

Diminished physical abilities may also inhibit the use of the Internet among older people. Eyesight, digital dexterity, hand-eye coordination and mental alacrity all tend to deteriorate with age making it more difficult for the elderly to work with keyboards, mice and cathode ray tubes.

and error (Chart 6). By comparison, only 20% of younger Internet users learned entirely on their own. The importance of learning on one's own was evident from the results of the 1998 GSS on time use. One-third of Canadian adults, who spent time learning a subject on their own, studied computer and Internet technologies (Silver et al. 2001).

## 7. CONCLUDING REMARKS

Far fewer older Canadians surf the Internet than do young people. Those who do are an elite group, with higher education levels and higher incomes than other older people. Older men are more likely to be online than women. While gender is a significant factor related to Internet use, education and income are more important factors.

Older people are embracing the Internet at a faster rate than younger people. But the proportion remains small and few non-users appear interested to join. While it is possible to "catch up", if partly through attrition, it will take some time.

Older surfers go online less frequently and spend less time online than younger people, especially younger men. Most of this time is spent on a home connection. Time spent on the Internet is less likely to displace other activities than it is for younger people. But when it does, it tends to displace the same kinds of activities as for younger people, notably watching television.

The difference between older and younger people does not appear to be so much a divide in how they use the Internet, as it is in bridging access and skill differences. Fewer older people believe that access to the Internet is important. And with most older people without access to workplace training, they have to make the effort to find other ways to learn these new technologies.

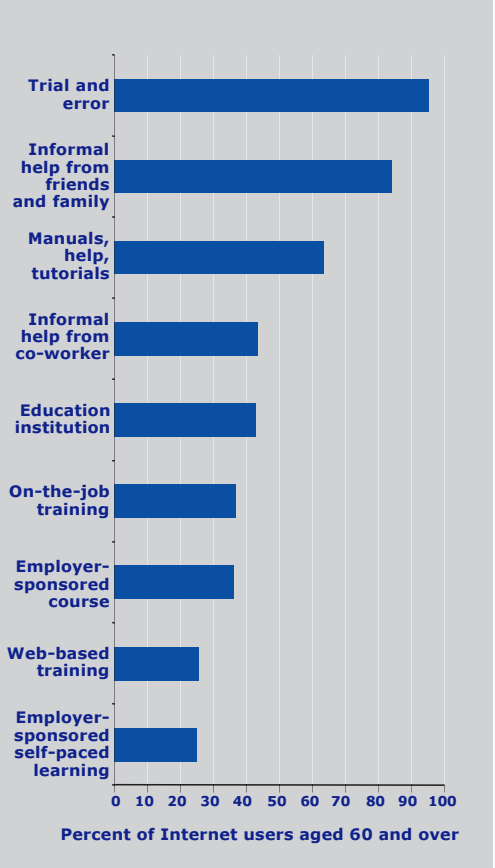



**Chart 6.**
*Methods used in learning computer skills*

The generally lower levels of education among older people, while not explicitly included among the barriers explored by the survey, may make the acquisition of these skills more difficult. For example, in 1994, literacy testing of seniors in Canada revealed that over half possessed the lowest literacy level (Statistics Canada 1997).

Very often older people acquire their computer skills entirely on their own – without help from employers or educators. The importance of having friends and family available to help is underlined by how many make use of such help and how highly this help is regarded. Since older women spent less time in the labour force (Sunter 2001), they have even less recourse to skills acquired at the workplace. Being able to call on a son, daughter or grandchild to help introduce them to this new technology may be the impetus needed to get started. And the ability to correspond by e-mail and even exchange family photos could be quite an incentive.

With little recourse to using machines at work or school, access to a computer is an important issue among older people. Most often, older Internet users rely on their own resources to purchase a computer and get an Internet connection. Since many retired people live on low incomes, family and community resources are also important ramps onto the information highway for the older generation.

As society uses the Internet for many different purposes more and more, older people are being excluded from the main stream. This exclusion has significant economic and social implications insofar as it may place limits on plans for business and government transformations made possible by the new medium.

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