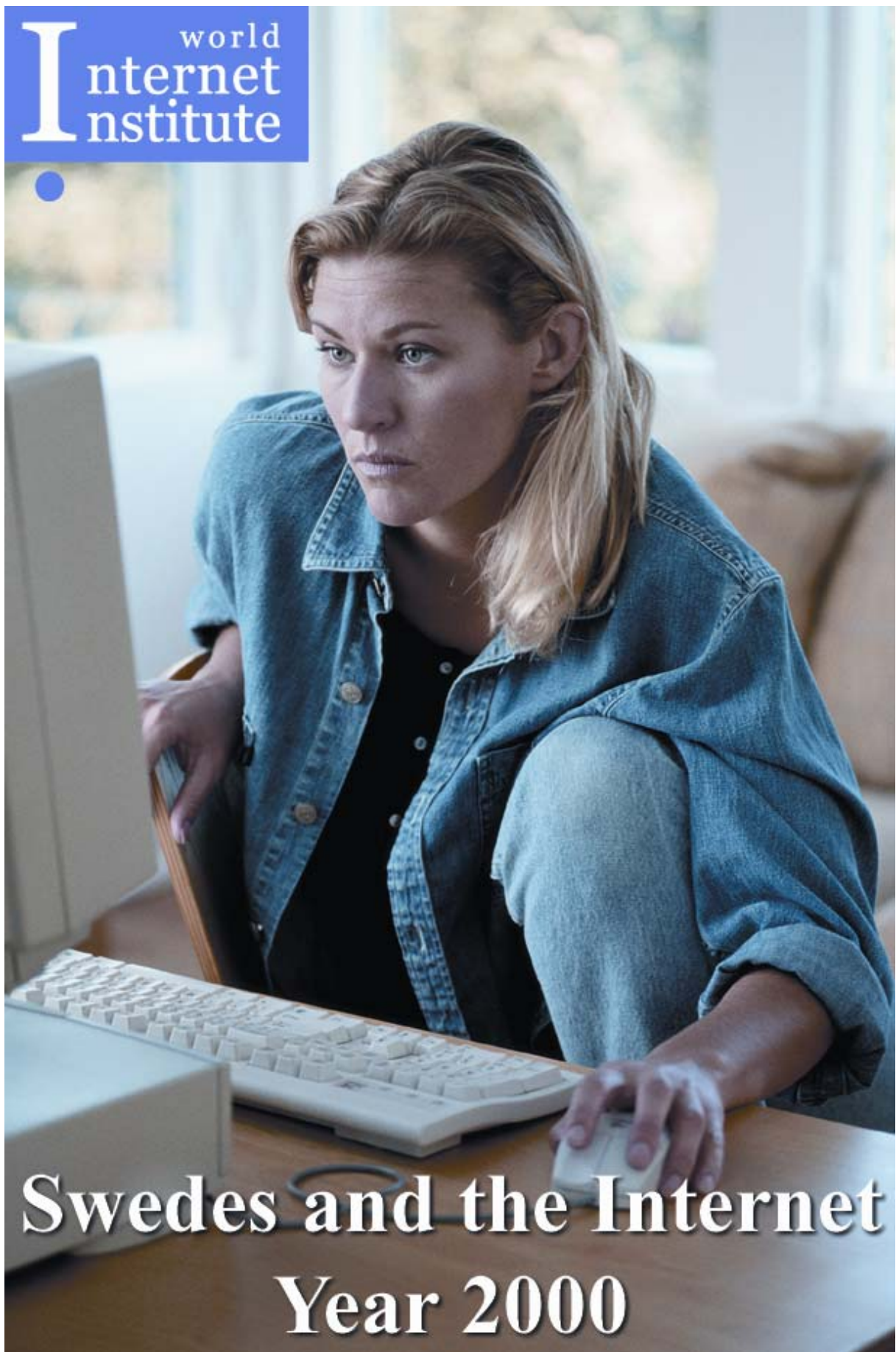


**I** world  
Internet  
Institute



# Swedes and the Internet Year 2000

Professor Olle Findahl  
World Internet Institute

Second Edition - 2001

Translation by Sheri Fox, World Internet Institute and Mattias Pettersson, MATE Solutions.

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***World Internet Institute, WII***

World Internet Institute is an independent research institute that studies the Internet's influence on society and the individual from a social science perspective. By working closely with universities, public institutions, and corporations and industry. WII strives to initiate, influence, and support social and behavioral science research which focuses on how people and the society are influenced by the Internet's expansion and penetration into our lives.

WII is working strategically to reach out with research results, and through its work initiate policy decisions in order to create greater insight and understanding for both public organizations and private companies.

WII strives, with an open attitude, to provide a forum for education, research, business, and society.

***World Internet Project, WIP***

World Internet Project is a worldwide research project that conducts national panel studies. WIP began in 2000 and will for at least 10 years follow the populations in a number of countries. The goal is to study how people and the society are influenced by the Internet. Example of partners are UCLA in USA, World Internet Institute in Sweden, Bocconi University in Italy, and NTU in Singapore. During 2001, 20 countries will join as partners—Brazil, England, Finland, France, Hong Kong, Canada, China, Spain, Taiwan, Germany, and Hungary.

Every partner finances its own operations. The national panels are all a representative selection of the population. In the question packet there are about 100 questions in common for all countries. The World Internet Project will hold the first world congress between the 19<sup>th</sup> and the 22<sup>nd</sup> of August, 2001 in Gävle with the World Internet Institute as a host.

## Introduction

In a very short time the Internet has made a breakthrough as a new international information-bearing medium. Sweden is one of those countries where Internet penetration has reached deepest in society. Generally the development goes in two directions: broadband networks have been quickly developed in the country in the last few years, and are expected to create completely new conditions for living, working, and life in all of its aspects. At the same time, mobile technology is being developed, which makes the Internet all the more accessible, and far-reaching. Complementary technologies such as WAP, Bluetooth, SMS and MMS mean that information in many more forms can be available no matter where one is.

Sweden has gone through a rapid information technology transformation during the last few years. Five years ago the Internet was an abstract phenomenon that many talked about, but few used. Today it is expected that information from authorities, businesses and organizations should be found on the Internet.

The development is positive for those who have access to the Internet and most of all for those who feel participatory in the development, but there is simultaneously the threat on a growing digital rift in society. The rift is created in the distance between those who have access to the technologies and feel participatory in the development, and those who lack the technology and who do not have the capability or the possibility to be a part of the societal development that is now happening.

The World Internet Institute is working strategically, from a social science perspective, to follow and study how the Internet in its different forms influences people's behavior, habits, and needs. WII means that the Internet will change our lives socially, politically, economically, and culturally. In order to actively follow the development tendencies, WII has formed a panel that is a representative random selection of the Swedish population. Each year telephone interviews are conducted with the panel. The strength and core business at the institute is to follow the same people during a long period in order to reach deepened insights and to understand what the developments and changes in the use of the Internet will mean in people's everyday lives.

The accompanying report is a summary over parts of the results that have come from the first year's panel study. Another report describing the results from the 2001 panel study will be available in early 2002.

*Gävle April 2, 2001  
Christoffer Nilsson, Managing Director*

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## **An International Longitudinal Internet Project**

During just a few years in the end of the 1990's, the Internet has established itself as an important channel for information and communication. This new technology has fundamentally changed the economy and the business world on both a national and an international level. People's working lives, in addition to their everyday lives, have changed. A great deal of economic resources have been invested in building an infrastructure which should facilitate the information exchange over the Internet, and large economic resources have also been spent by businesses, authorities, and cities to create information sites for Internet users. Within the telecom branch the technology is being refined for the mobile Internet among other things, and within the research world huge resources are invested in this technological development. But we still know fairly little about what people actually use the Internet for, and what needs and interests this new technology meets. What do they inform themselves about? Do they learn something new? Can they take advantage of all the possibilities that the Internet offers? Do they find what they are looking for? What kinds of problems occur? What kind of communication occurs over the Internet? How are peoples' daily lives influenced in their families, among friends, and at work? How is interaction with the authorities influenced? How are politics and the conditions for democracy influenced?

Internet development has until now been propelled forward by the interests of the technology branch and by a rapid technological development, while the users have been expected to follow along. Certainly the access to the Internet has increased rapidly, but the use of the Internet is still limited, especially with regard to e-commerce. The content on the Internet is still not suited to users' needs and interests and the technical obstacles are many.

The goal of this project is partly to study people's access to and use of the Internet-- which activities, what sort of content, and what kinds of contact are taking place over the net--and partly to study how this use influences and changes people's daily and working lives as well as other activities. Following are a few of the areas that are being studied more closely for every person who is interviewed:

- Background: profession, education, interests, etc.
- Media use: access, time, content
- Internet use: Who uses the Internet and why? Who uses the Internet and for what?
- Trade and purchase
- Working life
- Family life
- Communication and contact patterns
- Social and psychological effects

To be able to follow the changes over time and to better understand these changes the project is planned as a longitudinal study, where a panel of people representative of the Swedish population are followed for a longer period of time. Only then can individual changes and group patterns be studied. The results of this panel study can later provide comparison information for special studies in certain areas and cities where, for example special Internet introduction projects are carried out. The results can also constitute a starting point for in-depth studies--for example, interviews with certain individuals and groups with a special relationship to the Internet.

This project is also a part of an international project. Around one hundred of the two hundred-plus questions included in the study are presented in corresponding studies for other countries in North America, Europe, Asia, and even in Africa and Latin America. This also makes possible unique comparisons between countries with different cultural and technological backgrounds, and between developing countries and highly developed countries. How are the global aspects related on a local and national level?

*Olle Findahl  
Research manager  
Professor in Media and Communication Science*

## Summary 2000

Half of Swedes have access to the Internet at home. The use is however limited for most and many problems remain to be solved before the Internet can be a technology for everyone.

### *Internet access*

60% of Swedes have access to the Internet and 50% have access to the Internet at home.

### *The most popular Internet activities*

E-mail, seeking information about a hobby, surfing the net, reading newspapers/magazines, and reading the news comprise the most popular Internet activities.

### *How many people use e-mail?*

In just a few years, e-mail has become one of the most used communication channels in Sweden. 45% of Swedes regularly use e-mail.

### *Has computerization made work more effective?*

Two of three believe that work has become much more effective with computers. This is true for both Internet users, and for those who do not have the Internet.

### *Are users pleased or displeased with the Internet?*

Three of four users are pleased or very pleased with the Internet for the most part.

### *Can one trust information on the Internet?*

One-third believe that only a small amount of information is trustworthy. One-third estimate that half the information is trustworthy, and one-third estimate that more than half the information is trustworthy.

### *Protection for private information*

Every other person is worried or very worried over the fact that authorities and employers may have increased possibilities for surveillance and control through the Internet.

### *Will non-users become users?*

Every third non-user has plans to obtain the Internet at home. Just over half are not interested.

### *Children and the Internet*

86% of adults believe that children have access to a great deal of inappropriate information on the Internet.

### *The Internet and family life*

The family is the most important thing in life both for those with and without the Internet and their family lives and family relationships do not differ.

### *Do Internet activities influence other media activities?*

An increased Internet usage can mean that one calls others a bit less often, watches TV less often, and reads somewhat fewer evening newspapers. However, morning newspapers are affected very little.

### *The Internet as a source of information and enjoyment*

The traditional media--daily papers, TV, and radio--are still the most important sources for news and entertainment, as well as friends, family, and work contacts. The Internet is still thought of as a complement to this.



*New contacts through the Internet*

Internet use is not thought to isolate people, but rather to increase the Internet users' contact with other people who use the Internet. Among the qualities of the Internet which are most appreciated is the ability to communicate with other people.

*The Internet and Democracy*

90% percent of Swedes are generally skeptical to the Internet's possibilities to influence and change political life and to strengthen people's possibilities to influence. This is true both for those who have and for those who do not have the Internet.

*E-commerce*

The interest for e-commerce is still limited. 10% of everyone have tried at one time, while 8% are repeat e-buyers at least a few times per year.

*Why should one purchase through the Internet?*

The main reason for e-commerce is that it is easier to find items which otherwise are difficult to get a hold of, and because it is comfortable and saves time.

*Why don't people purchase through the Internet?*

It is mainly credit-card fraud that worries Internet users. Following this is the worry that personal information is not protected and then that it is difficult to judge the quality of the product descriptions.

*Are prices lower on the Internet?*

Just over half state that prices are lower over the Internet. This is especially true for more experienced Internet users.

*Does e-commerce influence other purchases?*

There are few who state that purchases from normal stores have decreased very much. On the contrary, almost half state that their purchases have decreased somewhat.

*Is the world becoming completely dependent on computers?*

Half of the Internet users and 75% of those who do not have the Internet agree with the assertion that the world is becoming completely dependent on computers

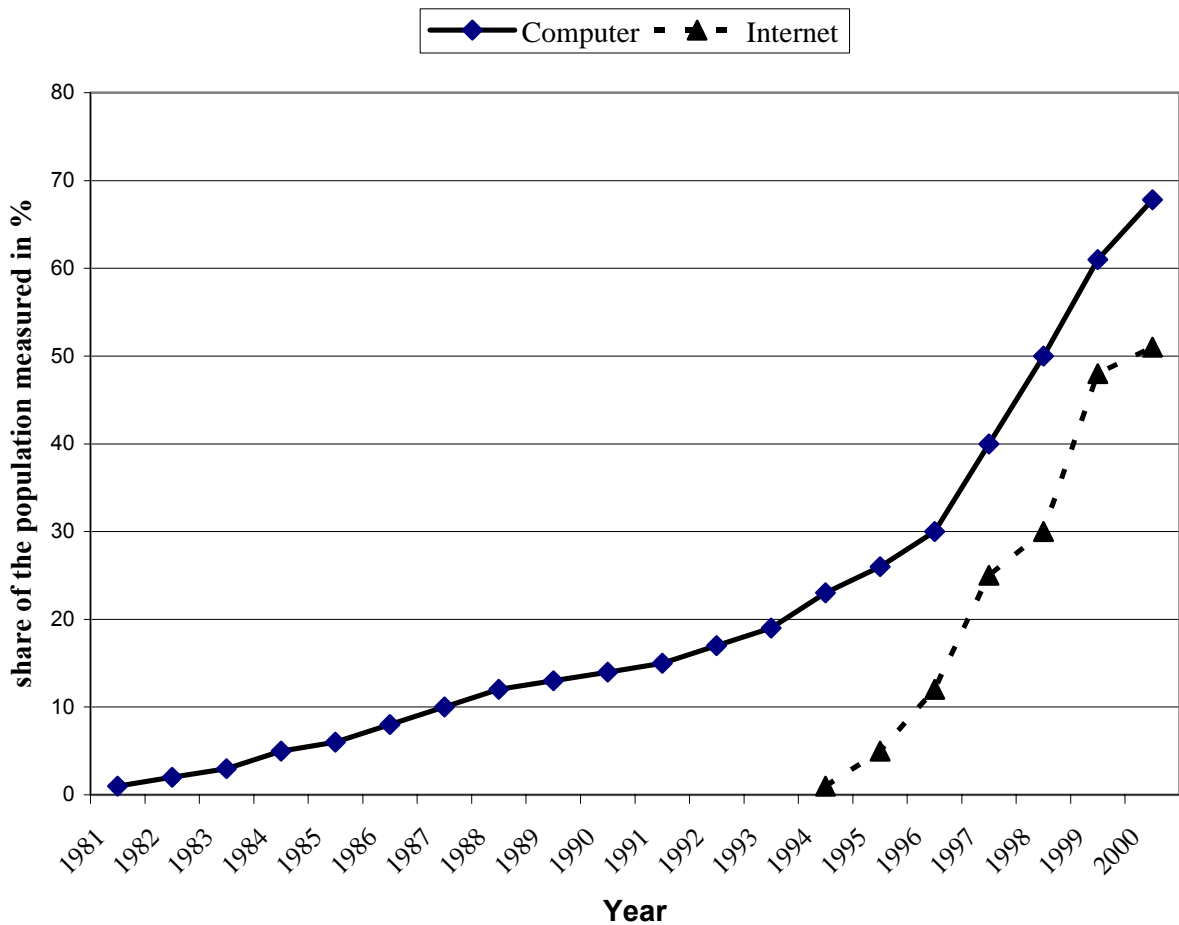
*Do those who do not have the Internet find themselves at a serious disadvantage?*

39% of everyone believe that those without the Internet find themselves at a serious disadvantage.

## Internet development at the end of the 1990's

In the middle of the 1990's much was written about the new information society, digitalization, and the Internet. But apart from the universities and a share of workplaces, there were not many who had acquired the Internet. 25% of the population had a computer at home but only 3% also had access to the Internet. What then happened was a rapid dispersion of computers and the Internet in the population. In five years half of the Swedish population had bought an Internet connection. This development, with its rapid diffusion, is fully comparable to the spread of color-TV in the 1970's.

*Share of the population with access to computers and the Internet.*



Source: Mediebarometern

## The Internet. A few facts.

### *Swedes with access to the Internet*

At home	51 %
Not at home, but at work	7 %
Not at home, not at work, but somewhere else	2 %

### *The ten most popular Internet activities*

1. e-mail
2. searching for information on hobbies
3. surfing the net
4. reading newspapers/magazines
5. reading the news
6. paying bills
7. information on amusement/entertainment
8. schoolwork
9. travel information
10. information on culture, literature, and science

### *How long as an Internet user?*

Less than 1,5 years	21 %
2-3 years	42 %
3-4 years	26 %
5 years or more	12 %

The Internet is a new medium. Every fifth user has had the Internet for less than one and one-half years, and two of three have had the Internet for less than three years. How Internet use will develop and the types of changes that this will bring in the long term for Swedish households and for the Swedes' daily lives are now impossible to predict. Today we can say nothing more than that we will all be affected.

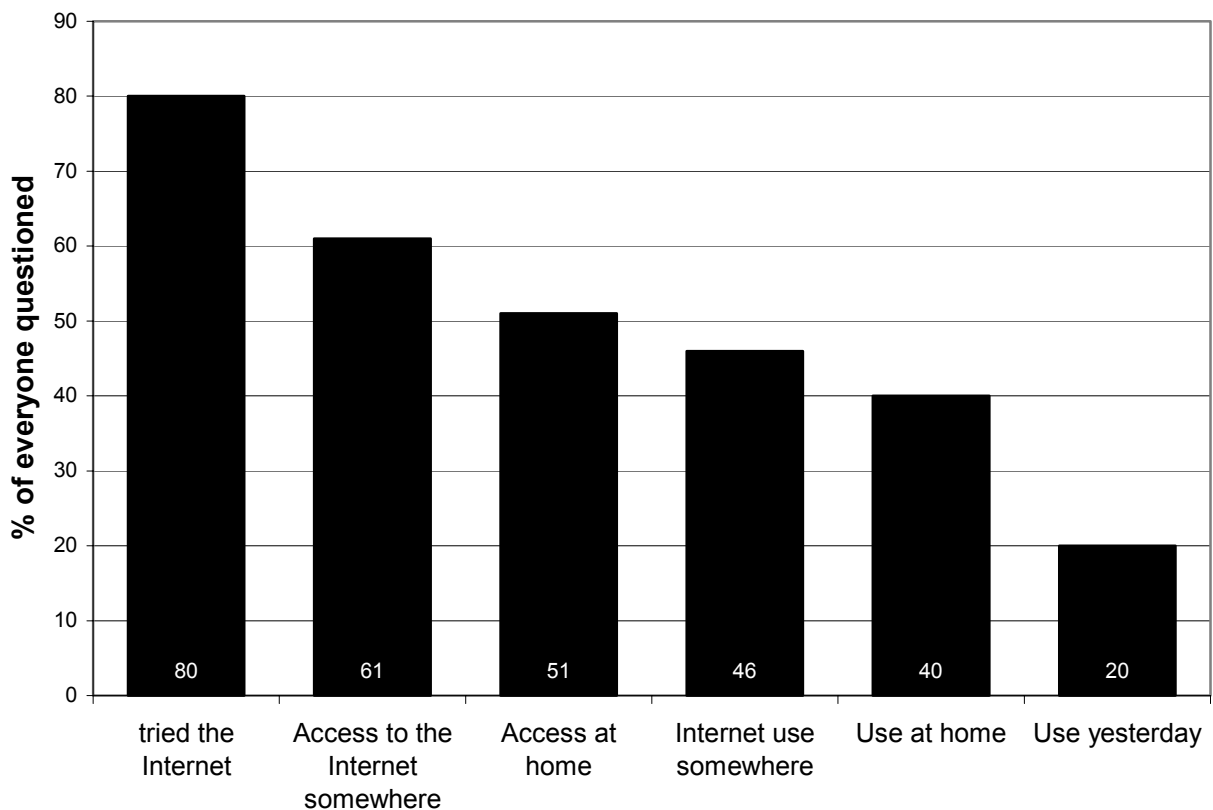
## What do the measurements say?

In the debate over Internet access and use, many different kinds of measurements occur in the different media. "80% of Swedes have the Internet" was recently on the cover of a daily newspaper. But since no source was given one must wonder what the numbers stand for.

The highest number is attained if one counts all of the people who have come in contact with the Internet at least once. Approximately 80% of Swedes have come in contact with the Internet in some way. If one then counts how many who in some way have access to the Internet, one gets the number 61%. If one counts just those who have access to the Internet at home, that number drops to 51%.

If one then goes to consider the use of the Internet, that number sinks even further since there are those who have access but who do not or cannot use this access. The highest number is achieved by counting those who have used the Internet somewhere at least one time during the last year. The time period can be reduced to count use during the last week (46%), to use on an average day (40%), and finally to how many used the Internet yesterday (20%). Consequently there are many different possibilities to choose a number that suits one's purpose. Sometimes one gives the Internet use for just those who have access to the Internet, and sometimes the use is inclusive of the entire population. In this report the measurements that are mainly used are based on questions about Internet use during an average week.

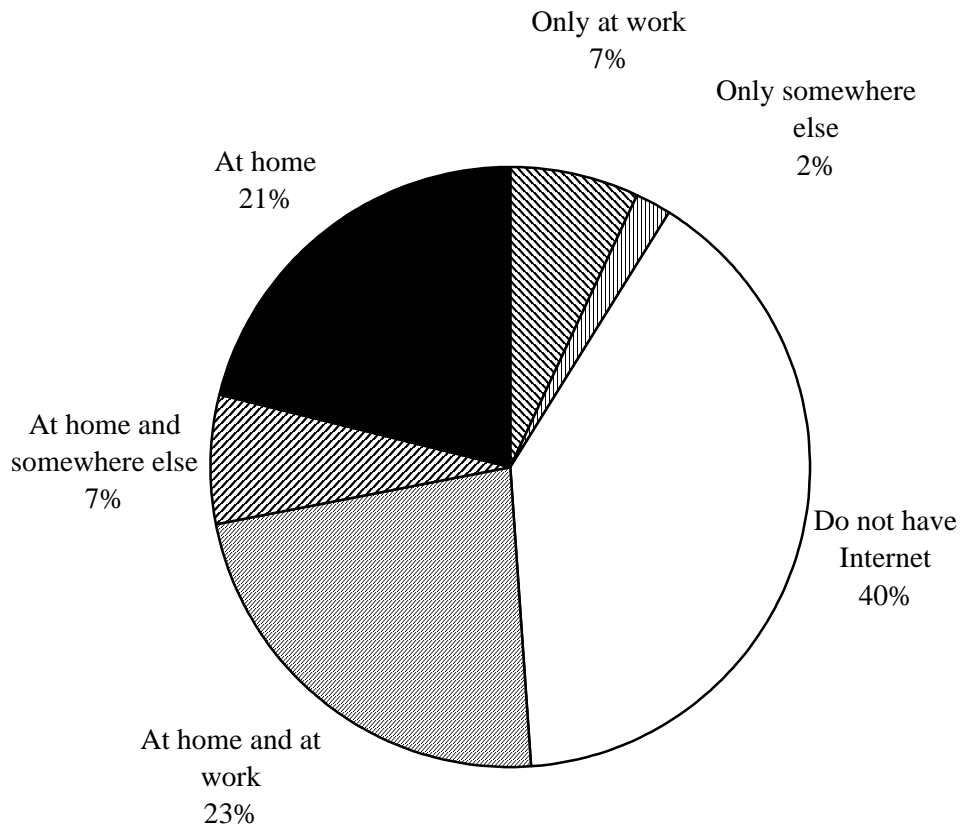
*Different measurements for Internet statistics.*



## Swedish People and the Internet

Half of the Swedish people today have access to the Internet in the home, and most have access both at home and at work. Another 10 percent have access to the Internet at work or somewhere else. Yet, at the same time, 40% do not have access to the Internet at all, and half of the Swedish population does not have Internet access at home.

### *Swedish people's access to Internet*



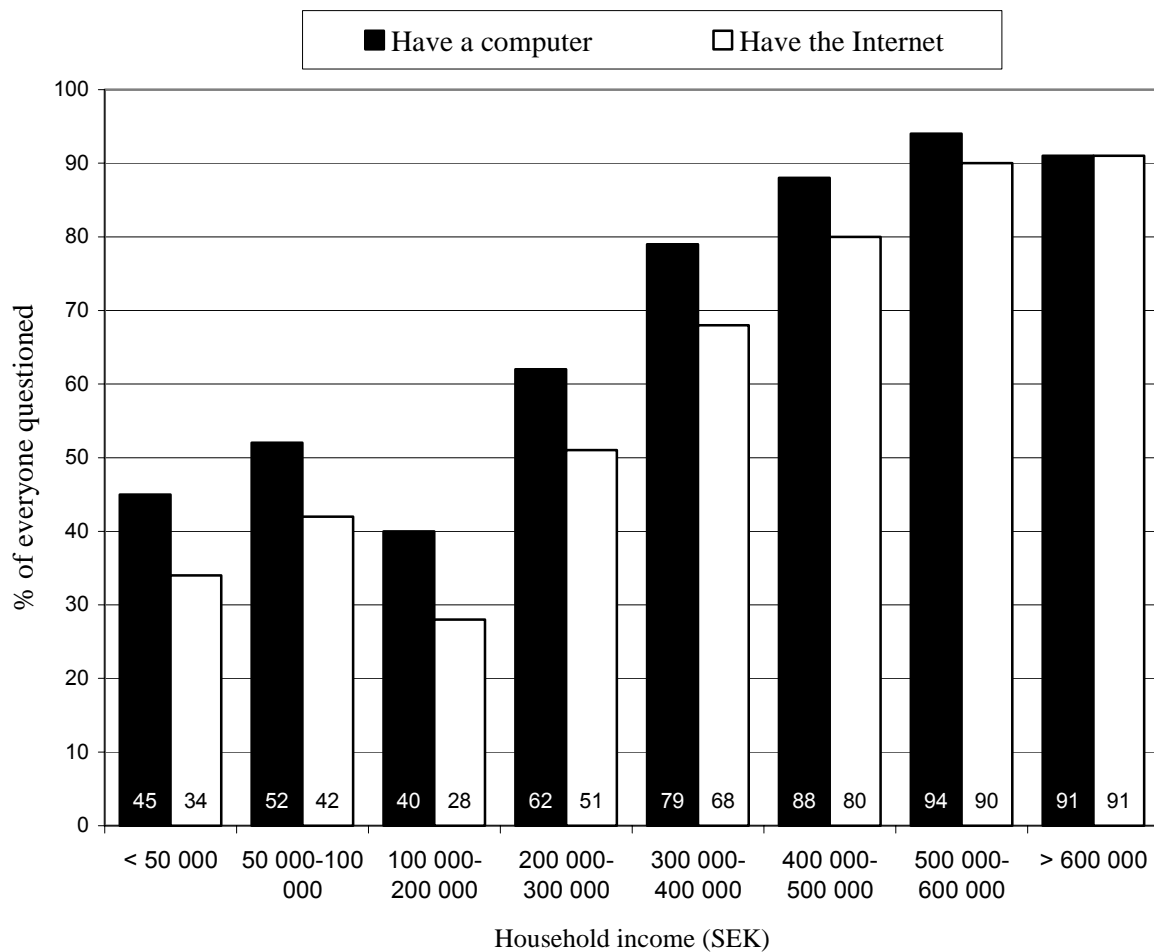
## What are the main reasons for getting the Internet?

1. 62% say that it is "the ability to communicate with other people."
2. 52% say that it is "the amount of useful and accessible information"
3. 52% say that it is "the availability of goods and services."

## Who has access to the Internet?

Internet use demands access to a computer and a connection to the net, normally via a telephone modem. Thus an economic investment is also necessary, and a certain technical competence, and an interest which motivates this investment. From the beginning the Internet was something for those interested in technology and other special interests, but today, when half of the Swedish people have acquired access to the Internet, the users reflect a broad average for the population. But there are still great differences between different population groups - between rich and poor, high and low education levels, between young and old, and even between men and women.

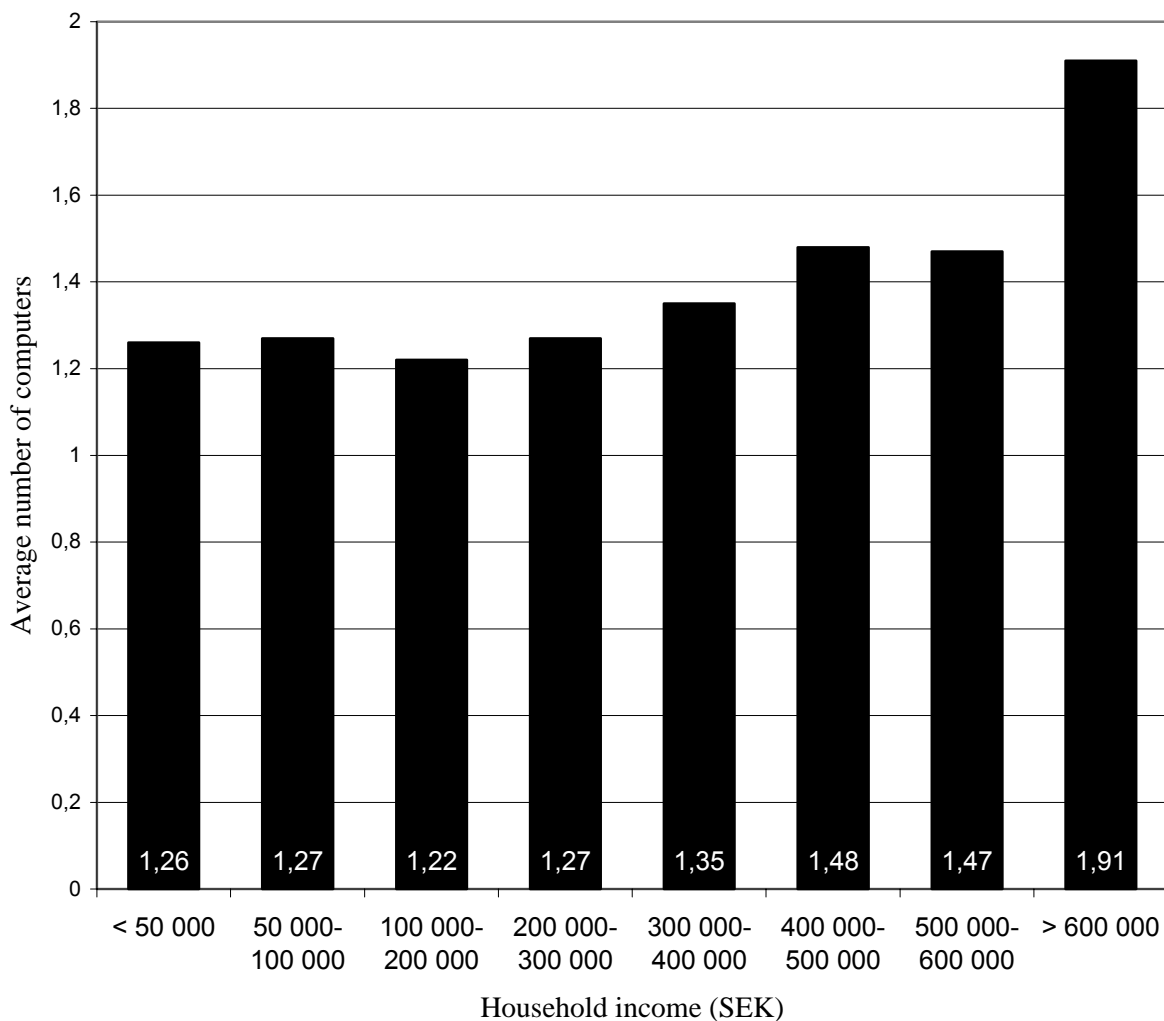
*Computer and Internet access according to household income.*



## The number of computers in the home

Another condition that influences the possibility to use the Internet is if there is access to several computers in a household with several people. The man or the oldest son has a tendency to occupy the computer. The higher the income, the more usual it is to have not only one computer with Internet access, but also to have several computers, and thus the possibility of having a personal computer.

*The number of computers according to different income groups.*

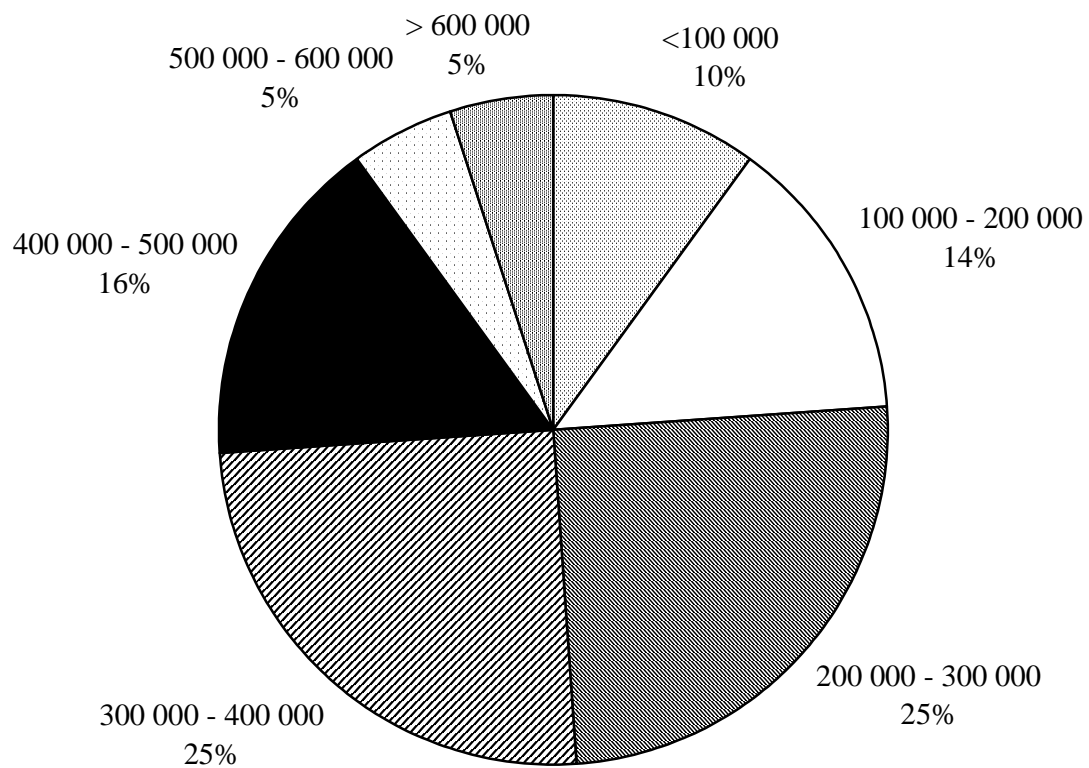


Computer and Internet possession presents a strong connection with the level of the household income. The higher the income level, the more common it is that one has a computer at home with access to the Internet. In the highest income levels 90% have the Internet at home, while the corresponding number is 28% for those who earn between 100 and 200,000. The number of computers in the home also rises with a higher income. 16-18% of those who have a household income between 100 and 300,000 have more than one computer in the home, while 50% of those with a household income over 500,000 have two or more computers. On the other hand, the time of usage differs very little between income groups, with the exception of the low-income group in which most students happened to be.

## Difference between share and amount

It is important to remember that most Swedes have a household income between 200 and 400,000, and with respect to this group is relatively few who have the high incomes, thus most Internet users are not high-income earners or academics. Half of Internet users have a household income under 300,000.

*Internet users divided according to household income. (SEK)*

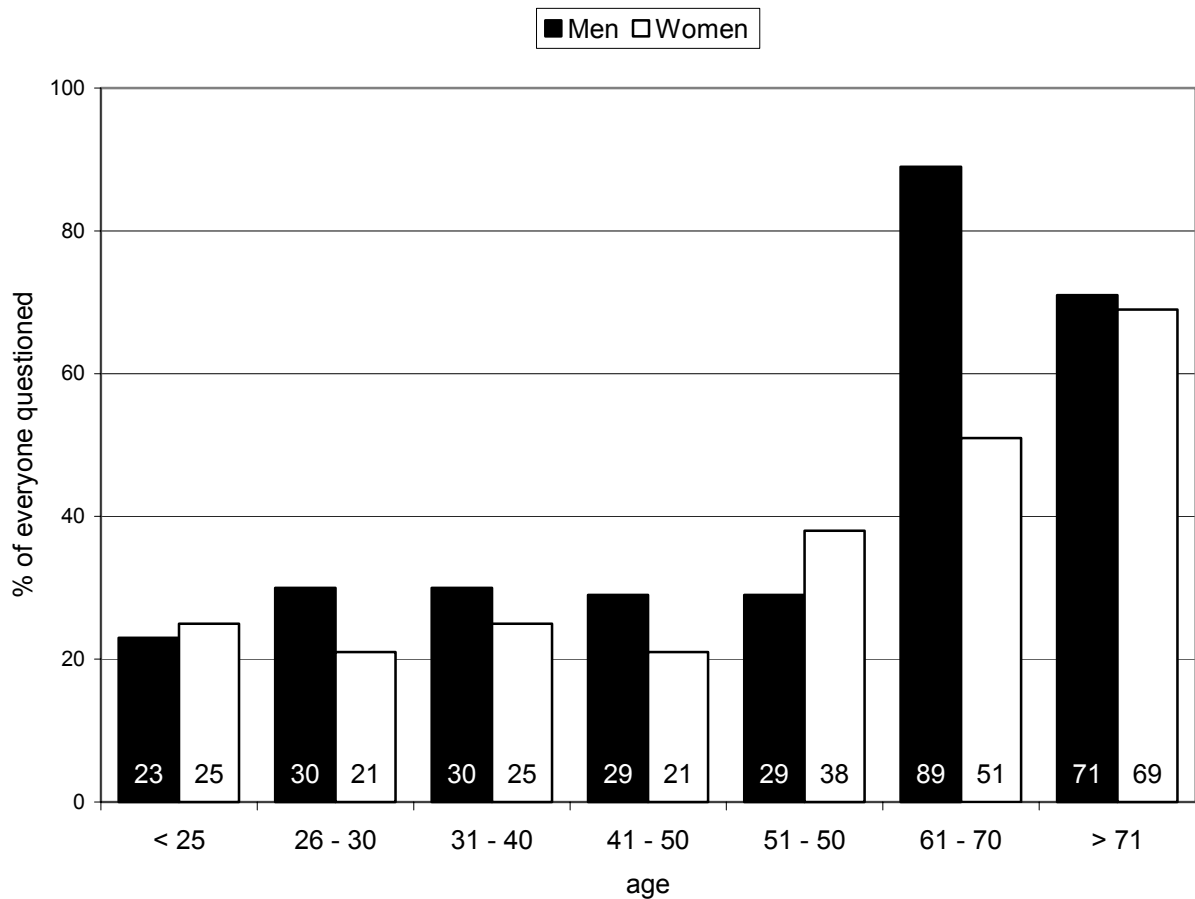




## Who does not have access to the Internet?

Those who do not have access to the Internet are partly those 38% who do not have a computer, and partly those who have a computer, but for various reasons have not gotten Internet access. It is mainly the elderly who do not have a computer, but in every age group there is at least one-fourth who do not have a computer.

*The share of different age groups who do not have a computer.*



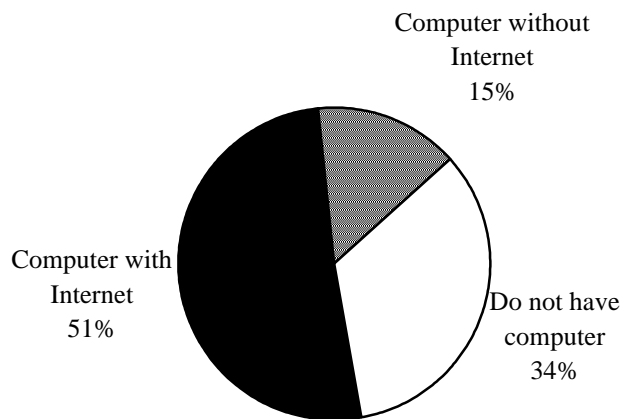
Of these, almost all younger persons have tried using a computer while around half of the older persons have not had any opportunity to try. What interest do these "computerless" people have in getting a computer? Just over half of them are not interested in getting a computer, 16% are doubtful, and 26% are interested. This means that there is the potential for another 8% of the population who are interested in acquiring a computer and the Internet for themselves.

There are also people who are interested among those who already have a computer but not the Internet. Their main reasons for not having for not having the Internet are economic. It is too expensive, they have no modem, or their computer is too old. Four percent of the populations exist as potential Internet users. But here there are also people who think that the Internet is not interesting for them.

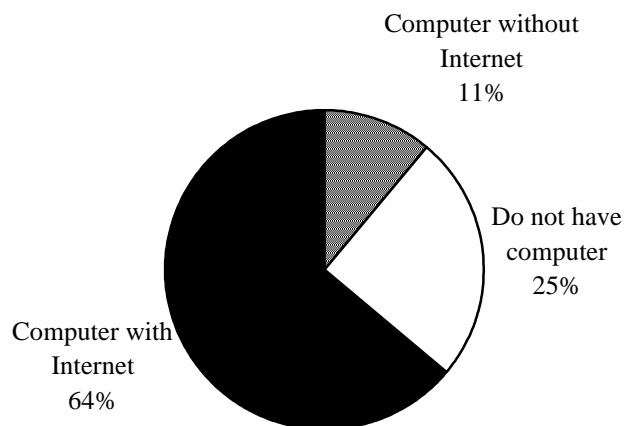
## The projection for development

Aside from the 51% of the population who today have access to the Internet there is another 12% who are interested in getting themselves Internet access. It is the 8% who do not have a computer and the 4% who have a computer but not the Internet who are interested in getting the Internet. This means that the spread of the Internet has great possibilities for continuing until about 65% of the population has access to the Internet at home. After this the growth will probably begin to level out.

*Access to computers and the Internet today*



*Access to computers and the Internet tomorrow*



Why not the Internet?

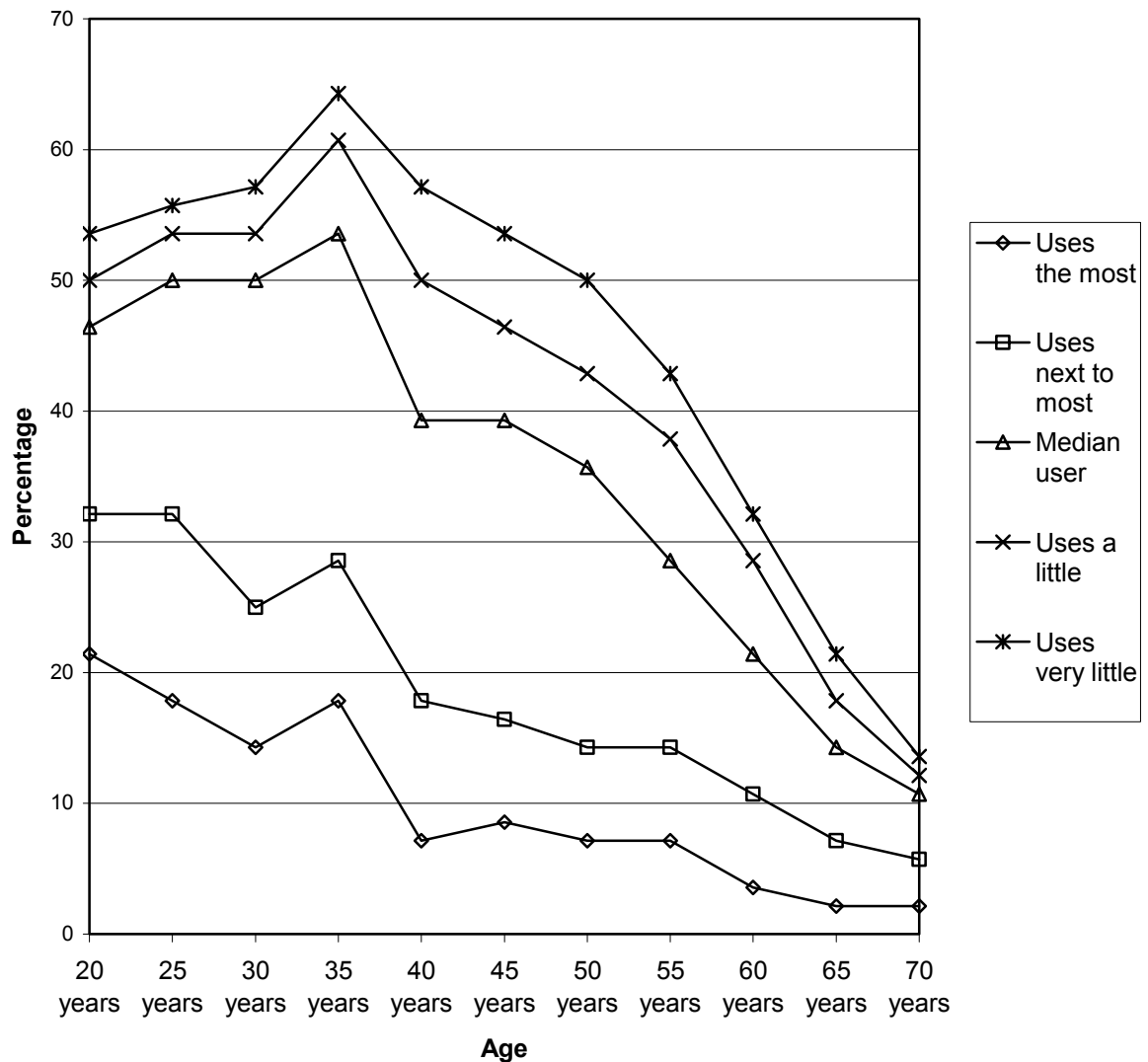
Following are reasons that those with computers had for not having gotten Internet access.

- 1. Not interested in the Internet (50%)
- 2. The Internet is too expensive (25%)
- 3. No modem (21%)
- 4. There is nothing interesting on the net (18%)
- 5. Bad computer (12%)
- 6. Too complicated (7%)

It was mostly young women who stated economic reasons and a bad computer as main reason for not having gotten Internet access.

Differences between age groups and between men and women.

*Internet use in different ages divided into five groups according to the time spent on the Internet.*

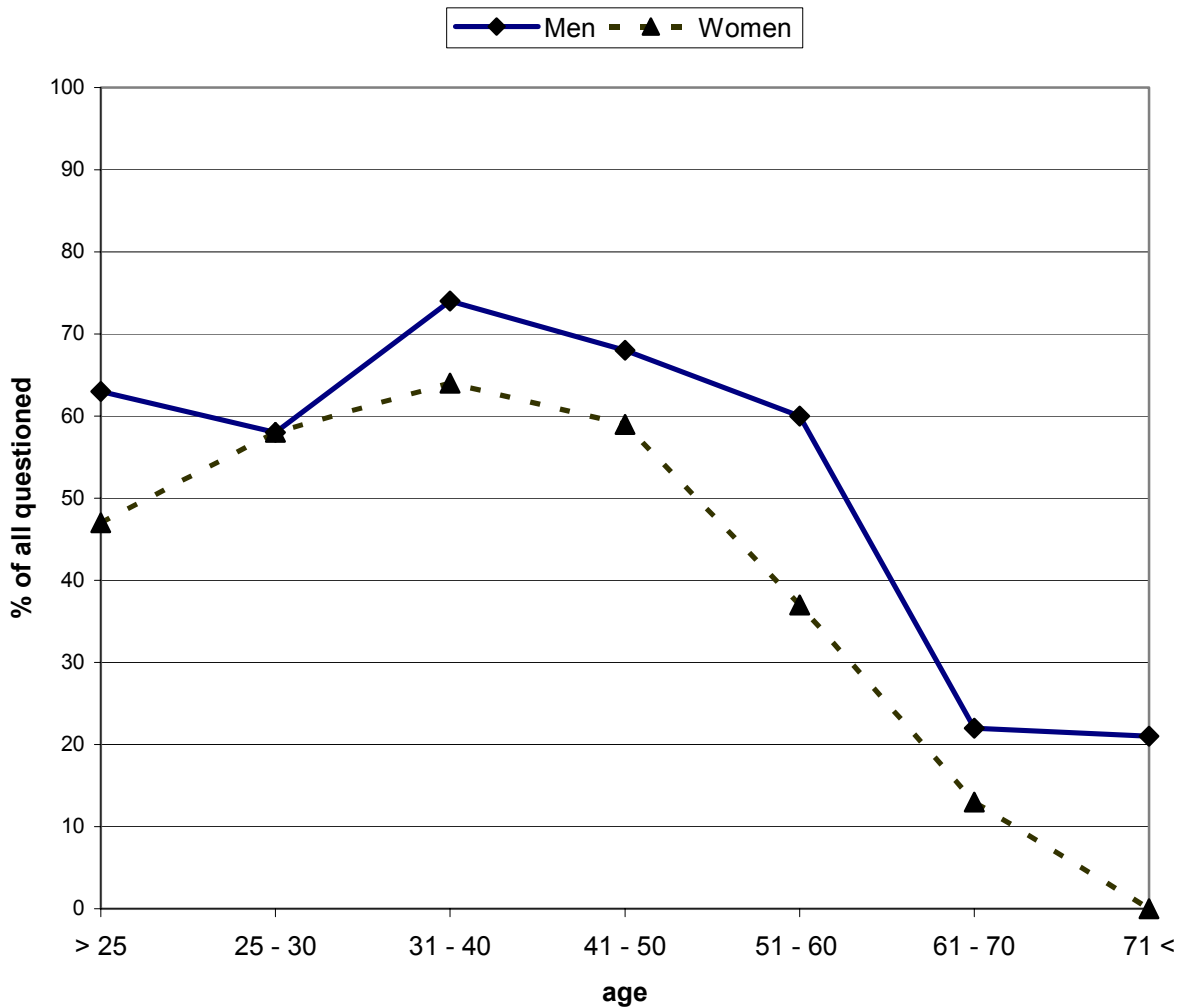


Those who spend the most time on the Internet are in all ages, but the younger tend to dominate. Otherwise it is in the ages between 30 and 40 who spend most time on the Internet. After 50 years of age the Internet usage begins to decrease, and then to sink quickly after 60 years of age. Among the oldest users, Internet usage is between 10 and 15%.

If we compare men and women the differences are fairly small with regard to their Internet use. Men's access to the Internet is somewhat greater, and they spend more time on the Internet than women. It is especially evident in the oldest age groups.

	Men	Women
Access to the Internet at home	55%	47%
Access to the Internet at work	34%	32%
Access to the Internet somewhere else	18%	20%

Share of different age groups among men and women who use the Internet.



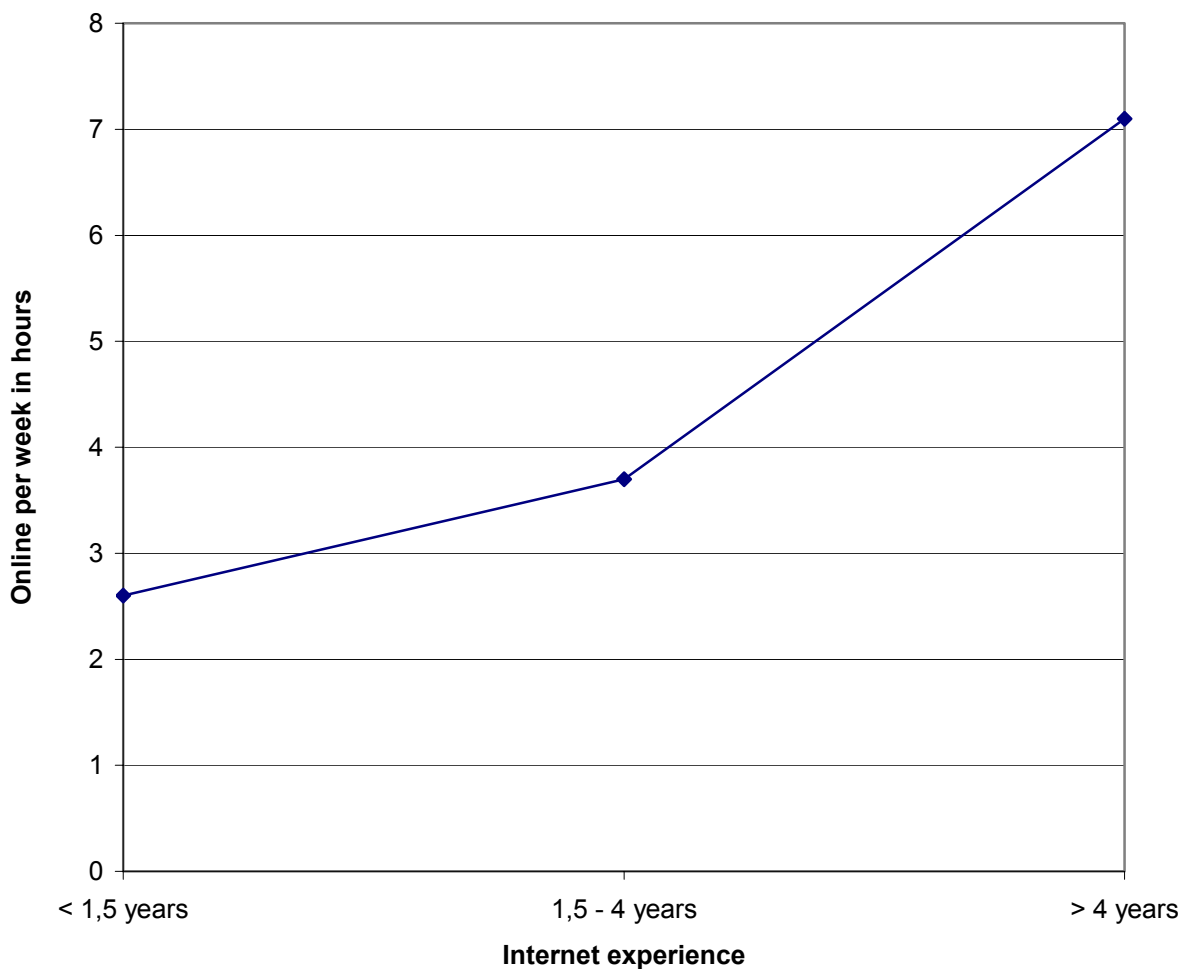
## What does extensive experience mean for the Internet?

Men spend more time than women on the Internet. This is true in almost all age groups. Another condition that influences Internet use is the time that men have used the Internet.

The longer the time one has use the Internet, the longer is the time that one spends on various activities on the net. If we compare those who have just begun to use the Internet with those who have been connected for several years, the differences become clear. Those with an Internet experience of more than four years spend three times as long on the Internet as a beginner. Larger differences in age or income do not exist between these groups, but there are more men than women and more younger people among those with long Internet experience.

Those who have used the Internet for a longer time are also more pleased with the Internet than others. They have gotten faster connections to the net and they are less worried about problems and dangers linked to the Internet.

### *Internet experience and on-line time*

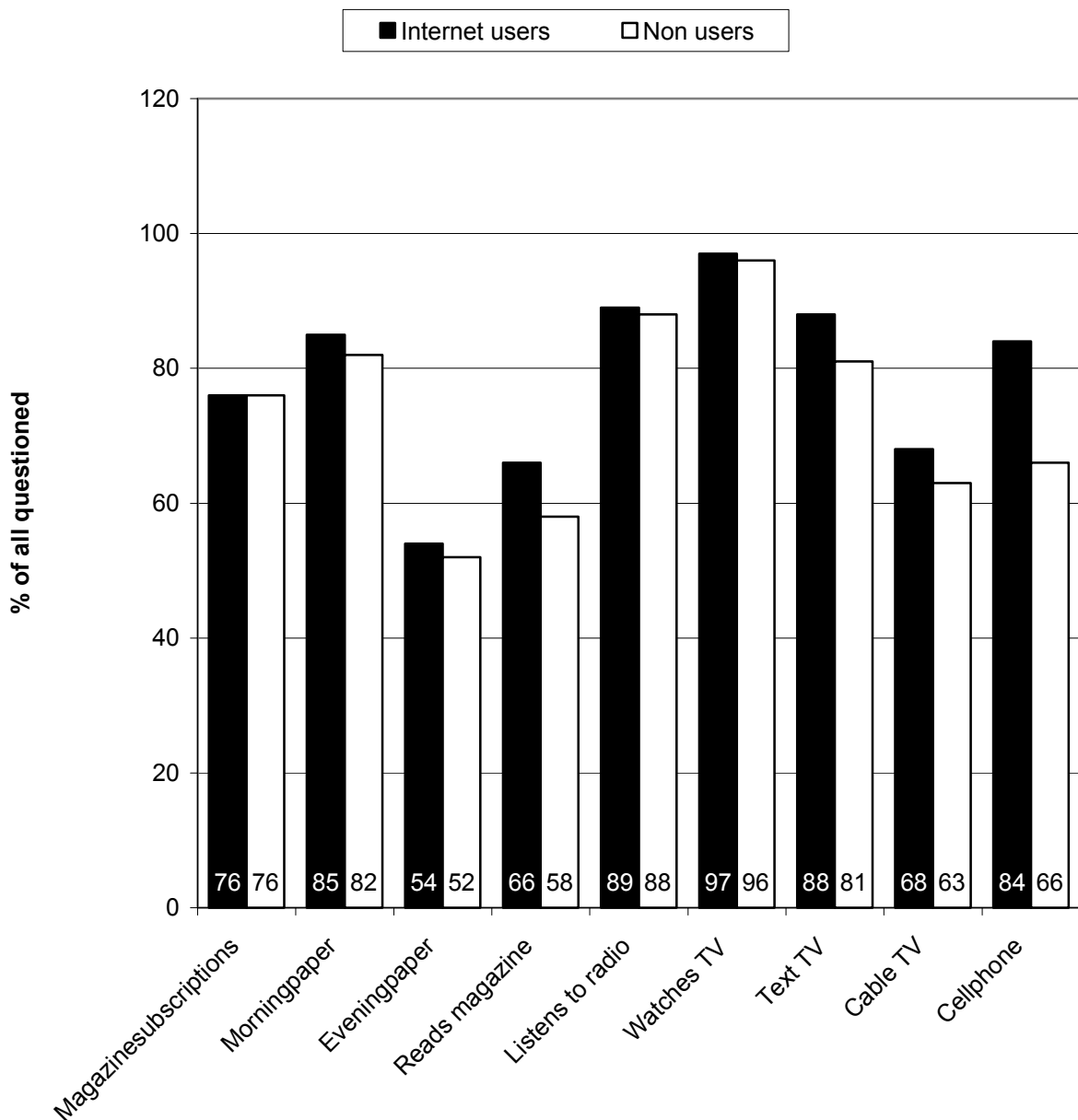


## Do Internet users differ from others?

Aside from the difference that many of the elderly do not have access to the Internet, Internet users do not differ from non-users when it comes to, for example, media habits, standpoints on friends and family, feelings of loneliness and isolation, confidence in the government and authorities, etc.

They watch TV just as often, read the morning and evening papers, and listen to the radio. A certain difference exists regarding text-TV and how normal it is with a mobile telephone.

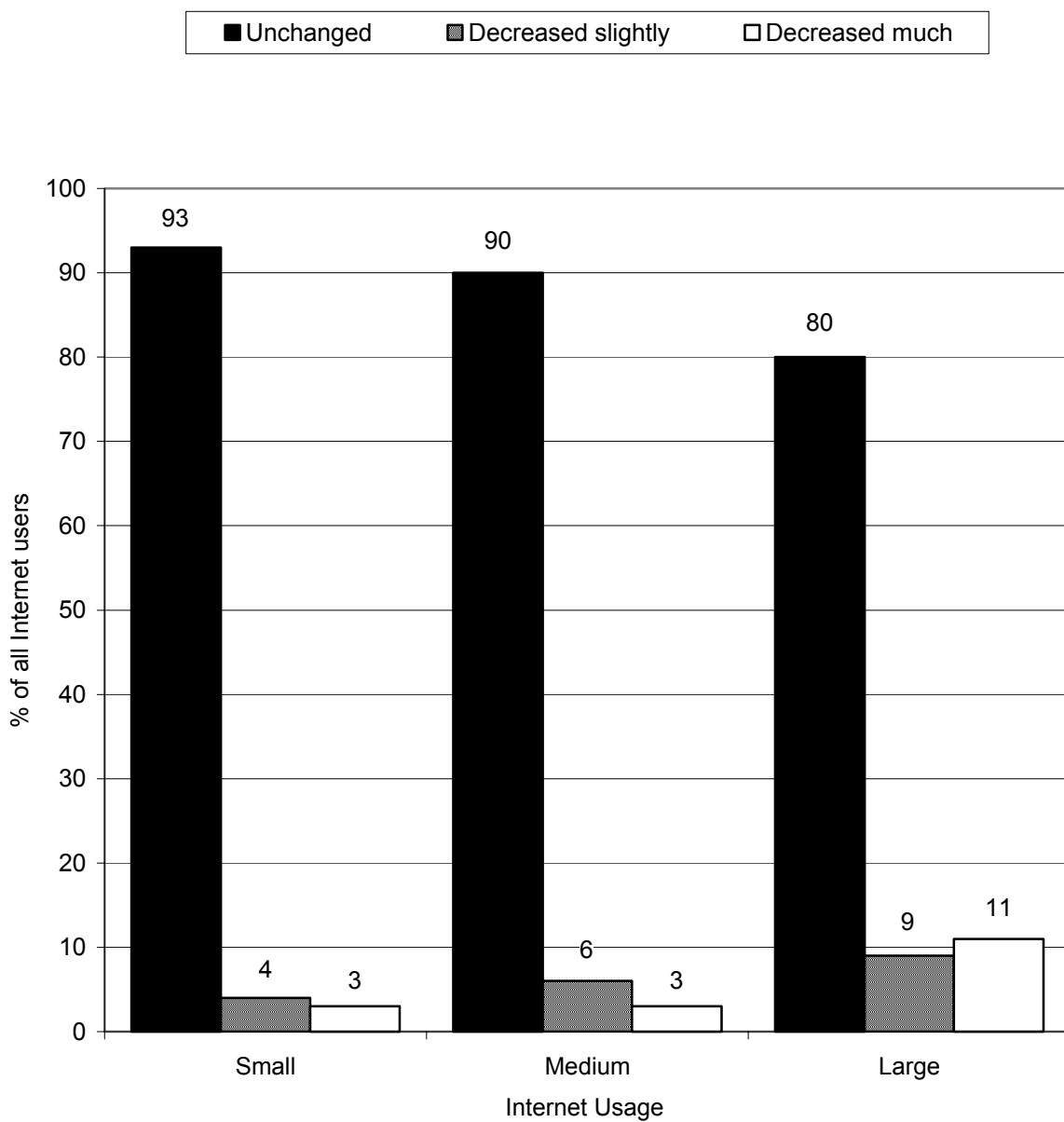
*A comparison of media usage for Internet users and non-users.*



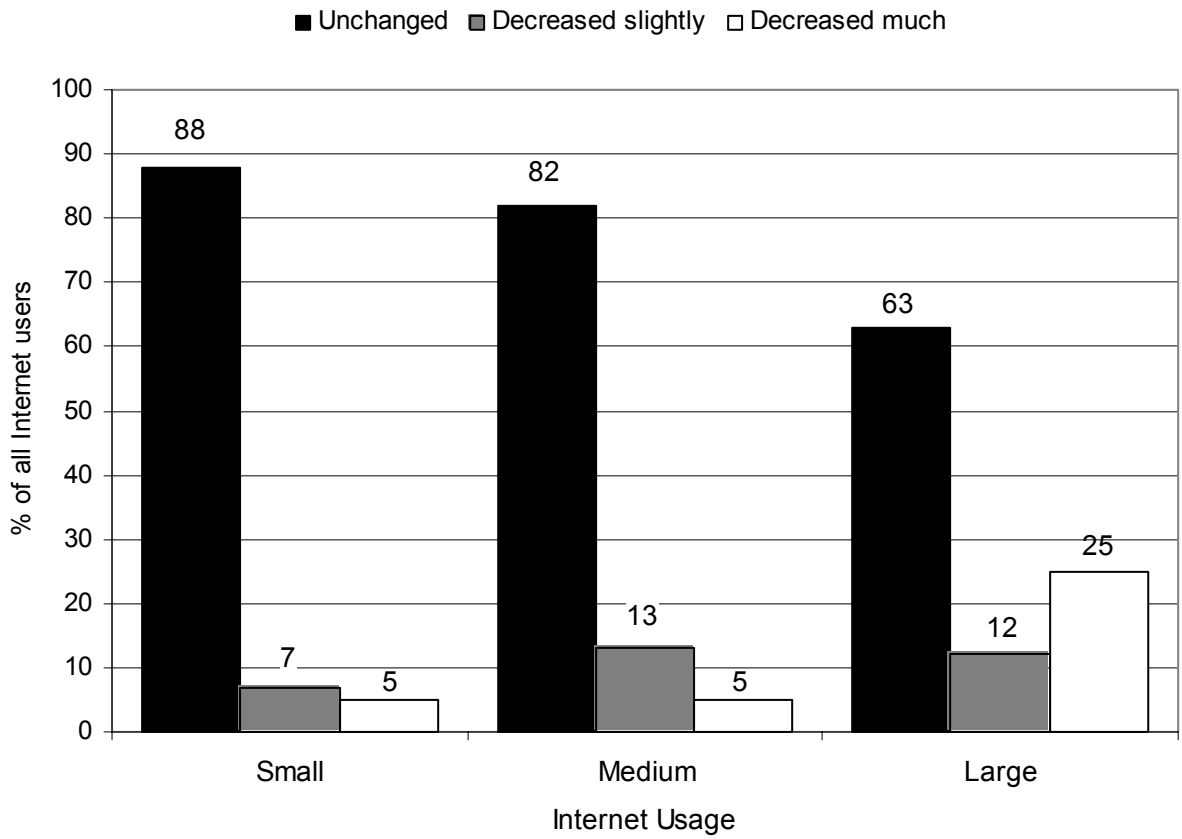
## Does the use of the Internet influence the use of other media?

Every new medium influences the use of old media. It can have something to do with the fact that certain functions are better fulfilled by new media or just the fact that the time that is used for the new media must be taken from somewhere. Earlier in media history however, new media such as radio and TV, and new equipment such as video and tape players have not eliminated old media such as books and newspapers. On the other hand, their roll has partly changed. When Internet users spend time with on-line activities on the net, they must consequently take time from some other activity such as another media activity, family life, or social life. If the Internet can fulfill functions that the old media fulfilled, this influence will be even more apparent. In order to look closer at this, we divide Internet users into three groups: the 25% who use the Internet a little, the 25% who use the Internet very much, and a large group of 50% which lies in the middle. If the Internet influences the use of other media it should be most evident among those who are long accustomed to the Internet and among those who spend much time on the Internet.

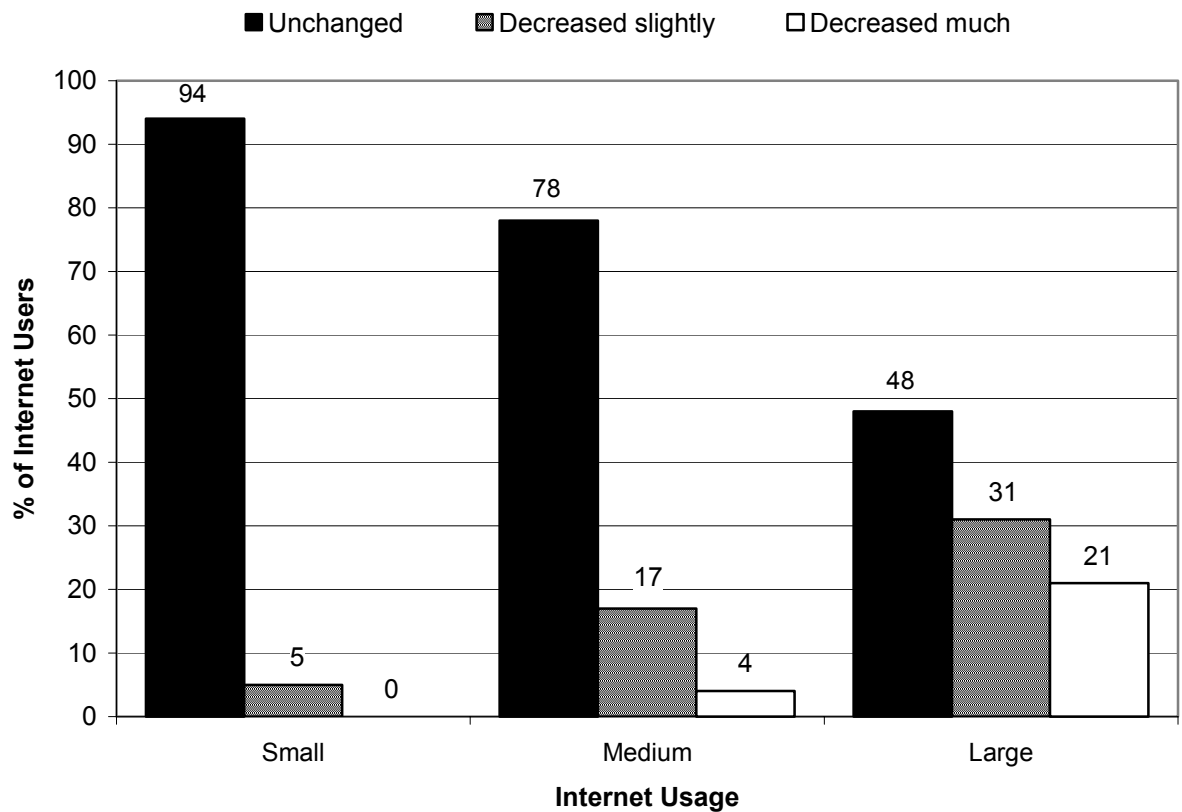
*How is the reading of the morning paper influenced by the Internet?*



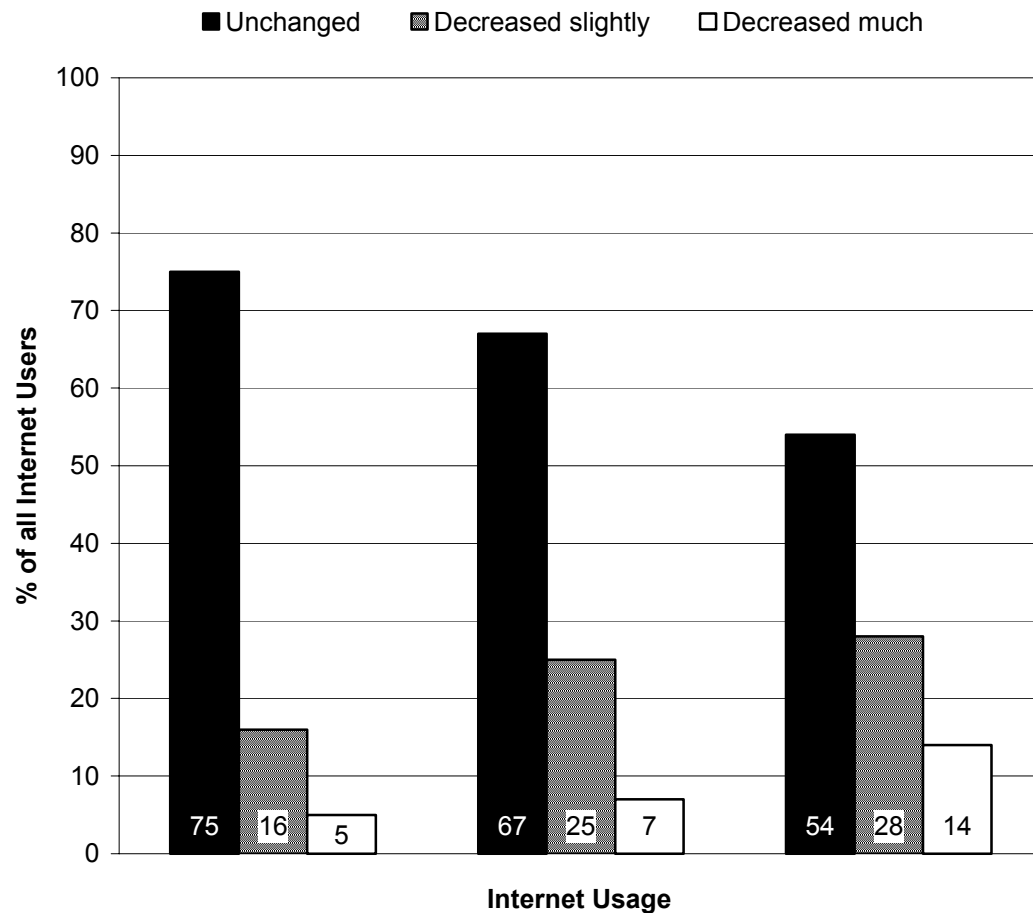
*How is the reading of evening papers influenced by the Internet?*



*How is TV viewing influenced by the Internet?*





*How is telephone use influenced by the Internet?*

Those who use the Internet to a limited extent report that they use other media just as much as earlier. Even with the great majority of Internet users the Internet's influence on other media is small. It is the telephone use and TV viewing which has been influenced somewhat. On the contrary many of the regular Internet users report that they have changed their media habits. They make fewer phone calls and watch less TV.

That it is just TV viewing and telephone use which are mainly influenced is logical. TV-viewing is the evening activity which takes up most time, and should one need to take time from some activity, reduced TV-viewing is the closest at hand. With regard to the use of the telephone, we can guess that many of the contacts which were previously managed via telephone can now be managed via e-mail. If there is one function that everyone uses the net for, it is to send e-mail. Everyone does it.

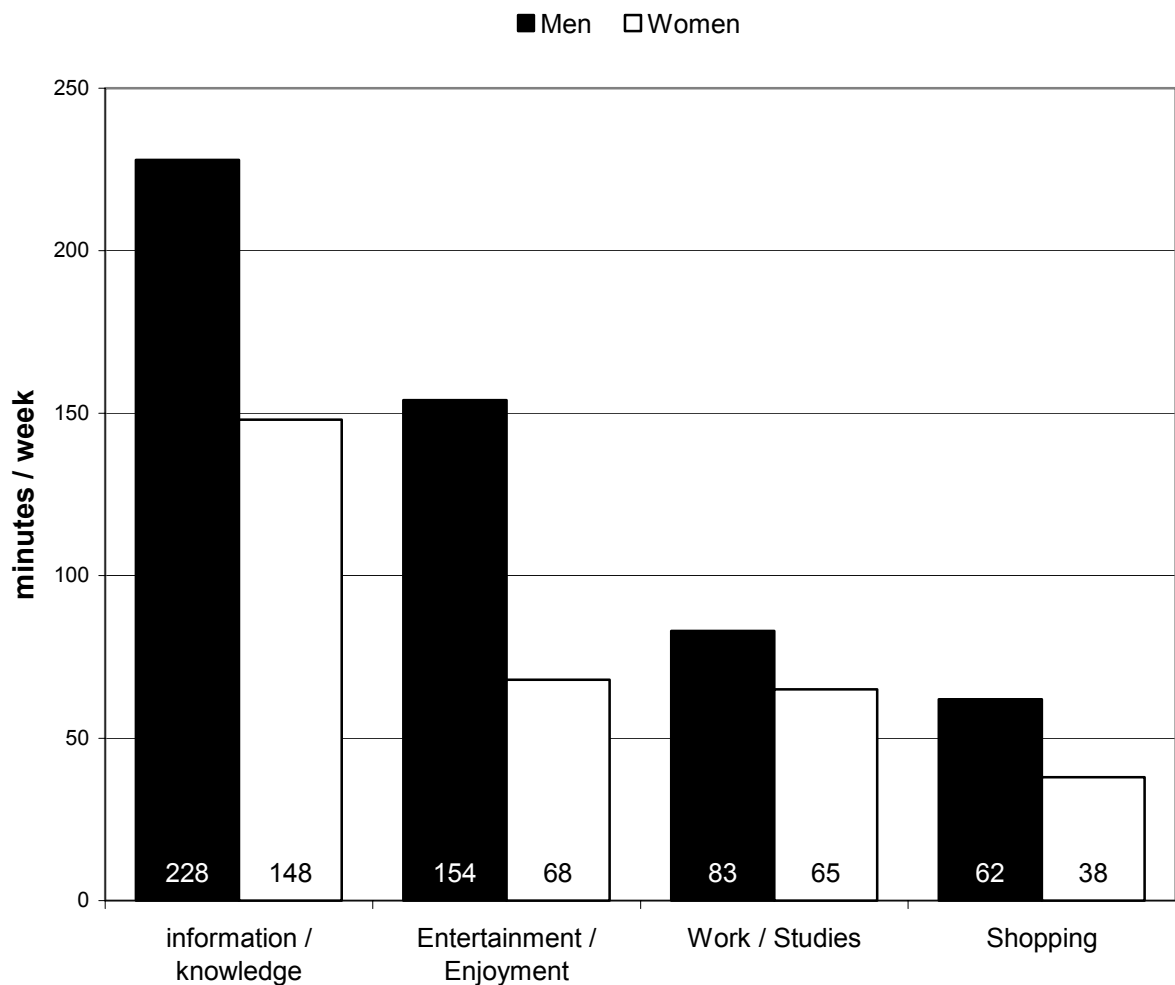
As for other changes, it is not thought that the reading of the morning paper is influenced as much, other than with the 25% who spend the most time on the Internet.

The Internet has so far not had any drastic influence on the use of any other media. But on the other hand the changes that are now evident are consistent and unambiguous. The longer one has used the Internet, and the longer time one spends on the Internet, the more the use of other media is reduced, especially TV, telephone, and evening papers.

## The Contents of Internet Use

The Internet offers a wide selection of all sorts of information which we can search through for our own purposes, and we can group these activities according to their contents. This can include (1) work and studies, (2) business and economy, (3) information and knowledge, and (4) enjoyment and entertainment. The dominant activity involves searching for different sorts of information. This is followed by enjoyment and entertainment, then work and studies, and finally business. Men spend more time on these activities than women, which is especially true when it comes to enjoyment and entertainment.

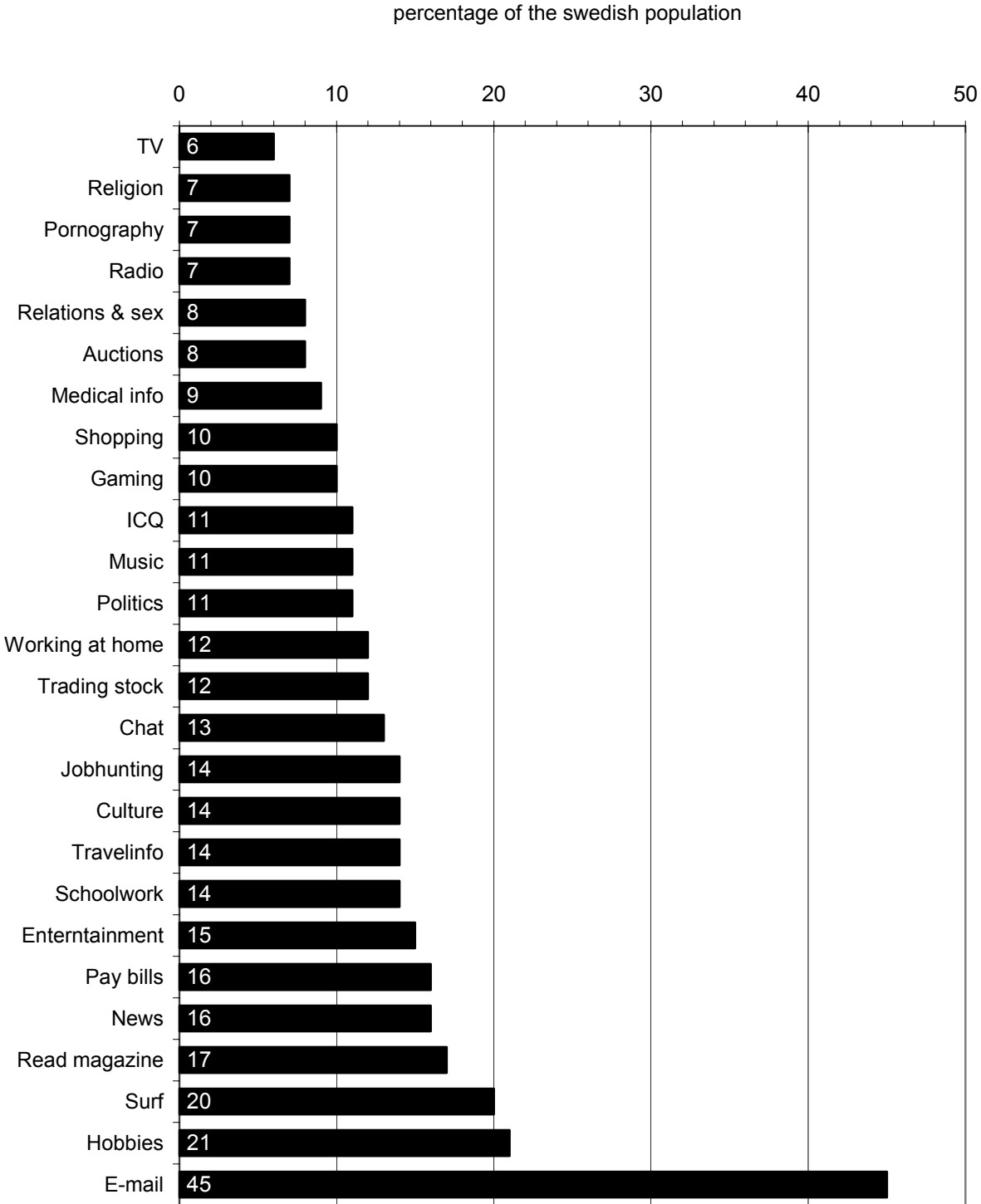
### *Contents of Internet Use*

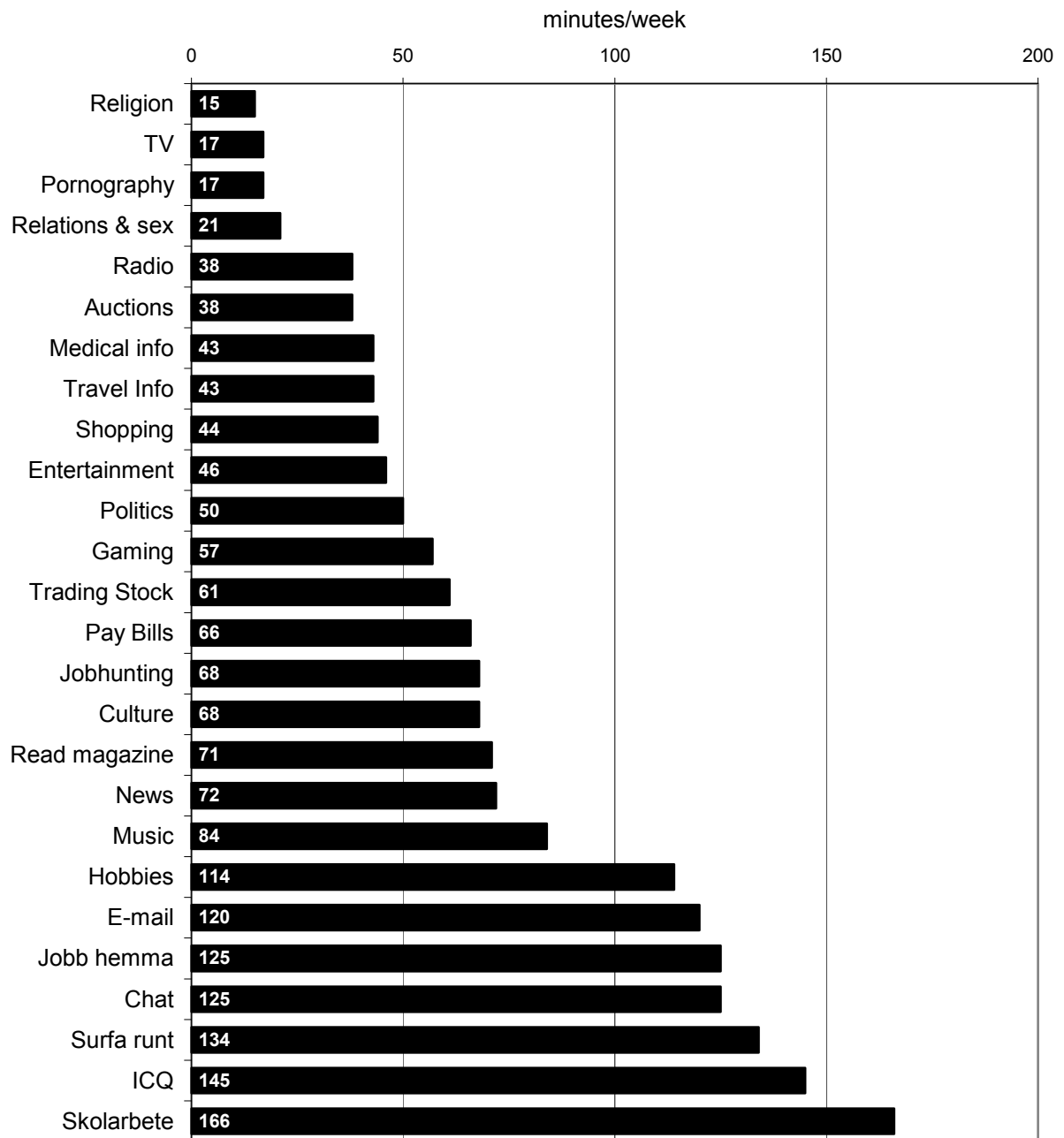


### The most common Internet activities

Thus the Internet is first a means of obtaining information, but behind this nonspecific expression a great deal of different activities are concealed. Certain activities such as sending e-mail are things that almost all Internet users devote time to. That is 90 % of Internet users, and if we include the entire population it is 45 % who use e-mail in the course of one week. Twenty percent of the population devotes time to hobbies and general net surfing, but only 7 % say that they have used the Internet to find pornography. This is probably an underestimation since a different statistic shows that pornographic sites on the net are well-visited. It is a weakness in the interview studies that people modify their answers for sensitive questions according to what is considered appropriate.

*The most common Internet activities during one week*



*Average time for different activities*

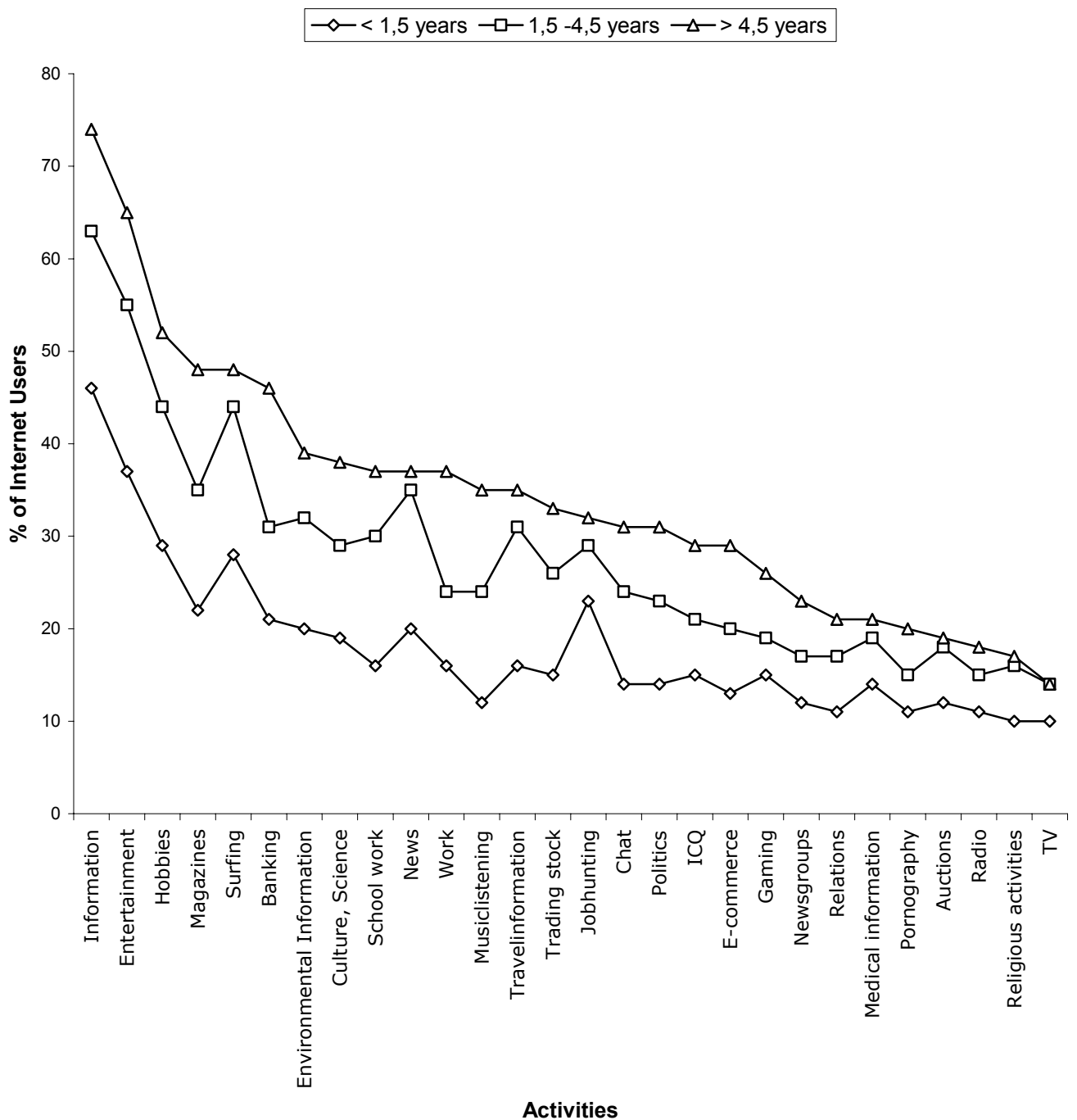
The Internet activities which claim the most time are schoolwork, ICQ (looking for contacts), general surfing, chatting, work that is done at home, e-mail, and hobbies. Here it is a question of essential work which, through the Internet, can be done at home in front of the computer. It is also a question of maintaining or creating new contacts with other people and where there is also time for personal special interests or general information searches.

## Does Internet use change with time?

The longer the experience one has with the Internet, the longer time one spends on the Internet. This is true for most activities. This includes general information seeking as well as enjoyment and entertainment. It is then one becomes accustomed to reading magazines or listening to music via the Internet, and one also learns to use the Internet for bank errands and stock trading, travel information and schoolwork. Contrarily, the less common activities such as listening to the radio and watching TV via the Internet are not so influenced by Internet experience.

What is the Internet used for? A comparison between beginners and experienced Internet users.

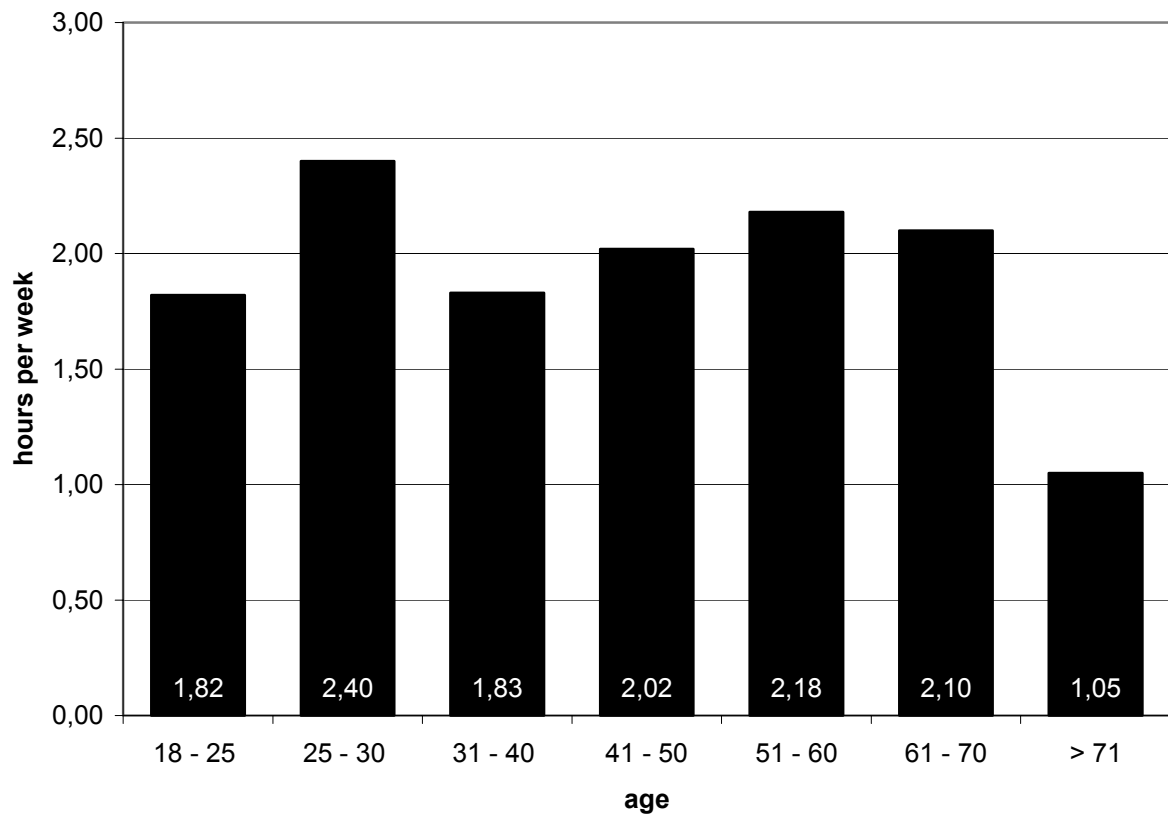
*Does Internet use change focus over time?*



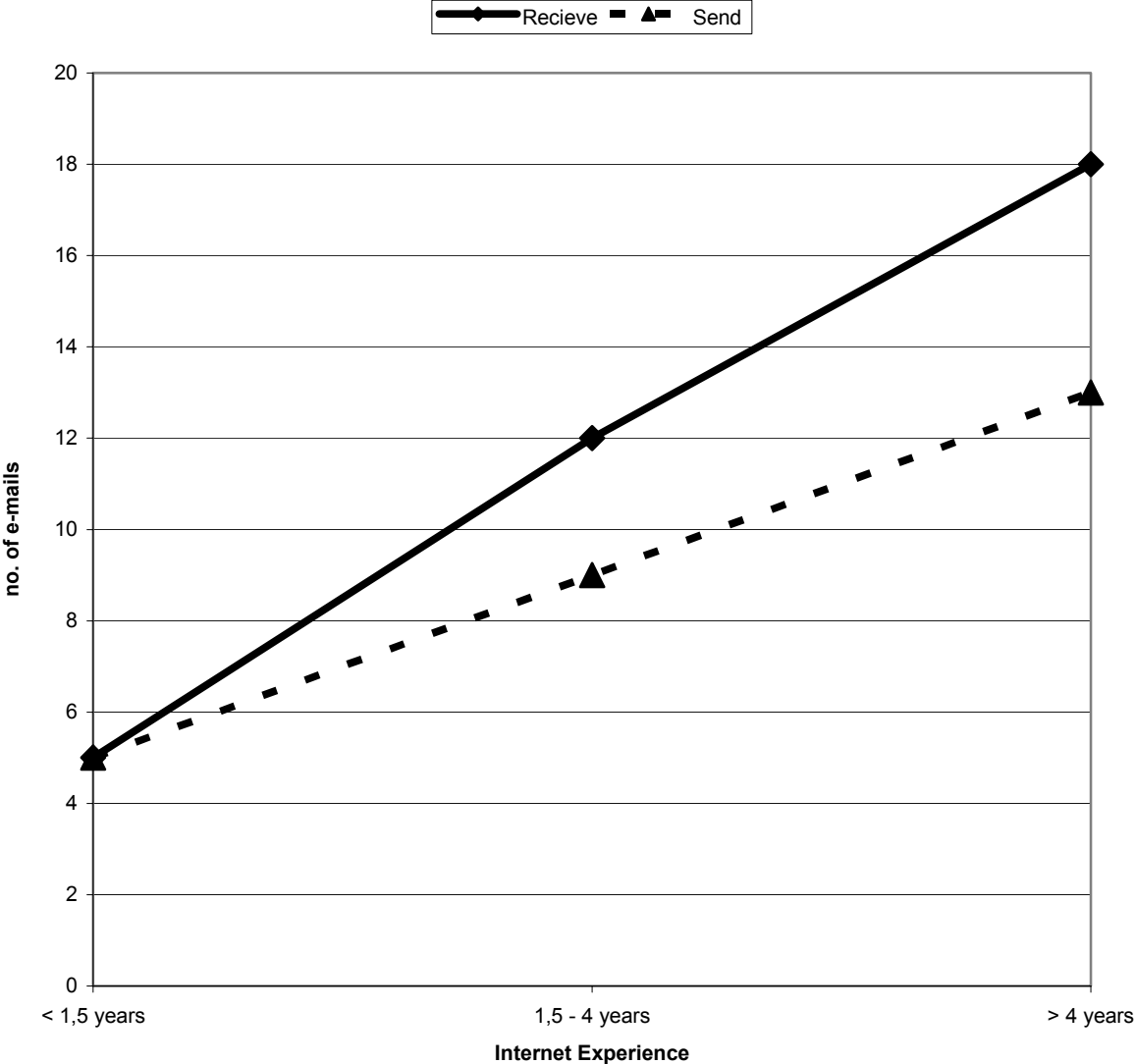
## E-mail is something that everyone uses.

Nearly everyone who has access to the Internet uses e-mail. It is an easily understandable system which builds upon the ability to send normal letters, only simpler, faster, and cheaper. If we compare the time which is spent on writing e-mails, there are no variations among different age groups, with the exception of the very oldest. However, those with more Internet experience both send and receive markedly more mail.

*Time spent on e-mail in different age groups*



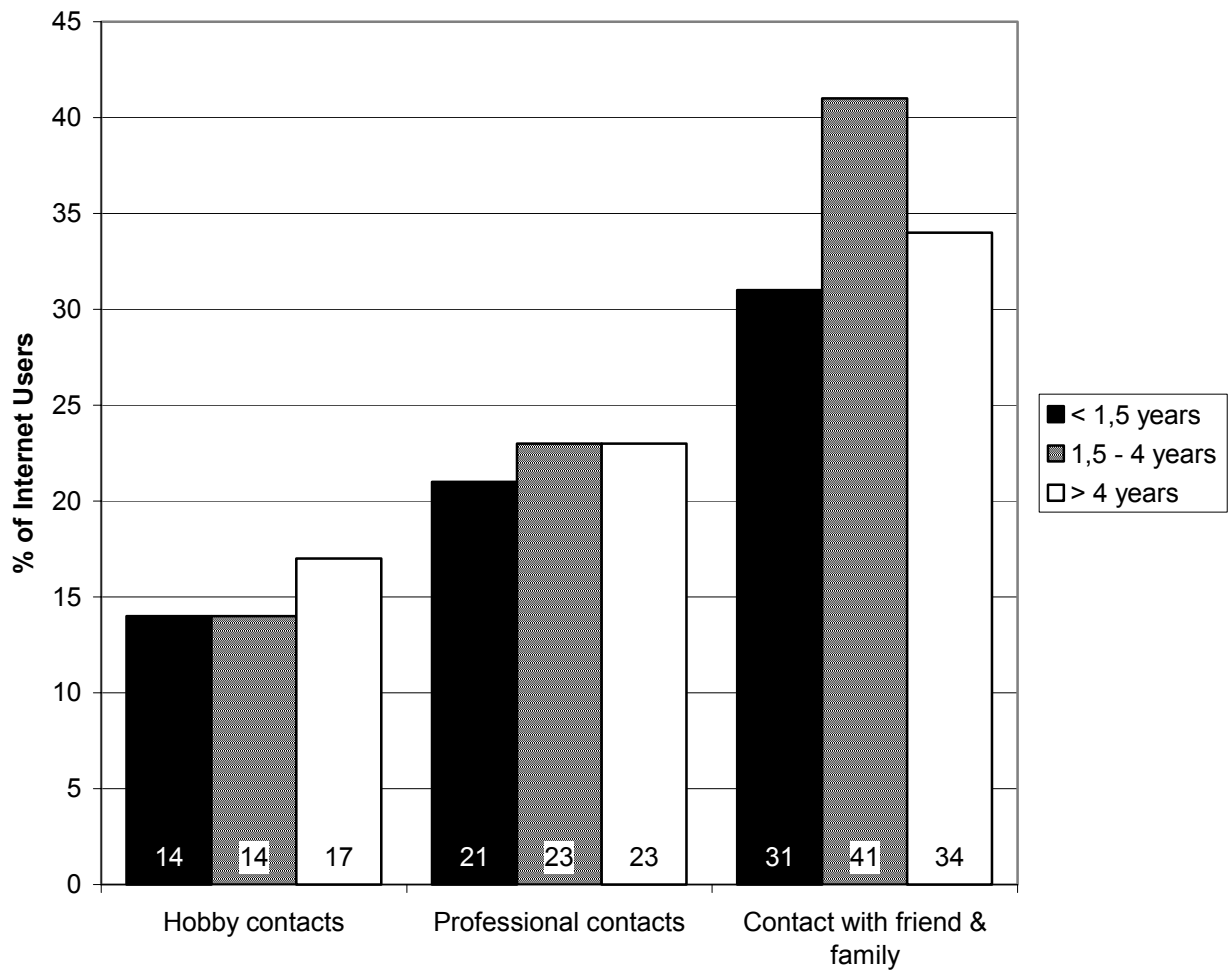
Amount of e-mail per week.



## The Internet as a communication channel

There has been apprehensions that Internet use would isolate people and cause them to sit and watch a computer screen hour after hour. But we have seen that everyone uses e-mail in order to communicate with other people and it seems as if Internet users' contacts with other people have increased with the use of the Internet. This includes even contacts who share the same hobby or work. It also includes family and friends. The longer the experience one has with the Internet, the more contacts one has.

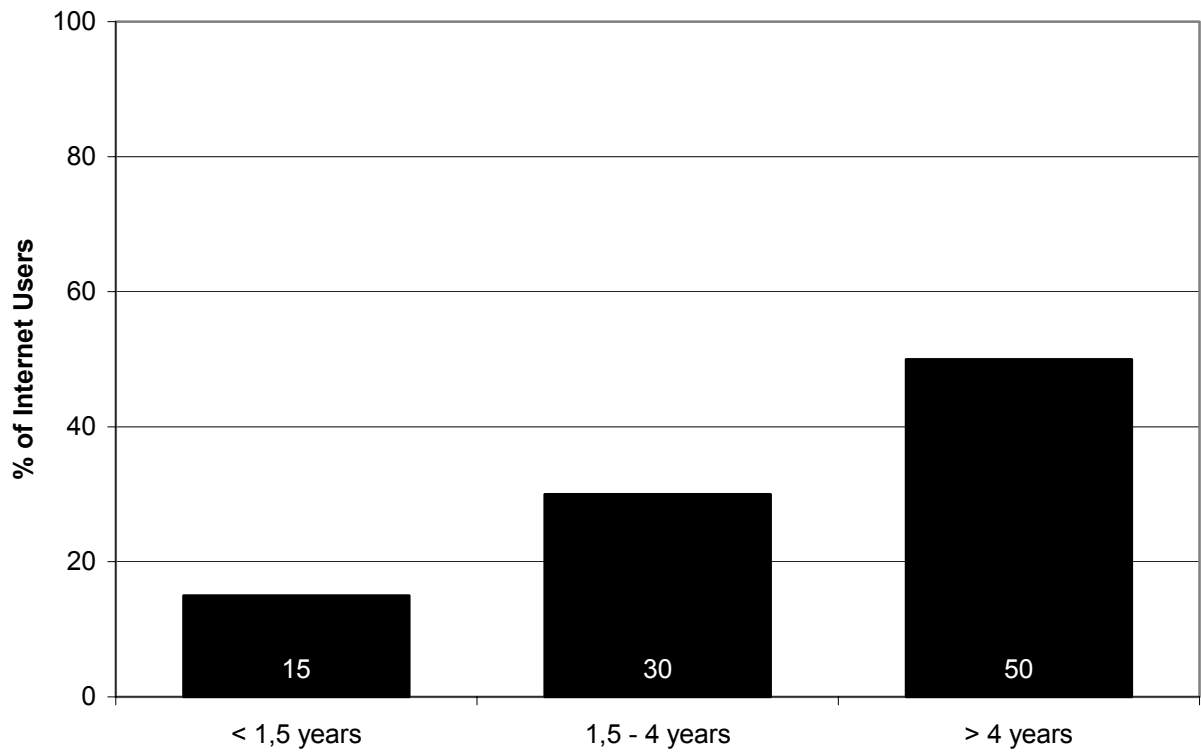
*Has the Internet brought increased or decreased contact?*



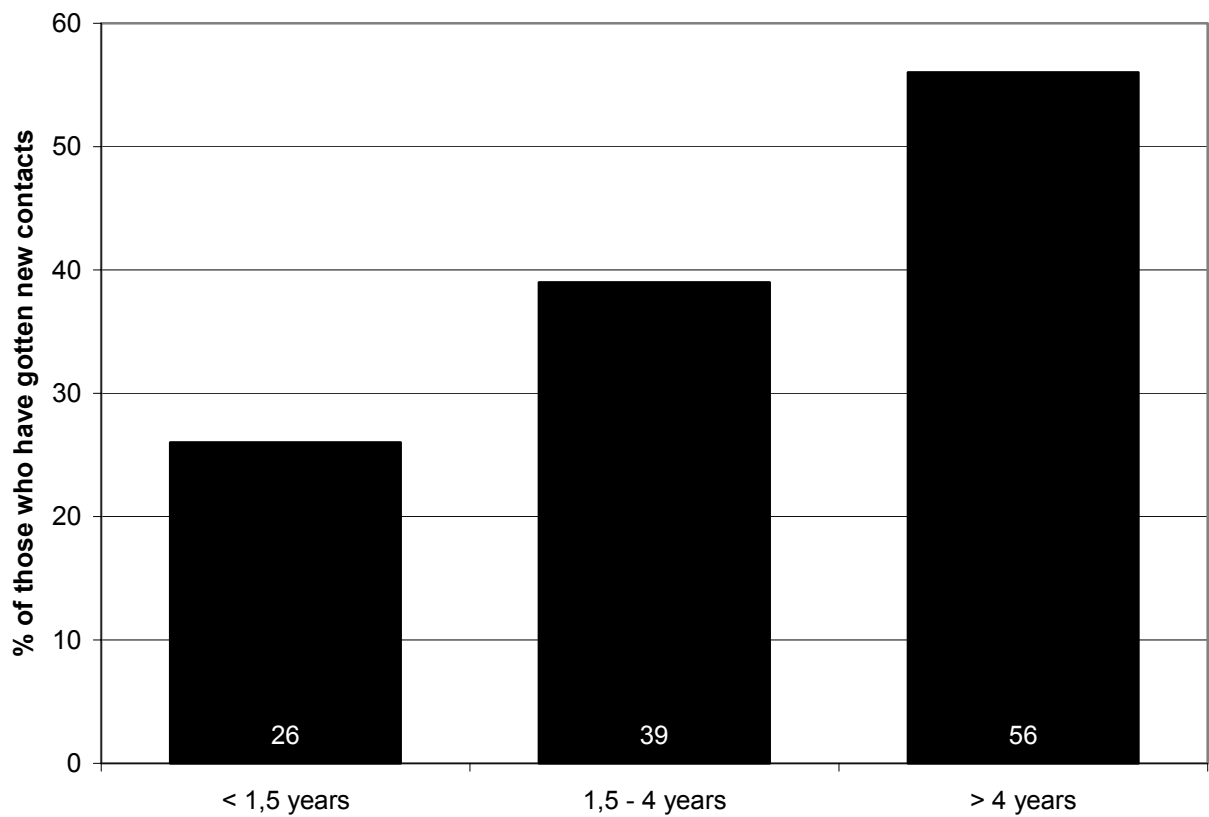
Internet use has also been the basis of new acquaintances, and surprisingly many have later met in person. Between 15 and 50% of Internet users state that they have met new contacts through the Internet, and 25 and 56% report that they have also met that person in real life. Among those qualities that the Internet is most appreciated for is for the ability to communicate with other people.



*Share who state that they have made new contacts*



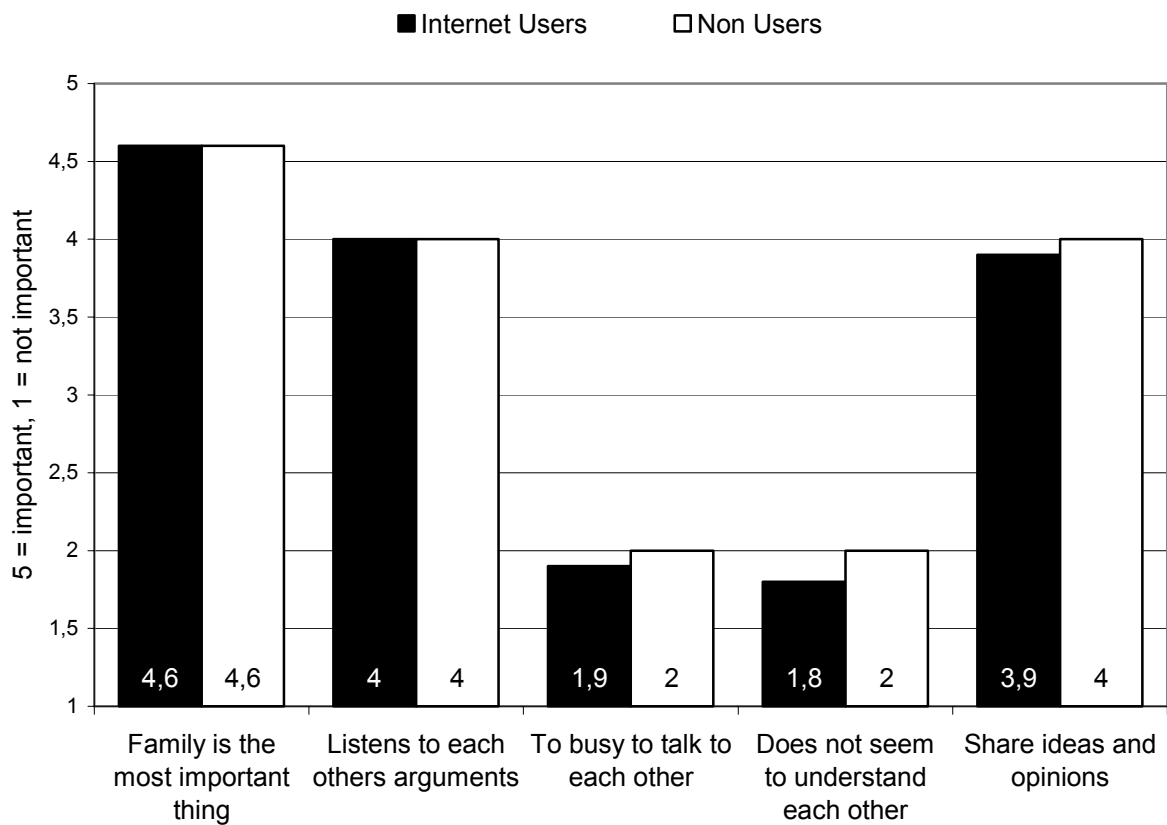
*Share who state that they have later met that person*



## The social effects of Internet use

The family is the most important thing in life. This is what everyone believes regardless of whether one has access to the Internet or not. The differences are also small when it comes to other aspects of family life and family relations. Internet users and their families do not differ in this respect from those families who do not have the Internet.

### *Family relations and family life*



## The Internet and democracy

Great hopes are fostered in the belief that the Internet and the new technology will ease and strengthen democracy. These are, however, expectations that are not shared by Internet users.

They are generally skeptical to the Internet's possibilities to influence and change the political life. This includes everyone regardless of the length of experience with the Internet. Few agree with statements like:

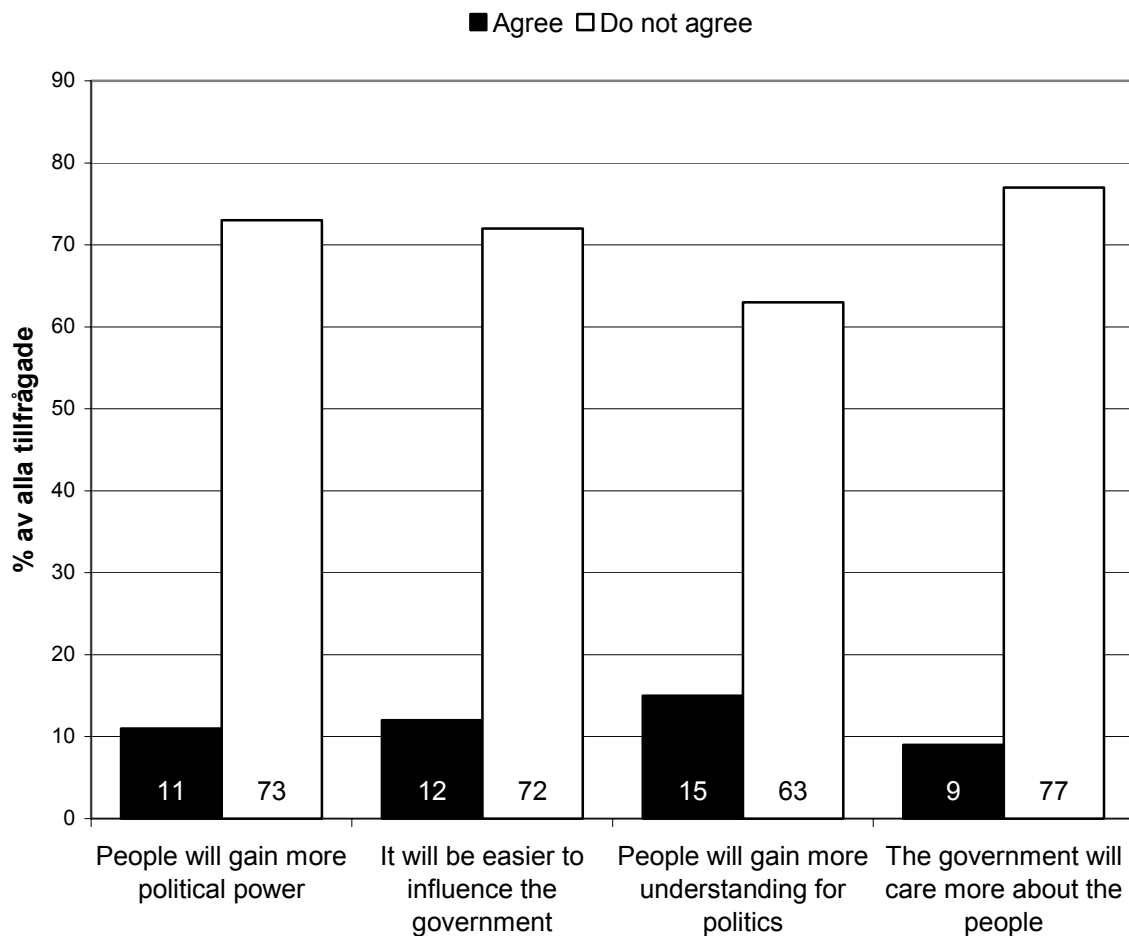
Through the use of the Internet, will people have more political power? (11%)

Through the use of the Internet, will people like yourself be able to easier influence the government? (12%)

Through the use of the Internet, will people like yourself be able to easier understand politics? (15%)

Through the use of the Internet will the authorities concern themselves more with people in general? (9%)

*Share who agree with the assertions on Internet and democracy.*

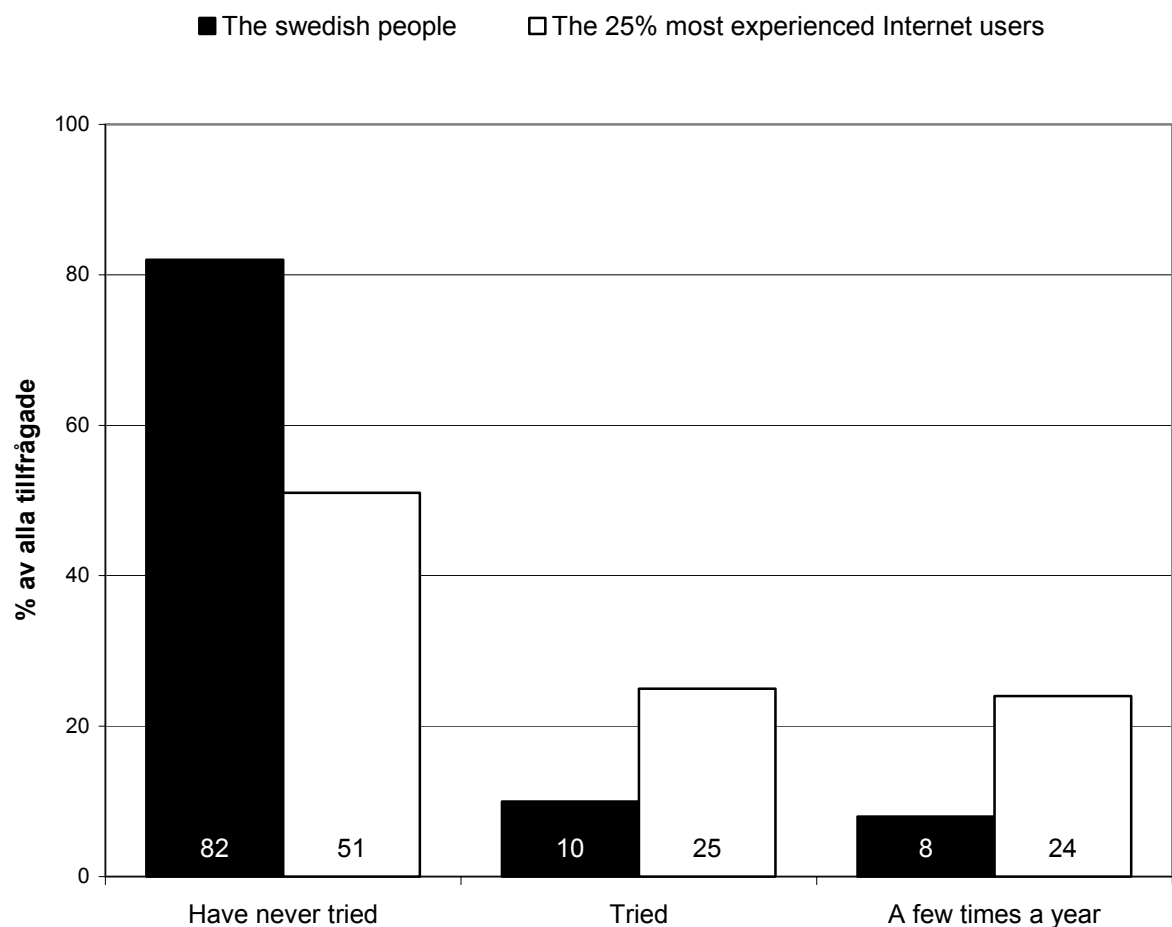


It is also relatively few (10% of the population) who use the Internet for informing themselves on politics and civil information.

## The E-commerce which is not picking up speed

The interest for e-commerce is fairly tepid among the Swedish people. Most (82%) have never tried purchasing via the net. Ten percent have tried at least once, and 8% are returning e-buyers at least a few times per year. Those who purchase the most frequently--a few times a week for example--are easily counted. But if we look closer at the most experienced Internet users--those who have had the Internet more than four years--the situation is different. Every fourth person of the Internet-experienced group is a returning e-purchaser, at least a few times per year.

*How many buy goods from the net?*



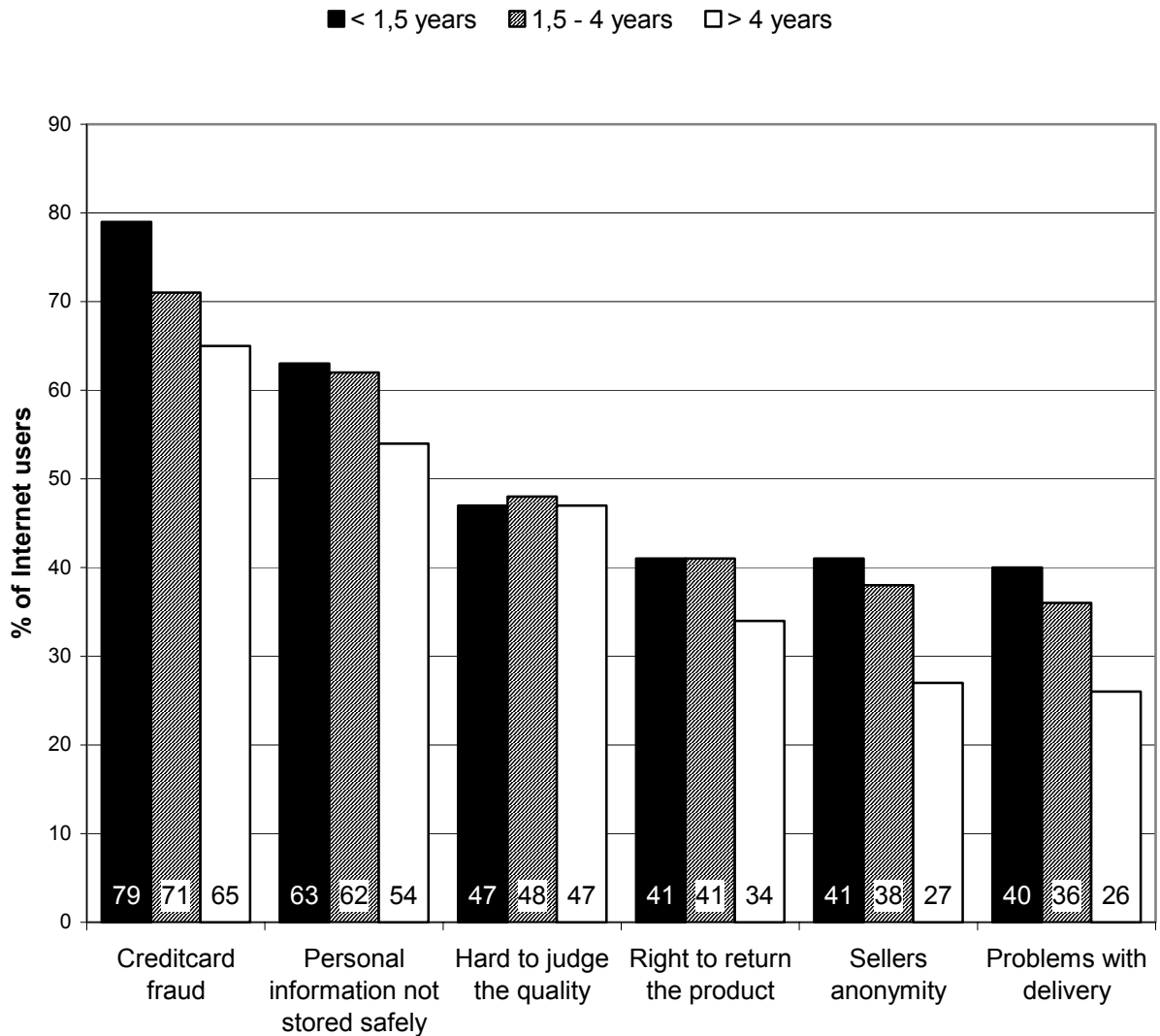
*What are the most important reasons for buying via the net?*

1. 65% say that it is easy to find goods that are otherwise difficult to get a hold of. This reason is given especially by the Internet beginners
2. 60% say that it is comfortable and saves time
3. 57% say that the prices are lower. This is especially true for the experienced Internet users.
4. 57% say that they can order and purchase twenty-four hours a day.

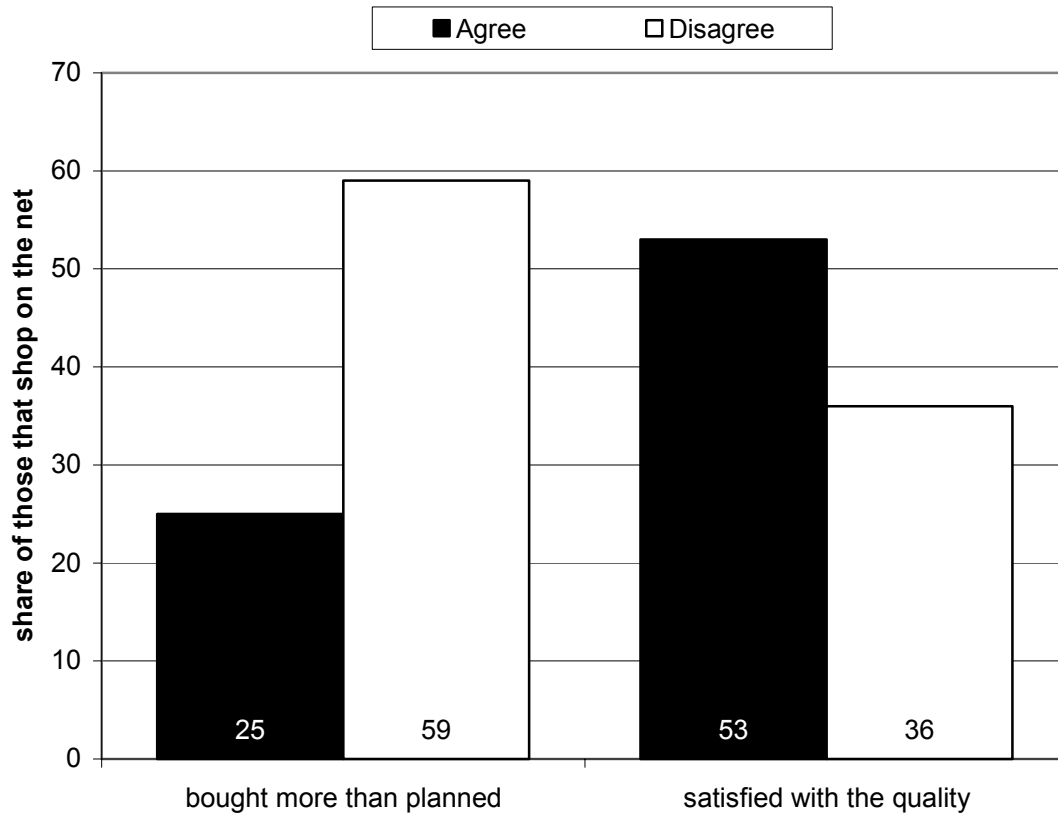
## Concern over e-commerce

What is it then that concerns those who buy or think about buying goods via the net? It is mainly credit-card fraud that 72% of Internet users are worried about, and following is the concern that personal information is not protected (60%), and that it is difficult to judge quality or product descriptions (48%).

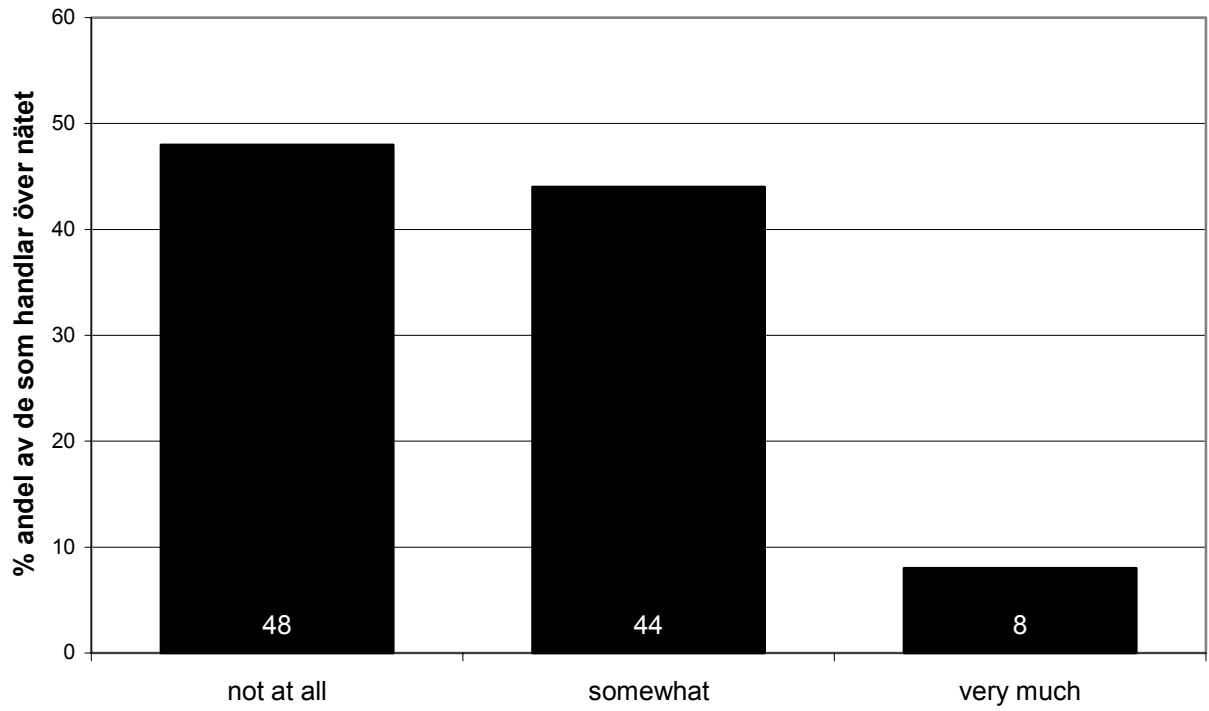
*Concern over problems with Internet purchasing divided among Internet users with different levels of experience.*



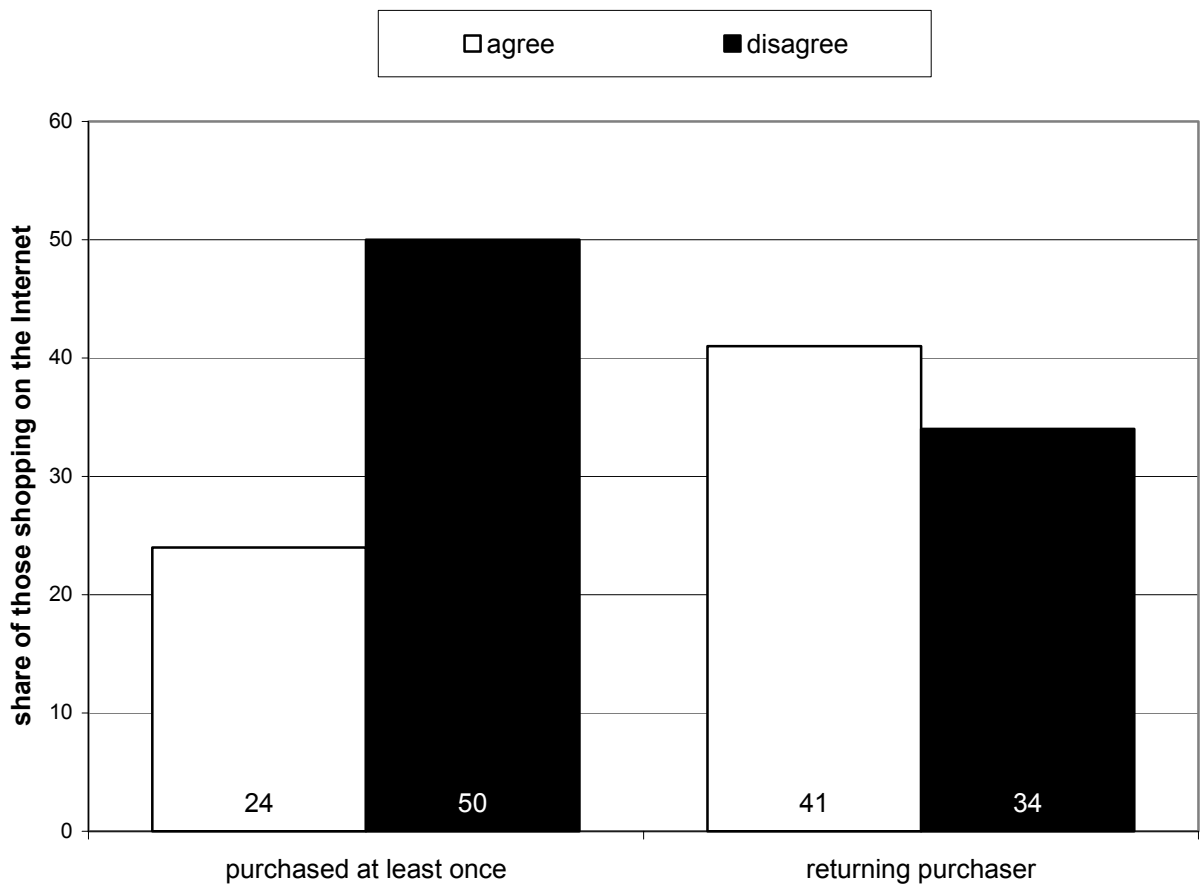
Even if e-commerce is limited, those who have tried are not dissatisfied. Only a few think that they have purchased more than they planned and a majority are satisfied with the quality of the products they have bought. There is a certain effect on other purchases as well. A majority of those who have purchased from the net at least once say that their purchases from normal stores are somewhat affected. On the other hand the projections for future purchases are a bit more at variance, and here it is those who already are returning e-buyers who report that they probably will make more purchases via the Internet in the future.



*Do Internet purchases affect purchases from normal stores*



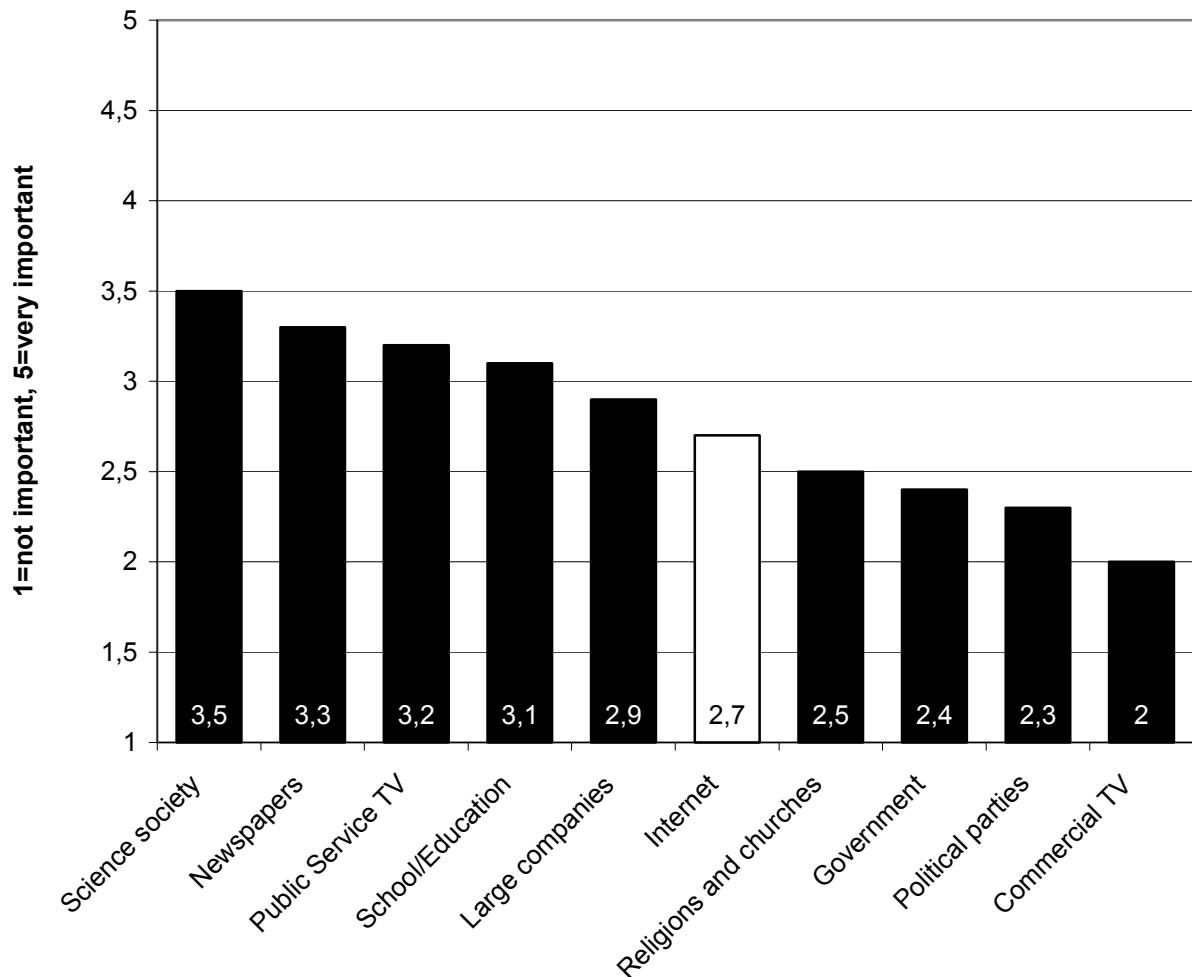
*Planning to make more purchases via the Internet*



## Trust in the Internet

The Internet is a new medium that includes old media such as newspapers, radio, and TV. News, facts, information, entertainment, etc. are all available. How much trust do people in Sweden have for the Internet compared with other media and institutions? The answer is that trust in the Internet is greater than trust in political parties and television advertisements, but less than trust in other media and in the scholarly community.

*The Swedish peoples trust in other media and institutions*

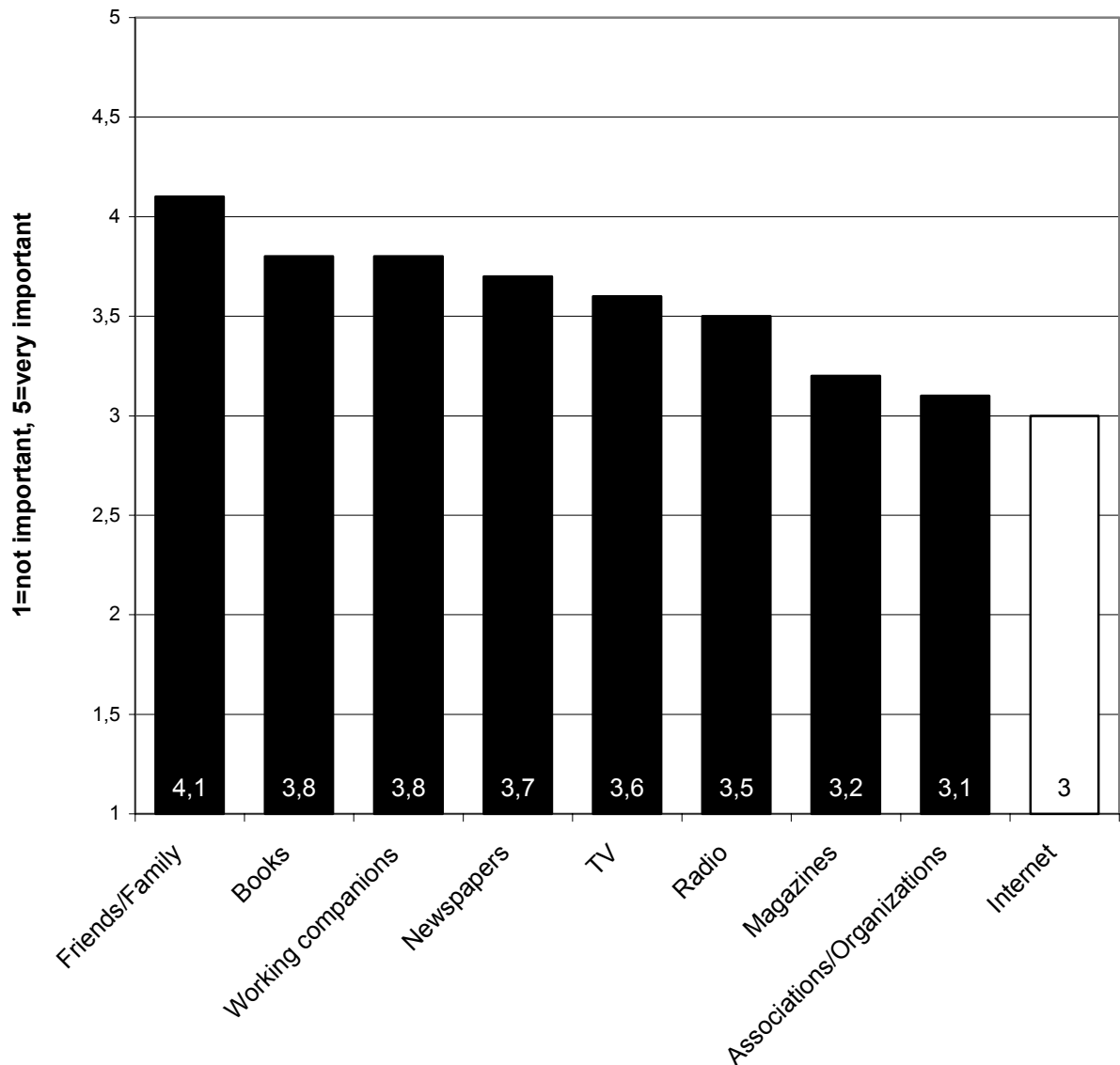




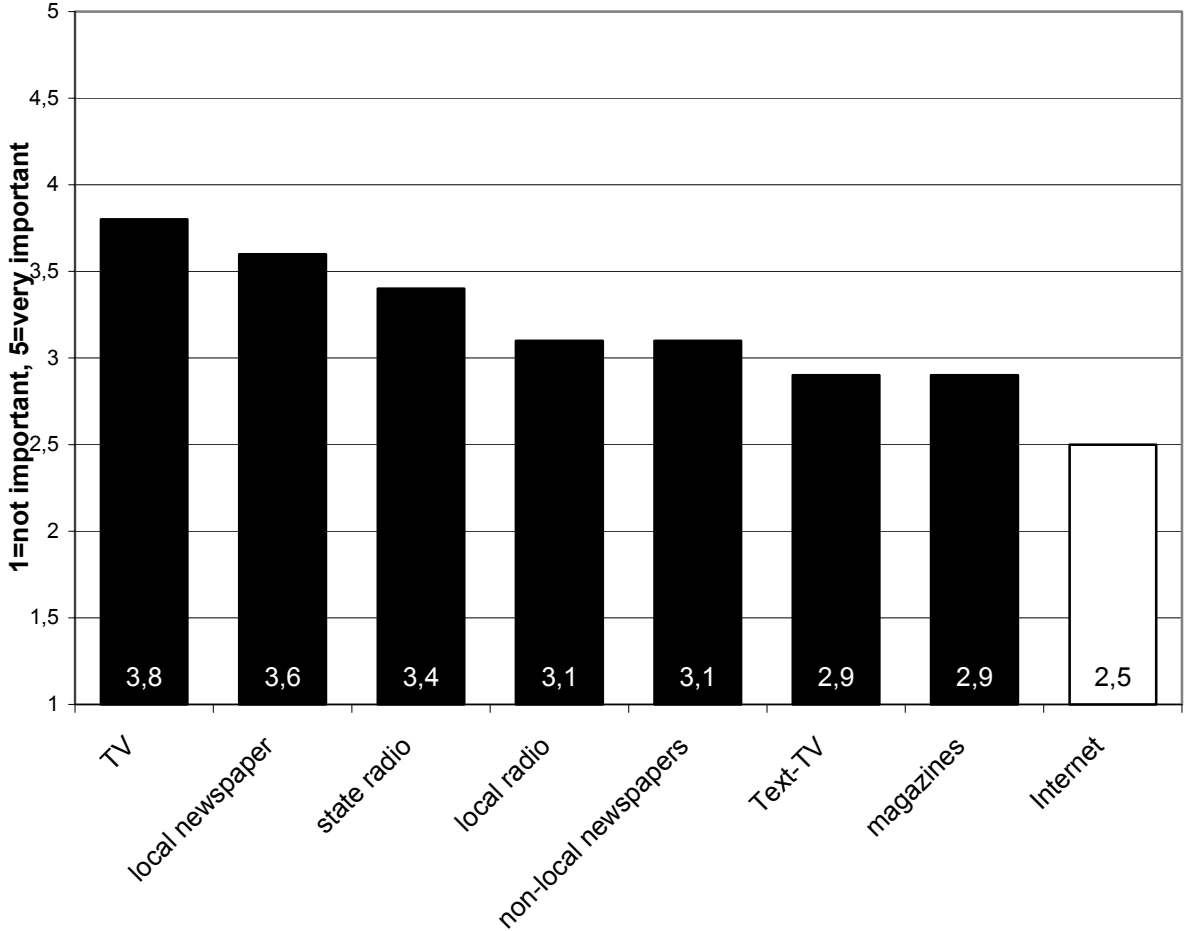
## The Internet as an information source among others

As a source of information, knowledge, news, entertainment, and enjoyment, the Internet is still not yet an established resource for most people. The traditional media are still the most important and the Internet comes in last as a media supplement with the exception of the greatest Internet enthusiasts. But even for them other information sources are the most important.

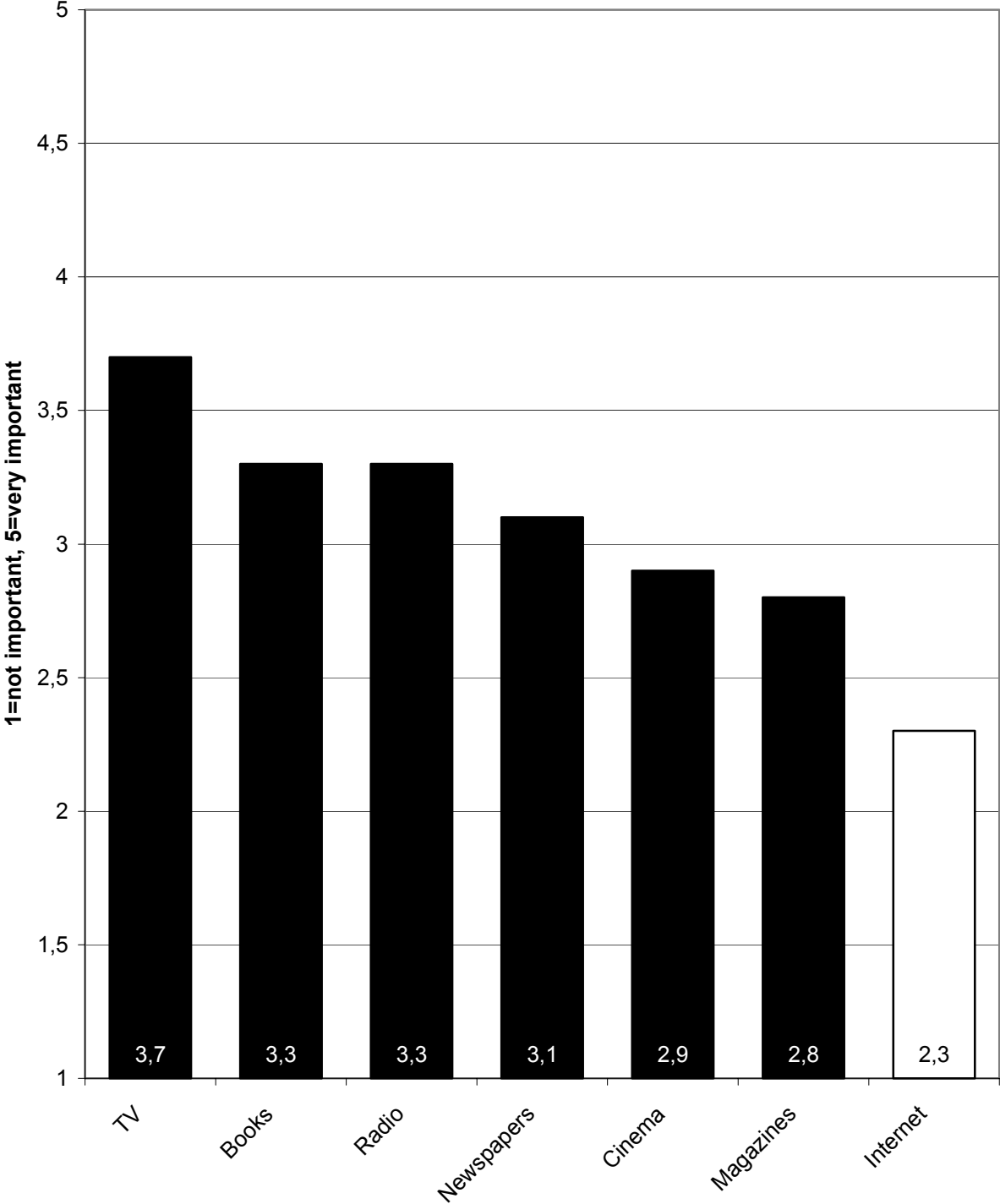
*The most important sources of knowledge and information*



*The most important sources of news*



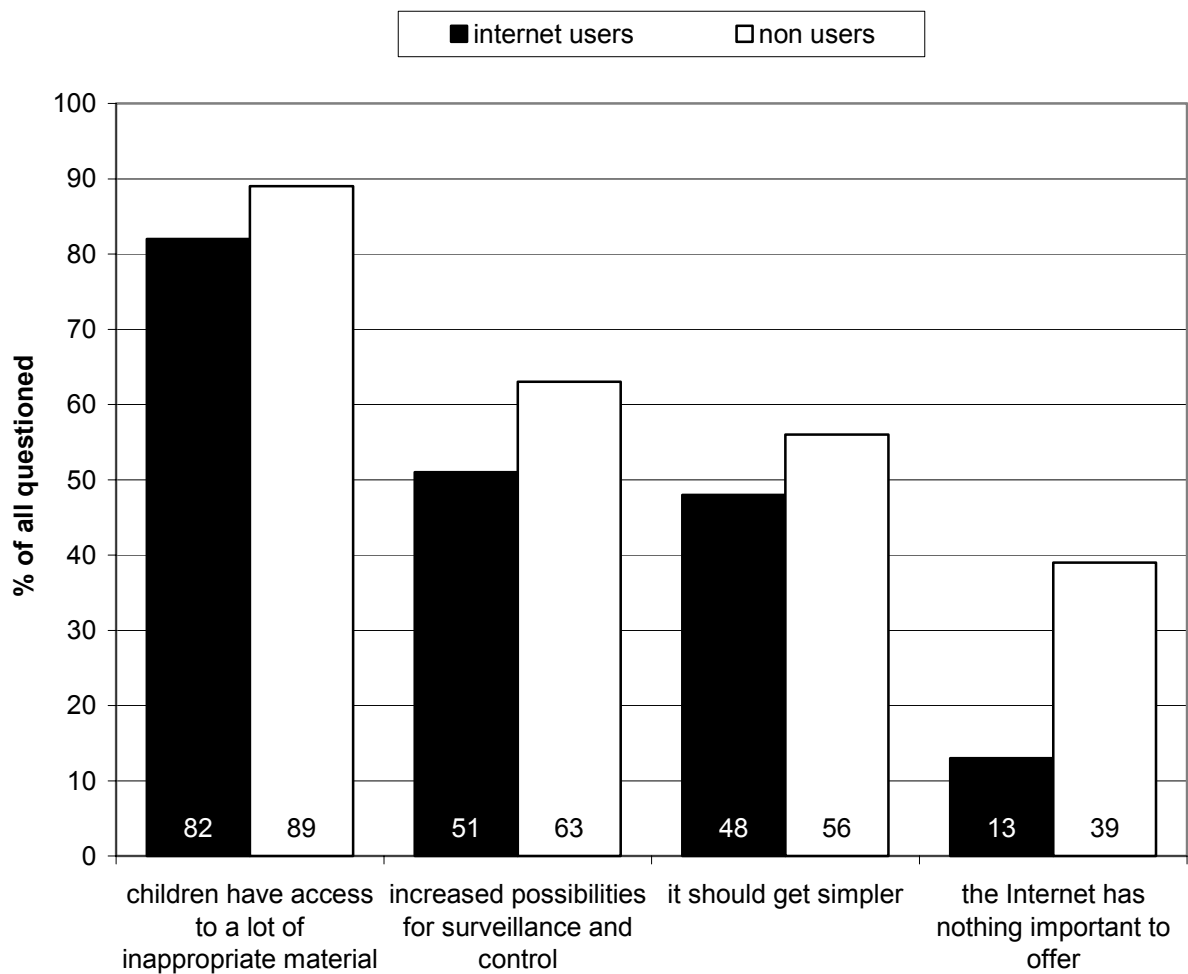
*The most important sources of enjoyment and entertainment*



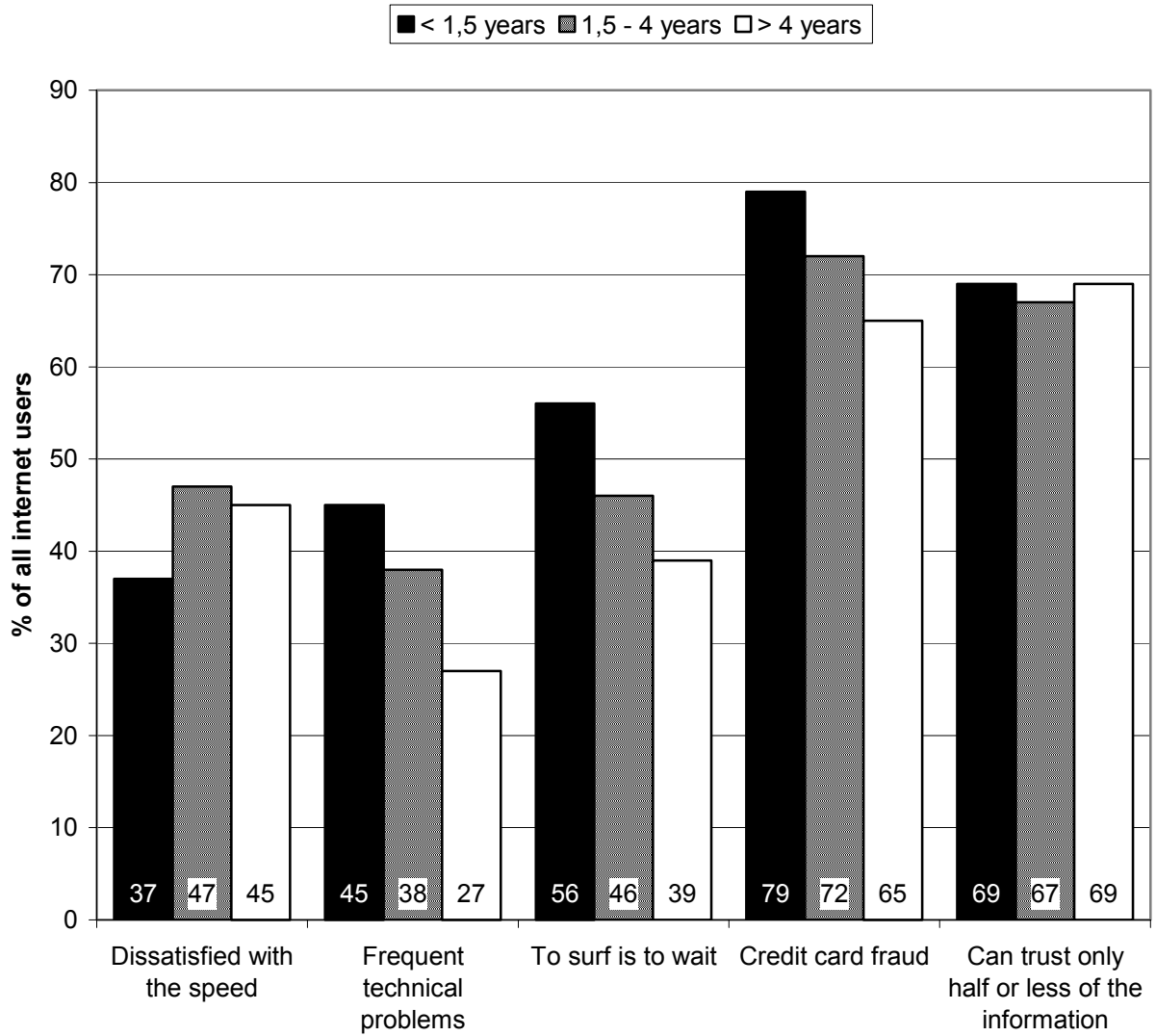
### The Internets inherent problem

People’s relationship to the Internet is not problem-free. There is a worry that a great deal of inappropriate information and pictures are completely too accessible for children. There is a worry that the Internet brings with it increased possibilities for surveillance. The Internet must also be made simpler in order to get through to people. These are opinions that are shared both by those who have access to the Internet and those who do not have the Internet. Half of the Internet users are also dissatisfied with the technology. There are also technical problems. The transfer speed is too slow. One must wait and wait. In addition to these issues come the worry for credit card fraud and the lack of trustworthiness that much information on the net has.

#### *Worry and dissatisfaction with the Internet*



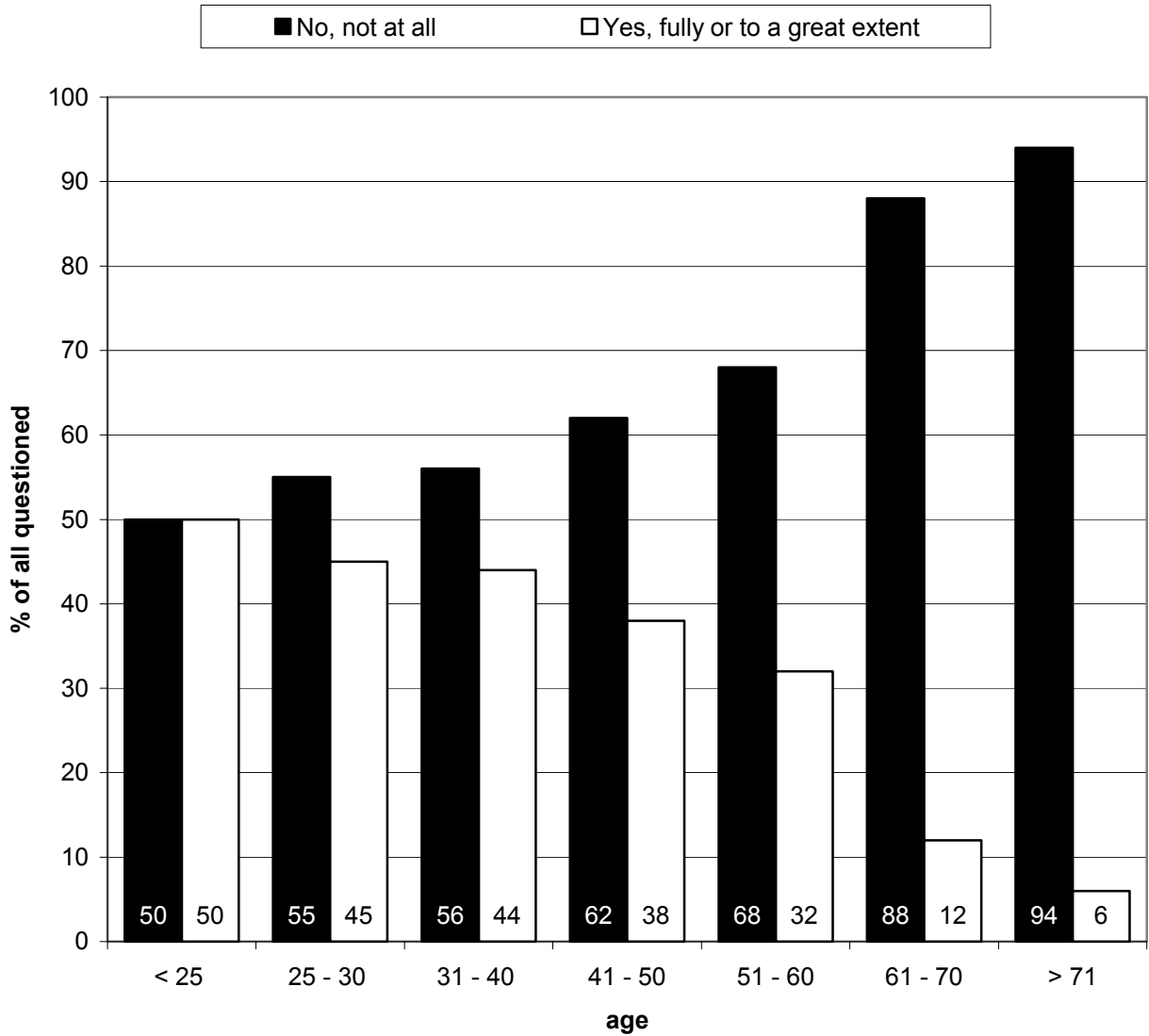
*Dissatisfaction with the Internet*



### The Digital Rift

Only one of three Swedes feels involved in the development surrounding the new information technology. Regarding the question of surfing on the net, using e-mail and the new information technology, and to what degree one feels involved, two out of three answers no. This rift between those who are involved and those who stand outside of the Internet development divides the population and places a great deal of the elderly outside the development.

*Do you feel involved in the new information technology?*



## **Broadband connection gives Internet use a lift**

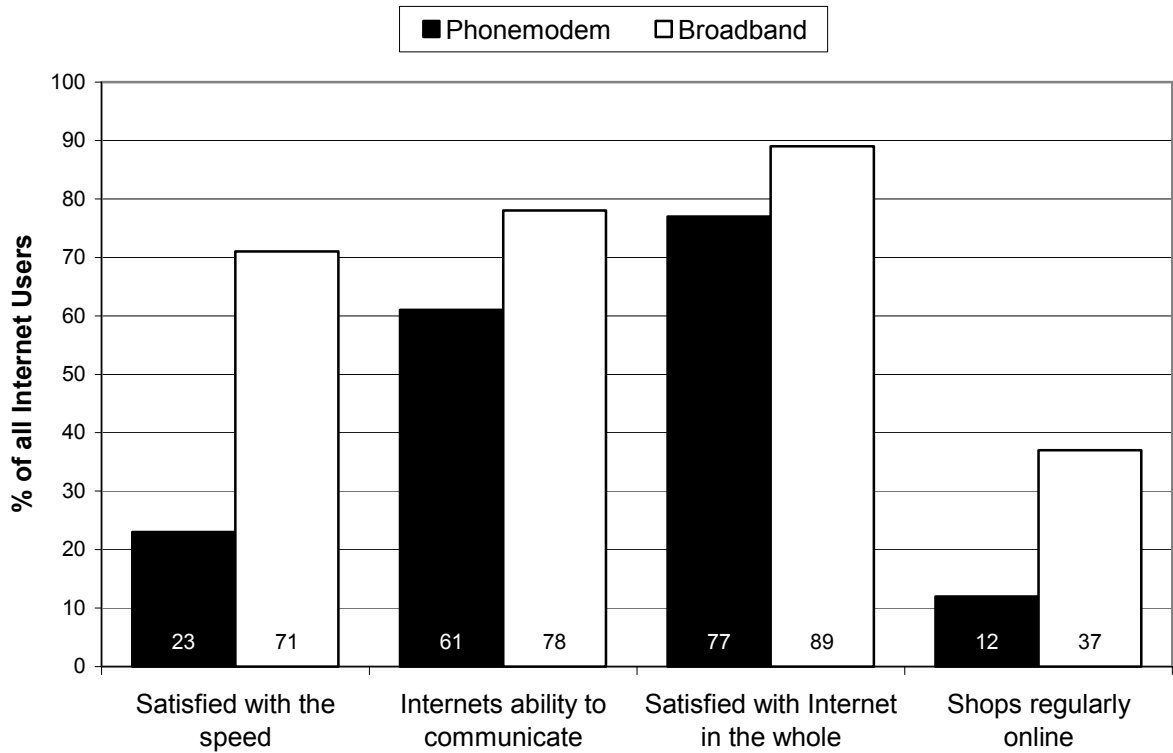
Half of the Swedish people have access to the Internet and most of these people are connected to the Internet via a telephone modem. This causes delays and technical problems. Six percent of the population are connected via more effective systems such as ISDN, cable, T1/T3, ADSL, satellite, etc. What does this mean? If we compare those who have access to the Internet through different types of broadband to those with telephone modems we find that those connected to broadband:

- ❑ Had just as many problems as others when they connected to the Internet for the first time
- ❑ Now have noticeably less problems and are pleased with the connection and speed
- ❑ Are more pleased with the availability of goods and services on the Internet
- ❑ Experience that the Internet has more to offer them
- ❑ They feel more involved when everyone talks about the new information technology
- ❑ They use the Internet three times as long as they did with the telephone modem.
- ❑ They play more games
- ❑ They purchase more
- ❑ They use more of other media such as radio and TV via the Internet
- ❑ They listen much more to music via the Internet
- ❑ They chat more and use the Internet more for contact-searching
- ❑ There are however no differences when it comes to using e-mail and reading of websites in general

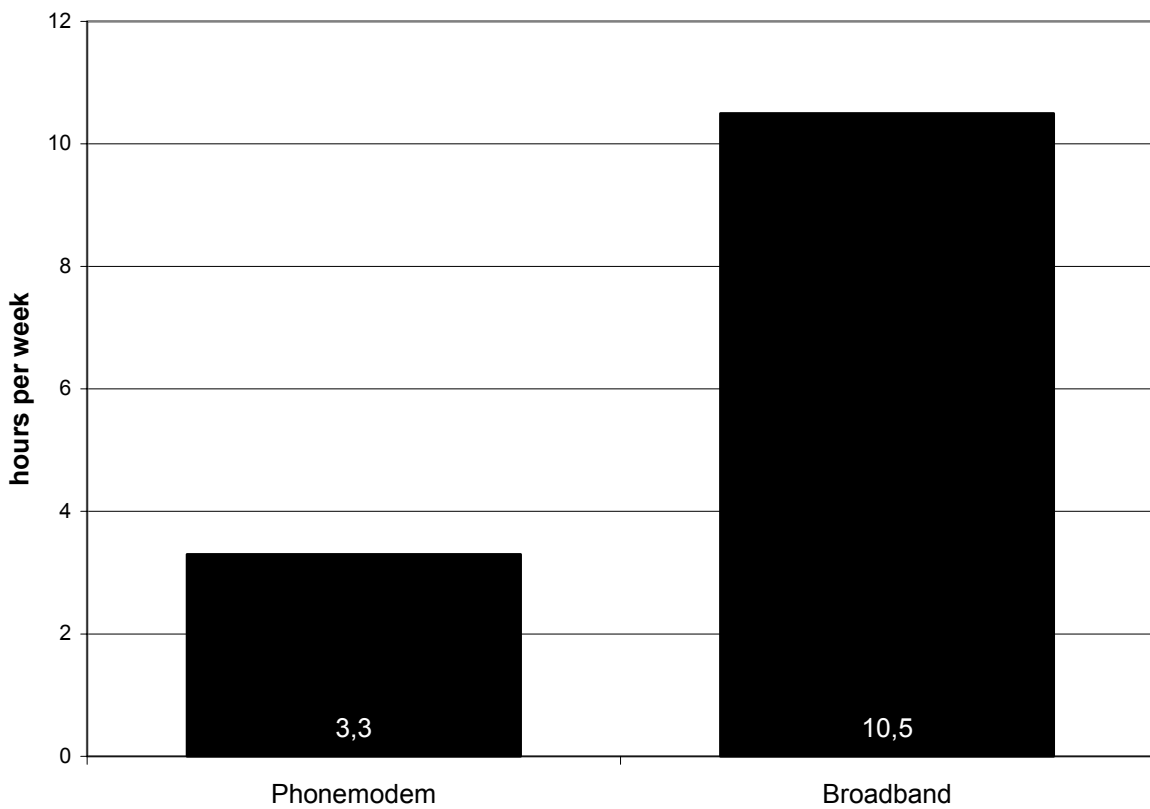
That those connected to broadband devote three times as much time to the Internet every day means that their use of media is influenced more than Internet users with telephone modems--they call others less and read fewer evening papers.

When interpreting these differences it is important to think about the fact that those connected to broadband do not only have access to a better technology, but they are also a sort of pioneer, and most of them are more interested in new information technology than the population in general. For this reason one cannot draw the conclusion that all Internet users who are connected via a telephone modem today would triple their Internet use if they only had access to broadband. However, with broadband, everything does become easier and the Internet becomes more usable.

*What does broadband connection imply?*



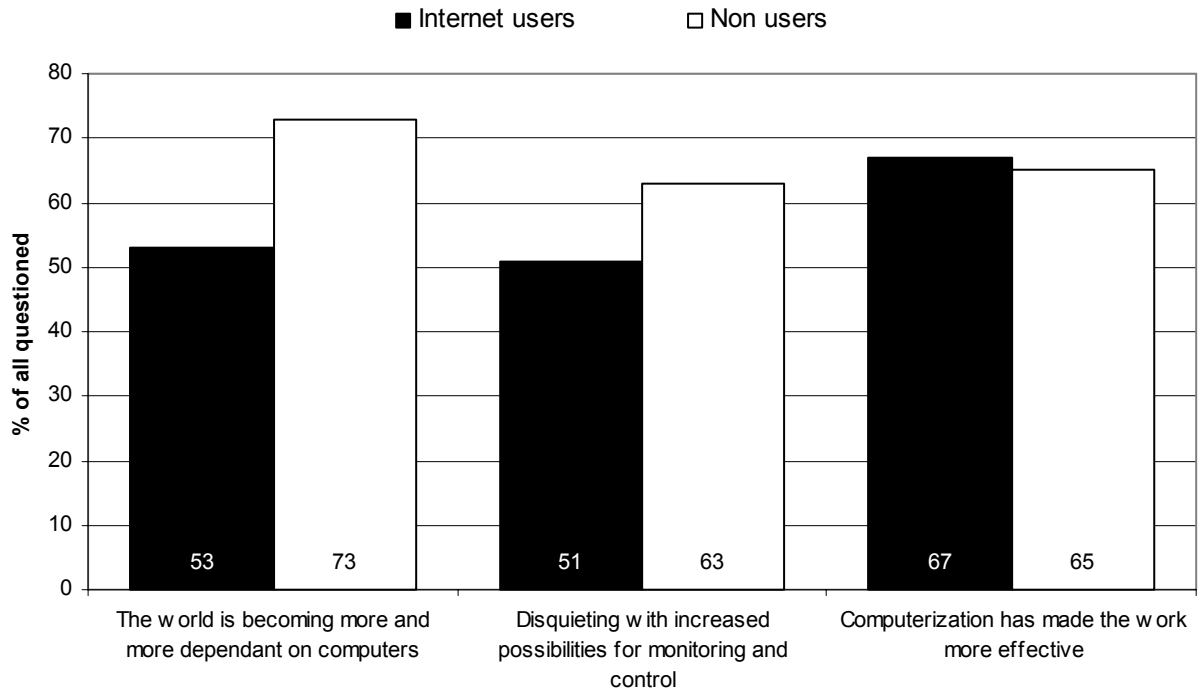
*Time spent on the Internet*



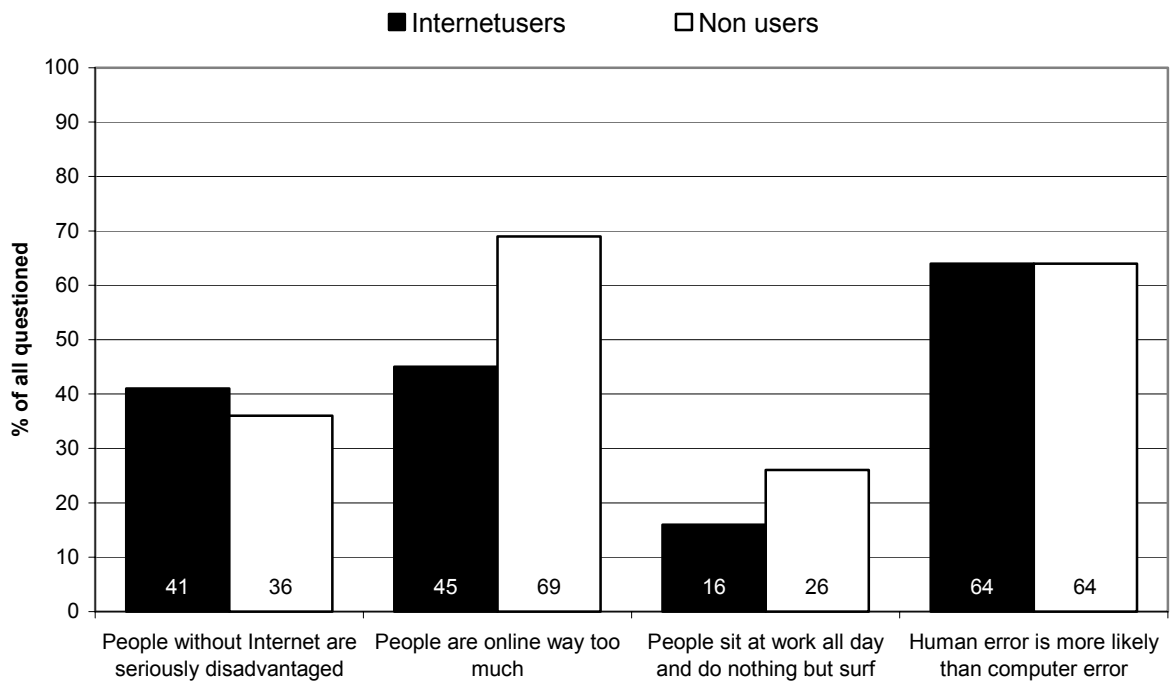


## Other facts on Internet users

### *Opinions on computerization and the future*



### *Opinions on people and the Internet*



## Summary

Even if Internet use has not occurred as quickly and developed in the sweeping way that the largest Internet enthusiasts had predicted, this greatly discussed IT-society has partly become reality-millions of Swedes have acquired a computer and a modem, and many Swedes connect daily to the Internet.

However, most are still beginners at using the Internet. Two of three have used the Internet for less than three years. The time that is spent on the Internet is also limited for most people.

Seven of ten Swedes have access to a computer and half of Swedes have access to the Internet at home.

On the other hand, half of the Swedish people still do not have the Internet at home, and only every third Swede feels participatory in this development which is all about surfing the net in the new information society.

Even if almost all academics and high-income earners have the Internet, the corresponding share in low-income earners is one in four. There are large differences in Internet possession between different population groups-between rich and poor, between those with high and low education levels, between young and old, and even between men and women.

Almost everyone who has access to the Internet uses e-mail. The ability to communicate with other people via the Internet is also the reason that most people give for using the net. Following this is the great deal of useful and accessible information and the availability of goods and services.

E-commerce is however limited. We can describe eight percent as more regular e-buyers who purchase via the net at least a few times per year. Most have never tried. Internet purchases are thought to have a certain effect on other purchases in normal stores, and Internet activities in general, at least when they become more extensive, which can lead to reduced viewing of TV, reading of evening papers, and use of the telephone.

The Internet is nothing user-friendly for the computer-technology uninitiated. Technical problems are normal and half of the users agree that "to surf the net is to wait and wait". As a news, entertainment, and information medium the Internet still has the characteristics of being a complement to the traditional media.

But as we have seen, an increased experience of the Internet implies an increased time spent on activities on the net. Those who have used the Internet for a longer time are also more satisfied with the Internet. They get themselves a faster connection to the net and are less worried over problems and dangers connected to the Internet.

But will this come to include even beginners? This is something we cannot really say. This is one problem connected with such a spot-check survey such as this one. It could be so that those who are Internet experienced (those who have had the Internet longest) belong to the real Internet enthusiasts, and that those who have just gotten the Internet have less of a need for it, and thus will not spend any time on the Internet in the future. To be able to answer these types of questions on the individual development over time, a longitudinal study which follows the same people for several years is needed. This is also the plan we have chosen.

This study is therefore only the first stage of a larger panel study.

And this report is only the first in a series of reports.

## The Internet in the Future

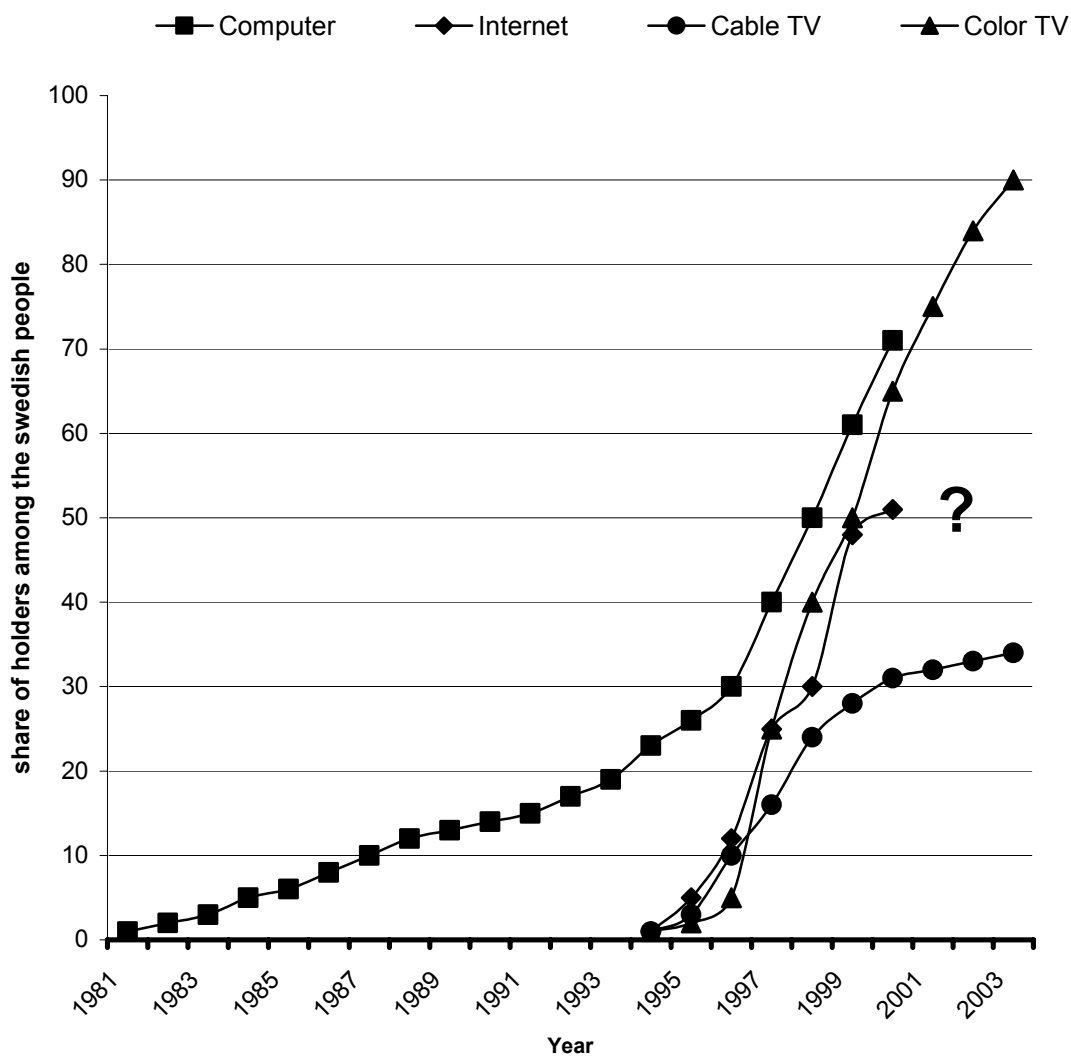
When will Internet development level out? The distribution of all new technologies follows the pattern of an S-curve. First it goes rather slowly, and then the distribution picks up speed and continues until the technology reaches a ceiling, and then the development begins to level out. When color television was introduced in the 1970's, the development was extremely rapid during the first few years, and in a period of five years 75 % of the population had gotten a color-TV.

Later the development leveled off and today almost everyone has a color-TV.

The spread of cable TV, towards the end of the 1980's, followed a different pattern. After a few years of rapid dispersion the expansion remained at about 30 % of the population – those who lived in family houses in the larger cities had gotten cable-TV. A plan to make cable-TV available for everyone became expensive. No one wanted to assume those costs.

How will it be for Internet expansion? When will the expansion level out? Is the leveling out already occurring? Or will the expansion continue, as it did with color-TV, until about 90 % of the population gets the Internet? This is something only the future can tell, but according to the answers given in this study, the expansion should level off around 70 %. Afterwards the expansion will be slower, and when the older generations disappear and are replaced by new generations, the expansion will continue until about 90 % of the population has the Internet.

*Dispersion of new media technologies*



**Appendix: Research method**

The goal for the study was to interview around 2000 people regarding their Internet ownership. The selection should include adult persons from 18 to 80 years old, of both sexes, with variable educations and incomes. The starting point was a random selection.

The result was 2078 telephone interviews. The final selection resembled in most respects a normal selection with regard to sex, income, education, household size, etc. There was however, an overrepresentation of those between 20 and 30. The interviews were conducted by telephone and took about a half hour-shorter for those who didn't have the Internet and a bit longer for those who spent much time on the Internet. The study is presented as a media report on "how the Swedish people use the media in Sweden today".



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