Research Center for Social Development
Chinese Academy of Social Sciences

Surveying Internet Usage and Impact in Five Chinese Cities

November, 2005

Funded by

MARKLE FOUNDATION

The CASS Internet Survey Report, 2005

Surveying Internet Usage and Impact in Five Chinese Cities

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Surveying Internet Usage and Impact in Five Chinese Cities

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ACKNOWLEDGEMENTS

It has been five years since this Internet survey project first began in 2000. Three reports have been released. Such a project could not have been completed without contributions from many scholars. We have been fortunate to receive much support and help from the following:

Many thanks to Professor Jeff Cole, director of USC Annenberg School Center for the Digital Future and the founder and organizer of the World Internet Project (WIP). Without his foresight and organizational efforts, such an extensive worldwide comparative Internet survey project never could have been completed. It is very fortunate that the Chinese have been able to participate in this cooperative effort among countries and regions with different cultures, different political systems, different histories of Internet development, and different research resources and methods. The yearly WIP meetings that began in 2000 have allowed scholars from around the world to share their methodologies and insights on the survey. I have learnt a lot from all the partners in this project, especially from Professor William Dutton, director of the Oxford Internet Institute, and from Professor John Robinson, Department of Sociology at the University of Maryland, who has shared his rich experience and provided the core questions of the project. Thanks also to Michael Suman and Wei Hua for working on the international cooperation and for managing the data. In addition, thanks to all of the WIP members for sharing their resources, insights, and methodologies as well as their survey results over the past five years.

Mr. Zhao Xiaofan, deputy director of the Department of Informatization Application Promotion at the China State Council Informatization Office; Professor Zhao Peijie, secretary to former CASS president Li Tieying; Director and Professor Li Jingyuan, Ge Liangzhi, Li Deshun, and Li Pengcheng of the CASS Institute of Philosophy, Director and Professor Wu Yuanliang of the CASS Center for Social Development, and Professor Huang Ping, chief of the CASS International Cooperation Bureau who have all provided administrative and academic support and who have shared their experience and insights.

The analysis on the social impacts of the Internet in this report has also been used in my report to the Advisory Board of State Informatization. My thanks to all the board members who gave suggestions and comments on the report. Professor Ke Huixin, Communication University of China, read the original Chinese report word by word and provided comments of immense value. Ms. Nina Hachigian, director of the RAND Center

for Asia Pacific Policy, encouraged me to do this research and provided valuable suggestions and comments for many years. Mr. Lee Rainie, director of the Pew Internet and American Life Project, continued to inform me of their excellent work and provided me with details of research methodology.

Thanks also to the entire research team. Associate Professor Xia Chuanling of the CASS Institute of Sociology discussed the questionnaire in detail and did some statistical work on the survey. Professor Liu Dehuan, School of Journalism and Communication at Peking University, supervised his graduate students in the quality control for the fieldwork. He also did some statistical work and wrote a section of this report. Special thanks to Ms. Maria Hu Xianhong, doctoral student in the School of Journalism and Communication at Peking University, who not only produced excellent fieldwork and wrote the report for the case study in 2003, but also provided communication and general assistance work for the project this year.

Additional thanks to the fieldwork team: Professor Lei Tao from the Institute of Sociology at the Beijing Academy of Social Sciences, Professor Lu Xiaowen and Assistant Professor Xu Rongqin from the Institute of Sociology at the Shanghai Academy of Social Science, and Mr. Li Si and Liu Tiejun from Guangzhou Oriental Marketing Research Co. Ltd. Thanks also to the data entry and coding team, directed by Ms. Li Lianfeng of Millenriver Marketing Research Co., Ltd.

One of the problems for Chinese scholars to complete such a report for wider distribution is the English language. Thanks so much for the efforts by Nancy Hearst, from the Fairbank Center at Harvard University, who contributed to the high quality of prove reading within a very short time.

Finally, this project could not have taken place this year had it not been for the Markle Foundation that provided financial support for the research. Thanks to Zoë Baird, president of the Markle Foundation, and all the members of the Board of Directors for constantly supporting the research. James Steinberg, former senior advisor to the Markle Foundation and now vice president of the Brookings Institution, provided valuable advice on the research design and introduced some U.S. experts to the project. In addition to managing the financial support, Mr. Stefaan Verhulst, chief of research at the Markle Foundation, constantly provided advice and other resources.

EXECUTIVE SUMMARY

Internet use has mushroomed in China since commercial Internet services were first introduced at the end of 1995. The total number of Internet users reached 103 million in July 2005. One of the important changes in recent Internet growth is about half of the users are using broadband. This not only provides them with high-speed access but also allows them always to remain online.

Yet, Internet development in China is still at a preliminary stage. Internet adoption reaches only about 8% of the total population. Even in the large cities, the proportion of Internet users is less than 50%. A typical Internet user is young, male, well educated, and well paid. Only 35.5% of the users have more than five years of Internet experience. 76.2% of the Internet users never make purchases online, 41.6% of the Internet users do not use search engines and more than 30% of the Internet users do not use e-mail. On the other hand, Internet entertainment content is heavily used, such as playing games, downloading movie or music, and accessing entertainment information.

Challenged by the Internet as a new medium, the traditional media, especially television and newspapers, generally still remain the dominant media. Yet Internet users have begun to spend more time accessing the Internet than they spend on traditional media. The number-one purpose of going online is to read the news. Among Internet users, the Internet is replacing the traditional media as a source of news. However, the most frequently accessed news mainly is entertainment news.

To use the media is one thing, but to trust the media is quite another issue. The survey results show that people still tend to trust the traditional media more than the Internet; they trust television more than newspapers or the radio, and they trust the domestic media more than the foreign media.

People prefer to use instant tools to communicate on the Internet. There are more users who use chat rooms and ICQ than those who use e-mail. About 45% of the users are using BBS and 29.5% of the users are using blogs.

All these statistics show that rather than being an information highway, the Internet in China is more like an entertainment highway. People use the network for entertainment or chatting more than they use it to seek information, or for work or study.

Although both central and local governments have put great efforts into e-government Web sites, not many people know about them. About 9.5% of Internet users use government Web sites occasionally and only about 3.5% of Internet users use them frequently. However, the communication platforms, such as BBS, blogs, and comments on the news, allow people to share views and information. According to the statistical results of the World Internet Project, more people in China than in other countries believe that the Internet will have a positive impact on political transparency.

Background and Methodology

The total number of Internet users in China reached 103 million in July 2005.

- After surveys in 2001 and 2003, this is the third Internet survey conducted by the Center for Social Development, Chinese Academy of Social Sciences.
- The survey was based on door-to-door household interviews in five cities in China, including Beijing, Shanghai, Guangzhou, Chengdu, and Changsha.
- A Probability Proportional to Size (PPS) sampling method was used to randomly choose households in each city, and a KISH form was used to randomly choose interviewees in each household.
- The final sample size was 2,376, including 1,169 Internet users and 1,207 Internet non-users.

Perceptions and Attitudes toward the Internet

- Perceptions of the Internet vary significantly between Internet users and non-users. About 10% more Internet users than non-users regard the Internet as a source for the following: as an information center (users: 84.5%; non-users: 73.7%), as a news media (users: 60.2%; non-users: 50.1%), as an entertainment place (users: 41.5%; non-users: 31.6%), as a meeting place (users: 41.1%; non-users: 31.6%), etc. Only 14.5% of users and 6.3% of non-users think of the Internet as a post office. The exception is among those who regard the Internet as a library; 39.9% of users and 19.4% of non-users regard the Internet as a library.
- More Internet users (47%) than non-users (31%) believe the Internet will make the world a better place. Compared to the survey results in 2003, such a positive attitude toward the Internet has dropped significantly, partly because the traditional media continue to report on the dark side of the Internet.
- Yet most people still trust the Internet content. Again, more users (48%) than non-users (35.2%) believe that the Internet content is reliable. Compared with other countries, people in Korea, Hungary, China, and the United States trust the Internet content the most, whereas most people in Sweden and Japan do not trust the Internet content.
- Most people think the Internet should be managed or controlled. The breakdown of what content the respondents think should be controlled is as follows: pornography (84.7%), violence (72.6%), junk messages (51.9%), advertisements (33.2%), games (15.6%), chat rooms (8.2%), and politics (7.6%).

Internet Adoption

- **Age:** More than 80% of people under 24 years of age are using the Internet. About 60-80% of people between the ages of 25 and 29 are Internet users. This trend slows down among people who are over 40. More elderly people are using the Internet in 2005 than were using it in 2003.

- **Gender:** Among male respondents 57.2% are using the Internet, while only 42.5% of female respondents are using the Internet.
- **Education:** The higher one's level of education, the more likely he/she will go online. Among the interviewees with bachelor's degrees or higher, about 90% are Internet users. Among the interviewees with a middle-school education or less, fewer than 15% are users.
- **Marital status:** Among the single interviewees, 77.2% are Internet users, while only 33.7% of the interviewees with spouses are users.
- **Employment status:** Among the students, 89.1% are going online, and nearly half of those who have jobs are using the Internet. More unemployed people (31.8%) than laid-off people (19.4%) are using the Internet. Only 12% of retired people are going online.
- **Occupation:** Among those who have jobs, the largest proportion of Internet users is among university or college faculties (87.5%). There is also a large proportion of Internet users among high school, middle school, and primary school teachers (81.5%) and among entrepreneurs in foreign or private companies (81%). Yet only 35.1% of private business owners and 20.5% of factory workers are going online.
- **Income:** The higher one's income, the more likely he/she uses the Internet. The rate of Internet use increases significantly as income increases, especially among those whose monthly income is less than 3,000 RMB,
- **Internet experience:** Only 35.5% of Internet users have more than five years of Internet experience, whereas 48% of users have less than four years of Internet experience.

Thus, a typical Internet user in China most likely is young, male, holding a job as a teacher or a white-collar worker with a high income, or a student, and has less than four years of Internet experience.

Internet Use

- **Duration:** Because of the unlimited use of ADSL and the P2P technology, users are spending more time on the Internet (2.73 hours per day) now than they did two years ago (1.9 hours per day). Young males who are highly educated and highly paid or who are students tend to spend more time online.
- **Location:** Also partly because of the increase in broadband access, more users go online at home (76.1%) than they did in 2003 (73.3%), and fewer users go online at Internet cafés (29.5%) than they did in 2003 (34.4%). The time spent on the Internet at home has increased significantly from 1.25 hours per day in 2003 to 1.89 hours per day in 2005.
- **Internet cafés:** Among the Internet café users 61.4% are 16 to 24 years old. The reasons for going online in Internet cafés are mainly for chatting (68.4%) or for playing games (61.7%).

- **Connections:** Broadband Internet use at home is popular; 44.9% of users are using ADSL and 14% of users are using LAN-based broadband. The use of traditional dial-up modems dropped significantly from 52.7% in 2003 to 17.7% in 2005.
- **Online activities:** People "often" or "always" use the Internet to read the news (65.9%). The second most-frequent function of the Internet among the respondents is "general browsing," followed by three entertainment functions: 62% of the users "always" or "often" play online games; 56.7% of the users "always" or "often" download music; and 53.5% of the users "often" or "always" download entertainment information. Considering that the online news read by users is mainly about entertainment, the number one online activity is entertainment.
- **Search engines:** Among the users, 41.6% do not use a search engine. Search engines are more often used by young males who are better educated. Among the search engine users, 67.9% use search engines to search for leisure or entertainment information, 56% search for information for work or study, 43.3% search for news information, and 43.2% search for knowledge-related information.
- Although the number of Google users has increased slightly, from 24% in 2003 to 27% in 2005, Baidu's market share has increased significantly, from only 2.5% in 2003 to 46% in 2005. This indicates that in a fast-growing market, whatever attracts new users can be successful.
- **Language:** Internet users spend 85% of their time on mainland Chinese content, 8% of their time on overseas Chinese content, 4% of their time on mainland foreign-language content, and 3% of their time on overseas foreign-language content.
- **Online purchasing** is still not popular in China. Among users, 76.2% have never purchased anything online and only 10% of all the interviewed users make purchases once a month. Among those who often pay for something online, 10.5% pay for entertainment, 9.3% pay for computer hardware or software, and 7.3% make online payments, such as for phone cards, etc.

The Internet and the Media

Media use

- **Proportion:** Television is still the dominant mass media. Among the 2,367 interviewees, 97% watched television, 86% read newspapers, 56% read books, 53% read magazines, 49% accessed the Internet, and 38% listened to the radio.
- **Time spent:** Internet users spend more time going online (2.73 hours per day) than they spend watching television (2.12 hours per day). Younger, more affluent, and better-educated people tend to spend more time using the Internet and reading books, but they spend less time watching television.
- **Sources of Information:** Among the respondents, 79% think that television is a very important or an important source of information, 75 percent of regard newspapers as an

important source of information, and 54% believe that the Internet and books are important sources of information. Yet more Internet users (78.4%) than non-users (30%) believe that the Internet is a source of information, whereas more Internet non-users (84.4%) than users (73.7%) believe that television is an important source of information.

- **Source of entertainment:** Among the respondents, 79% think that television is a very important source of entertainment, and 59% think that newspapers are an important source of entertainment. There are significant differences between Internet users and non-users regarding what they regard as sources of entertainment. Among the users, the Internet is the most important source of entertainment.
- **Daily needs:**

  Television is the most important media to obtain domestic and international news, both for Internet users (81.4%) and non-users (90.8%). Users also find it very important to obtain news online (67%).

  Among the users, 62.4% believe that the Internet is the most important media to obtain information about one's personal life, while 59.8% of the non-users and 43.7% of the users think that television is the most important media to obtain such information.

  To obtain information for learning or study, Internet users tend to go online (60.4%) or to read books (51.7%), whereas non-users tend to read newspapers (50.3%) or to watch television (43.9%).

  More Internet non-users (63%) than users (46%) think that television is the most important media for entertainment, whereas many more Internet users (72%) than non-users (15%) believe that the Internet is the most important media for entertainment.

  Due to the limitations to expression, fewer than 30% of the users or non-users think that any other media are important to express their opinions. However Internet users believe that the Internet is important to express their opinions.

  For the same reason, when asked about the importance of the Internet to exchange opinions or information, to participate in social activities, or to enhance personal relationships, very few people think that the traditional media are effective. Only Internet users believe that the Internet is important to fulfill these needs.

Internet impact on traditional media:

- **Time spent:** Internet users spend more time (2.7 hours per day on average) online than they spend on any traditional media. Compared with Internet non-users who spend 2.53 hours per day watching television, users only spend an average of 1.68 hours per day watching television. Non-users also spend more time reading newspapers and listening to the radio than users, but users spend more time (1.43 hours per day) reading books than non-users (0.94 hours per day).
- Although significant demographic differences can be found between **Internet café users and Internet café non-users,** there is no significant difference between the two groups in terms of using the different media.

- **Home Internet users** tend to spend more time watching television and listening to the radio than those who do not use the Internet at home.
- **Heavy Internet users** spend much more time online than light users, but there is no significant difference between the two groups in terms of using other media.
- There is no significant difference between people with different **Internet experience** in terms of using traditional media, except that users who have less Internet experience spend more time watching television (1.83 hours per day) than those who have longer Internet experience (1.61 hours per day).
- Among Internet users, 65.5% read online news about entertainment, 55% read domestic news, 48.4% read news about social life, 39.8% read international news, 30.1% read sports news, 17.8% read news about IT, and 13.7% read financial and economic news. Only 5.5% do not read any online news at all.

The Internet and Media Trust

- Generally, people trust the domestic news more than the foreign news, and they trust television, newspapers, and the radio more than online news. Among the respondents, 88.6% trust domestic television, 79% trust domestic newspapers, 74.9% trust domestic radio, 58.9% trust foreign television, 45% trust the foreign radio, 43.9% trust domestic online news, and 29.6% trust foreign online news.
- With respect to online news, Internet users tend to trust domestic Web sites more than overseas Web sites, and they trust the news provided by the traditional media more than the news provided by e-mail.

The Internet and Communication

- The most frequently used online communications tool is IRC (68.7%). This is followed by Internet users who use ICQ or QQ (66.6%), users who use e-mail (63%), users who use BBS (44.8%), users who use MSN (43.9%), and users who use blogs (29.5%).
- Only about 35% of e-mail users check their e-mail at least once a day. Fewer than 20% of e-mail users use paid accounts.
- 29% users like to use ICQ or QQ to communicate with people; others prefer to use IRC (20%), MSN (12%), BBS (10%), and blogs (4%).
- Male users tend to chat with other netizens online, whereas female users tend to use BBS or MSN to communicate with fellow netizens. Younger users tend to chat online, whereas older people tend to use blogs. Internet café users mainly use the Internet for chatting other than use MSN, BBS or blogs.
- Going online mainly increases communications with friends or colleagues, rather than with brothers, parents, spouses, or other relatives.
- Those who use Internet communication tools have more online friends (17.9 online friends for each user) than those who only browse the Web or only use e-mail (5.7 online friends for each user).
- After using the Internet, 30.1% of users thought that they spent more time with people of the same profession; 30% of users reported that they spent more time with colleagues or

classmates; 26.9% of users believed that they spent more time with friends; 14% thought they spent more time with people who share the same hobbies; 11.3% of users thought they spent more time with people who share the same religion; 10.9% of users thought they spent more time with lovers; 7.5% of users thought they spent more time with their parents; and 7.4% of users thought they spent more time with their siblings.

- Compared with international data, Internet use in China has increased contacts with people who share the same professions, hobbies, or political interests more so than in other countries. But the Chinese users have fewer contacts with family members or friends than users in other countries.

The Internet and Politics

- Although the central and local governments have spent large amounts of money on e-government projects, most people are not very familiar with e-government. Only 12.5% of Internet users and 3.3% of non-users know something about e-government, and 1.9% of users and 0.1% of non-users are very familiar with it.
- Among users, 52.9% never visited any government Web sites, 34.2% seldom visited government Web sites, 9.5% sometimes visited government Web sites, and only 3.5% often or always visited government Web sites.
- The respondents had strong expectations that the Internet would change politics in China:

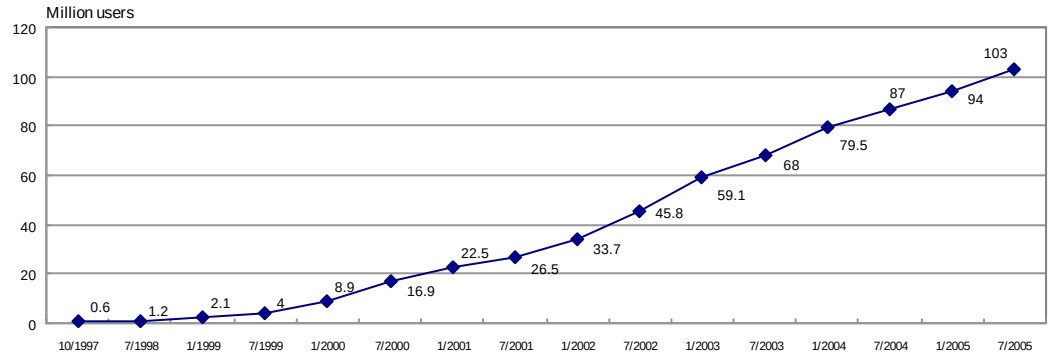
  Among the respondents, 62.8% “agreed” or “strongly agreed” that by using the Internet, people will acquire better knowledge of politics, 60.4% “agreed” or “strongly agreed” that higher-level officials will better understand the common people’s views through the Internet, 55.3% “agreed” or “strongly agreed” that by using the Internet government can better serve the people, 54.2% “agreed” or “strongly agreed” that with the Internet people have more opportunities to criticize government policy, and 45.1% “agreed” or “strongly agreed” that by using the Internet, people have more opportunities to express their political views.
- Comparing trends in China with those in other countries, only the Chinese subjects responded positively about the political role of the Internet.

PART ONE

BACKGROUND AND METHODOLOGY

Internet use has mushroomed in China since commercial Internet services were first introduced at the end of 1995. The total number of Internet users, according to the China Internet Network Information Center (CNNIC), reached 103 million in July 2005.[1]

Figure 1.1 Internet growth in China over the past eight years



On the one hand, China is listed as a medium Internet access country, ranking eighty-third in the world by Digital Access Index.[2] But, on the other hand, the absolute number of Chinese Internet users makes China second only to the United States in terms of number of users. According to the survey results in this report, about 40-50 percent of the people in metropolitan cities are Internet users and about 30 percent of the people in provincial capitals are users. One of the greatest changes in Internet use over the last two years has been the application of broadband, not only allowing users to access the Internet from Kbit/s to Mbit/s, but also allowing users to remain always online. For the first time, the number of broadband users, 53 million, has exceeded the number of dial-up users, ranking China as the second largest broadband country in the world after the United States. There are predictions that the number of broadband users in China will reach 90 million by the end of 2005, and will exceed 200 million by the end of 2007.[3]

The large base of broadband users allows for an expansion of Internet business. The total Internet market in 2004 was valued at about 11.3 billion RMB (about US$1.4 billion), of which 35 percent was for games, 29 percent for SMS and wireless services, 20 percent for advertisements, 7 percent for search engines, and 7 percent for e-mail services. P2P, IP phones, Blog, RSS, and IPTV are becoming popular now as well.

1 http://www.cnnic.cn

2 http://www.internetworldstats.com/list3.htm#dai

3 *China Internet Development Report 2005*, (Beijing: China Posts and Telecommunications Press, 2005), p. 4.

Internet use is spreading rapidly into daily life, and directly affecting people's ideas and behavior. It is changing the use of traditional media, daily communication among people, and to a certain degree also communication between the government and the people. Furthermore, based on its open technology, the Internet is also having a profound impact on China's relatively closed tradition, culture, and political system. Thus, it is important to examine how people are using the Internet and the resultant social impact of Internet use.

Directed by Jeff Cole, the Center for Communication Policy at the University of California at Los Angeles (UCLA) launched a "World Internet Project" (WIP) in 1999, with the goal of assessing the social impact of the Internet based on questionnaire surveys.[1] Unlike most commercial surveys that mainly concentrate on Internet usage, the WIP differs in that:

- It examines not only Internet usage, but also the social impact of usage.
- It focuses equally on Internet users and non-users.
- Its longitudinal research tracks behavioral and attitudinal changes.
- It represents a worldwide effort to study and compare changes in different countries and regions.

In December 2002, the UCLA Center for Communication Policy issued its first annual Internet report, entitled *Surveying the Digital Future* (http://digitalcenter.org/), which marked the beginning of cooperation on research on worldwide development and the impact of the Internet. There are presently more than twenty countries and regions, including the United States, Britain, France, German, Italy, Sweden, Chile, China, Taiwan, Hong Kong, Macau, Singapore, Japan, and Korea, that are sharing similar methodologies and core questions to conduct Internet surveys on Internet usage and its impact. Unless otherwise noted, all of the international comparative data in this report come from this project.

The Research Center for Social Development of the Chinese Academy of Social Sciences (CASS) joined the WIP in 1999. With administrative support from the former China State Informatization Office, CASS distributed a questionnaire survey in Beijing, Shanghai, Chengdu, and Changsha in early 2001 and released its findings in May 2001.[2] However, due to a shortage of funding, this research was terminated in 2002.

In 2003, the research was continued with the support of the Markle Foundation. Taking into consideration such factors as the size of the city, geographical location, economic development, and feasibility of conducting the survey, a multi-stage sampling method was employed to distribute the Internet survey in three municipal-level cities in China (metropolitan cities, provincial capitals, and small cities). The three metropolitan cities included Beijing, Shanghai, and Guangzhou; the four provincial capitals included Chengdu, Changsha, Xi'an, and Shenyang; and the five small cities included Nanhai in Guangdong province, Yima in Henan province, Jimo in Shandong province, Guangshui in Hubei province, and Fengnan in Hebei province. The total sample size was 4,000 (1,800 plus 1,200 plus 1,000) and the number of final valid cases was 3,941, including 2,457 Internet users and 1,484

1 The Center has now moved to Annenberg School for Communication at the University of South California and is called the Center for Digital Future. (http://digitalcenter.org)

2 Guo Liang and Bu Wei, Surveying Internet Usage and Impact in Five Chinese Cities, (Beijing: Research Center for Social Development of the Chinese Academy of Social Sciences，April, 2001).

Internet non-users. The Chinese version of the survey report was released in Beijing in September 2003,[1] and the English version was released at the Markle Foundation in New York in November 2003.[2]

As a cooperative project with the WIP, the CASS Internet survey is designed to provide empirical data and analysis on Internet development in China, for policy making by industries as well as by the government. Its purpose is to:

- Understand the distribution of Internet usage and online activities in urban China.
- Determining the effect of the Internet on the mass media, communications, and politics.
- Make policy proposals and suggestions.

Due to shortages in funding this year, the survey was limited to five cities, including Beijing, Shanghai, Guangzhou, Chengdu, and Changsha, targeting male and female urban residents between the ages of 16 and 65 through random sampling. The interviewees were asked to answer the questionnaire on their own in their respective households. The survey was conducted during the Spring Festival, the Chinese New Year, from January 15 to 25, 2005, so as to include college students, who are important members of the user group but who only return home during the New Year vacation.

Sampling Methods:

1. Five cities were chosen for this year's survey, including Beijing, Shanghai, Guangzhou, Chengdu, and Changsha.
2. Local residential communities (*jumin weiyuanhui*) were randomly chosen through a Probability Proportional to Size (PPS) sampling method, according to set samples (600 cases each in Beijing, Shanghai, and Guangzhou, 300 cases each in Chengdu and Changsha). From the above, seventy local residential communities were selected in each of Beijing, Shanghai and Guangzhou (sixty plus ten for back-up); and forty local residential communities were selected in each of Chengdu and Changsha (thirty plus ten for back-up). The reason why local residential communities were chosen for back-up is because it is difficult to make contact with some local residential communities since some have relocated or been dismantled. In each local residential community, ten qualified interviewees were chosen isometrically.
3. Due to the low success ratio based on past experiences, we randomly chose one household from the first five households in the local residential communities. If the first household could not be contacted, we would go to the next-door neighbor and continue until we could make contact. After making contact we would skip the next five households, and then continue the procedure until we had ten completed samples.
4. After successfully entering the household, a KISH form was used to randomly choose one person among the family members.

1 Guo Liang, *Surveying Internet Usage and Impact in Twelve Chinese Cities*. (Beijing: Research Center for Social Development of the Chinese Academy of Social Sciences, September, 2003). http://www.wipchina.org/

2 http://www.markle.org

Training, Conducting, and Supervision:

1. The prepared training materials were handed out in Beijing to each company or institution engaged in the actual fieldwork.
2. Supervisors (graduate students at the School of Journalism and Communication, Peking University) directly trained the investigators in each city.
3. The investigators were required to carefully complete the "Household Contact List."
4. The supervisors double-checked the "Household Contact List" and the KISH form in each city. Eighty percent of the interviewees were recalled or visited to make sure they really answered the questions on their own.
5. After the supervisors returned to Beijing, the remaining 20 percent of the questionnaires were double-checked by phone.

Due to the influence of the reform and opening policy, building development in residential areas, and people's rapidly changing ideas, it is presently much more difficult to carry out a household survey in China. Also, because it took place during the Spring Festival when families were reunited, the interviewees were less cooperative. Thus, the rate of refusal was quite high, while the effective rate from the interviews was 24.3 percent. After cleaning the data, the number of final valid cases was 2,376, including 1,169 Internet users and 1,207 Internet non-users.

The geographic location of each surveyed city is shown below:

PART TWO

PERCEPTIONS AND ATTITUDES TOWARD THE INTERNET

Perceptions and attitudes toward the Internet may directly affect Internet adoption and use. In the 2003 survey, through an analysis drawing on the results from the different perceptions and attitudes of Internet users and non-users, it was concluded that negative perceptions affected Internet use by ordinary people. It is important to conduct this research again to determine whether there have been any changes in people's impressions of the Internet over the last two years.

2.1 Perceptions of the Internet

Similar to the research in 2003, we attempted to understand the people's basic views about the Internet by using metaphors to reveal how they perceive of the Internet in their minds. In addition, we added two important Internet functions that were omitted from the 2003 questionnaire; these include news media and information center functions.

Most people regarded the Internet as an information center (79 percent of all interviewees), followed by a news media (55.1 percent); 36.5 percent of the interviewees saw it as a place of entertainment and 36.3 percent saw it as a meeting place. Compared with the 2003 survey in which 52 percent of the interviewees regarded the Internet as a library, this year only 29.5 percent regarded it as a library and only 19.1 percent thought of it as a school.

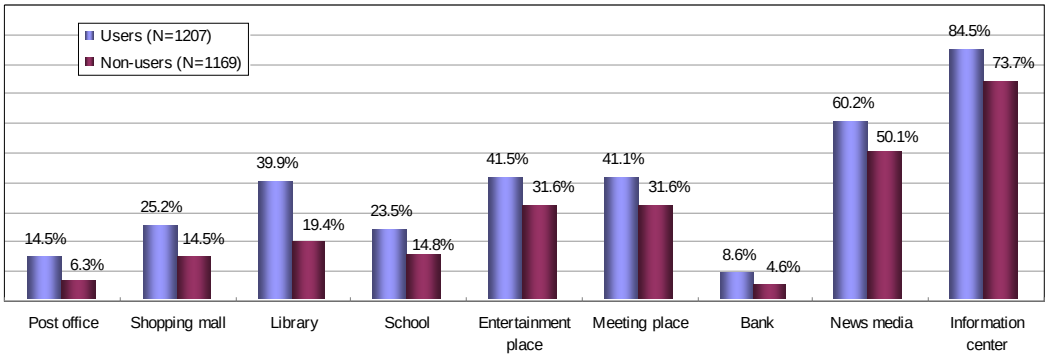
Incredibly, only 10.4 percent of the interviewees envisioned the Internet as a post office, showing that the Chinese people prefer instant communication. In the following analysis, we see that only 63 percent of Internet users are using e-mail (N=732), of whom only 35.2 percent check their e-mail at least once a day. This phenomenon shows that there is a serious deficiency in the application of e-mail in China. Furthermore, only 26 percent viewed the Internet as a shopping mall and only 6.5 percent viewed it as a bank, indicating the shortcomings of electronic commerce in China despite ten years of application.

By cross-tabs' statistics, we find significant[1] differences between the answers of Internet users and non-users to the questions. At the same time, the perception of the interviewed Internet users and non-users share a similarity in terms of the allocation of their work units, with the people using the Internet having a higher acceptance rate than non-users. This

1 The statistical significance level in this report is at 0.05, unless otherwise specified.

suggests that the gap in the extent of perception is mostly due to the degree to which they have been exposed to the Internet.

Figure 2.1 Different perceptions between Internet users and non-users



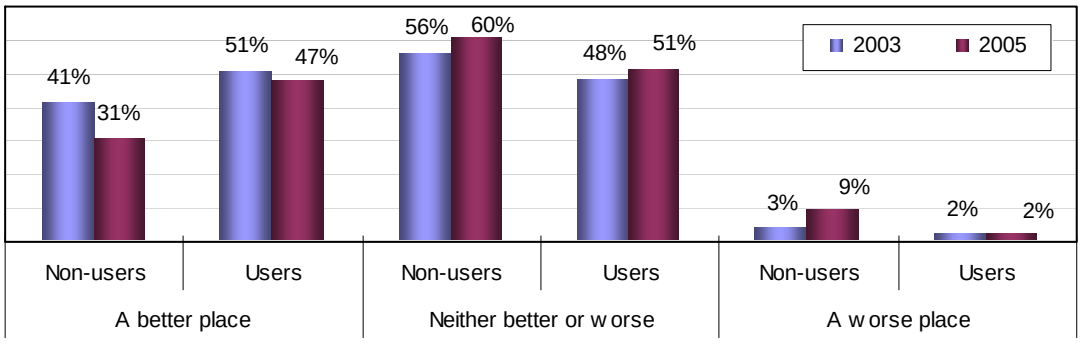
In addition to inquiring about functions of the Internet, questions on attitudes toward the Internet were also asked.

2.2 Will the Internet Make the World a Better or Worse Place?

Despite media coverage on the negative aspects of using the Internet, on the one hand people are more inclined to see the bright side of the Internet. Among the interviewees, 55.2 percent are more likely to believe that the Internet will make the world a better place, while 5.4 percent believe the Internet will make the world a worse place. But, on the other hand, the number of people who believe that the Internet will make the world a worse place has decreased significantly, and the ratio of non-users who believe that the Internet will make the world a better place has decreased by 10 percent.

At the same time, we found a significant difference among the views of Internet users and non-users regarding the pros and cons of the Internet: Of the users, 47.2 percent believe that the Internet will make the world a better place, as opposed to 30.5 percent of the non-users. These results are similar to those in the 2003 survey.

Figure 2.2 Attitudes of users and non-users in 2003 and 2005



Males are more likely to see the positive side of the Internet: 40 percent of the male respondents believe that the Internet will make the world a better place, while only 34.7 percent of the female respondents agreed. This shows the significant gender differences regarding attitudes toward the Internet.

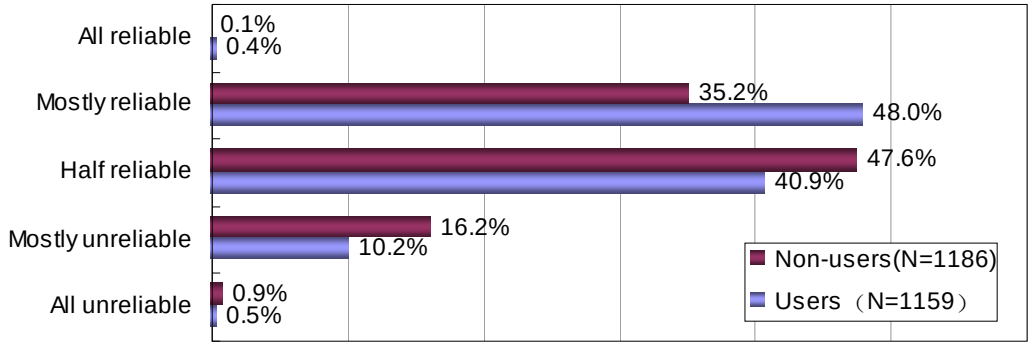
If we look at age differences, the younger respondents are more likely to see the positive aspects of the Internet. There are significant differences regarding the pros and cons of the Internet among the different age groups.

Figure 2.3 Age differences of people who think the Internet will make the world a better place

2.3 Is Internet Content Accurate or Reliable?

The Internet creates a virtual reality, a cybernetic world in which everyone can air his or her opinions and find information that is difficult to find in the real world. however, to what extent is this information regarded as reliable? Internet users are more likely to trust the Internet content. There are significant differences between non-users and users, of whom 48 percent believe that most of the content is reliable.

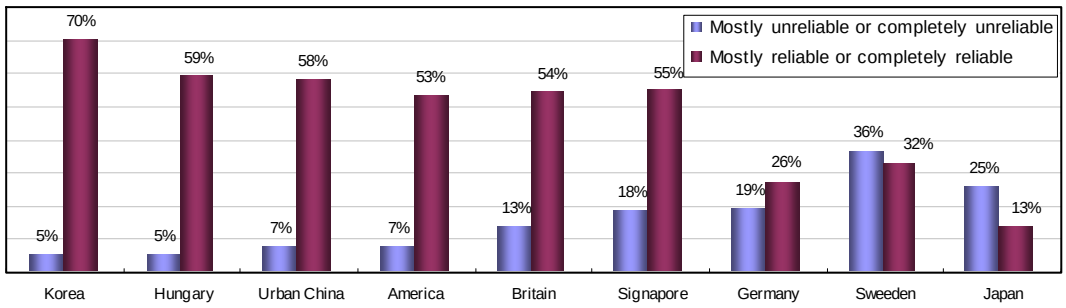
Figure 2.4 Differences between users and non-users regarding the reliability of the Internet



Using comparative transnational data, the proportion of Chinese who trust Internet information is second only to Korea and Hungary. The Japanese trust the Internet the least; 25 percent of Japanese think that Internet information is unreliable or mostly unreliable, while

only 13.3 percent think that Internet information is entirely reliable or mostly reliable; among the Japanese more than 12 percent believe that Internet information is not reliable.

Figure 2.5 Different attitudes toward the reliability of Internet information by country (2003)[1]

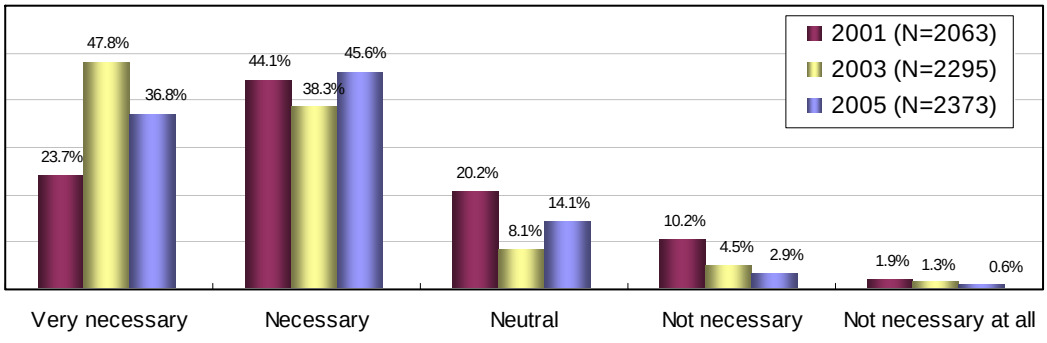


2.4 Should the Internet be Managed and Controlled?

The Internet is not a completely free world; it requires management and control. To what extent is it necessary to manage or control the Internet and what percentage of the people recognizes this need for management and control? Statistically, on the issue of "whether the Internet should be managed or controlled," the figures display no significant differences between Internet users and non-users, and no significant differences among Internet users of different ages, genders, online experience, and even how long they stay online. This means that all people agree that the Internet should be managed or controlled. Generally, 36.8 percent of the interviewees believe "it is very necessary" to manage or control the Internet, and 45.6 percent of the interviewees believe control and management are "somewhat necessary." Therefore, more than 80 percent of the interviewees support having some control and management of the Internet.

If we compare the survey data that gathered in 2001 and 2003, we find that there is always an absolute number of people who favor some sort of control and management of the Internet.

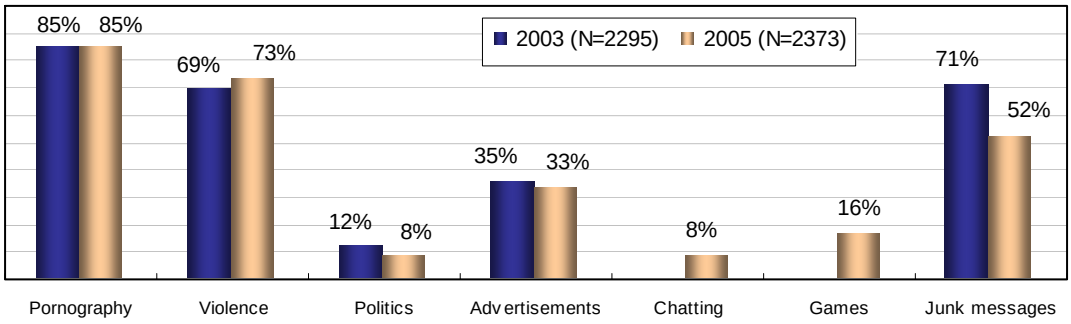
Figure 2.6 Attitudes toward Internet management or control over the past years



1 Source: http://digitalcenter.org

When asked what Internet content needs to be managed or controlled, most people choose "pornography." In both 2003 and 2005, 85 percent of the interviewees believe that online pornography should be managed or controlled. It is no surprise to find that 70 percent of the respondents feel that online violence should be managed or controlled. The 2003 questionnaires did not ask about the management or control of net-chatting and games, although these were the two areas about which parents were most worried. However, in 2005, fewer people feel that these areas should be managed or controlled. Obviously, among the interviewees chatting and games are not as harmful as portrayed in the media. Interestingly, the interviewees are comparatively tolerant of advertisements but detest junk mail. As the following figure shows, about twice the number of people agree that there should be management and control over junk mail as the number of people who think there should be management and control over advertisements.

Figure 2.7 Internet content that should be managed or controlled



PART THREE

INTERNET ADOPTION

In China more and more people are becoming Internet users, and the Internet is no longer considered a luxury. Then who are the probable current Internet users? And who would prefer to live without the Internet? Economic reasons, education, or technical skills may all prevent one from accessing the Internet. Yet attitudes and perceptions may also keep people away from the Internet. The former reasons used to be referred to as the "digital divide," while the latter, first raised by William Dutton, director of the Oxford Internet Institute, have been referred to as the "digital choice."[1] The fact remains that those who do not use the Internet may lose out on opportunities in this information age. This is why the CASS Internet Survey has continuously been concerned about this problem.

While more and more people are becoming Internet users, the demographic composition of the users is changing. To analyze the characteristics of Internet users, a logistic regression was used to compare the data between 2003 and 2005. The results show that the equations match perfectly, which means development trends have been consistent over the past two years.

Table 3.1 Logistic regression comparing 2003 and 2005 in terms of age, education, gender, and income

Dependent variable: Internet use	Year 2003	Year 2005
Age	-0.38766***	-0.31766***
Education	0.880931***	0.987975***
Cube of age	0.000168***	0.000123***
Quartic square of age	-1.8E-06***	-1.3E-06**
Personal monthly income plus natural logarithm of 1	-0.54071***	-0.43815***
Personal monthly income plus square of natural logarithm of 1	0.086162***	0.06852***
Male	0.310302***	0.478776***
Constant	5.606674***	3.583618***

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

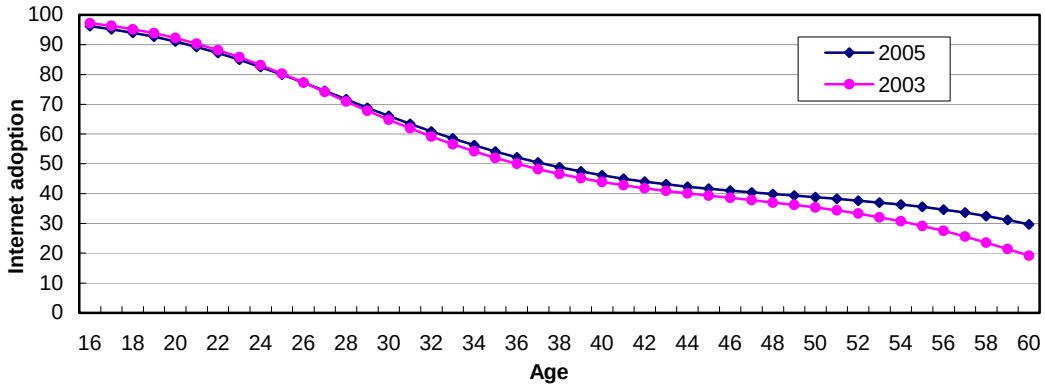
Yet the sampling methods in 2003 and in 2005 are different in that the Internet users were over-sampled in 2003 due to the low rate of adoption, while in 2005, after two years of Internet growth, a 100 percent random sampling method was used. Hence the logistic regression will only be used to analyze the age variable, while other variables, like gender, education, income, etc., will be analyzed by cross-tabs.

1 "Digital choice" refers to those who choose not to use the Internet even though their conditions (such as income level, etc.) do not affect whether they adopt the Internet.

3.1 Age

Obviously, the younger the people are, the more likely they will use the Internet. More than 80 percent of people under 24 years old are using the Internet. About 60-80 percent of people between the ages of 25 and 29 are Internet users. This trend slows down among people who are over 40. Even though the sampling methods for 2003 and 2005 are different, more people over 30 years old are using the Internet in 2005 than they did in 2003; this means that older people have been attempting to use the Internet in the past two years.

Figure 3.1 Internet adoption among different age groups in 2003 and 2005



3.2 Gender

The proportion of males is higher than that of females, especially among the youth, because of the gender imbalances in China. It is misleading to attempt to use the data to illustrate that the proportion of male Internet users exceeds the proportion of female users. Therefore, it is problematic to use the information to explain why there are more males than females among the users. From the survey results in 2005, 57.2 percent of the male respondents have already adopted the Internet, while only 42.5 percent of the female interviewees have adopted the Internet. This shows that the gender gap in terms of Internet adoption is still a problem in China.

Table 3.2 Gender rates for going online

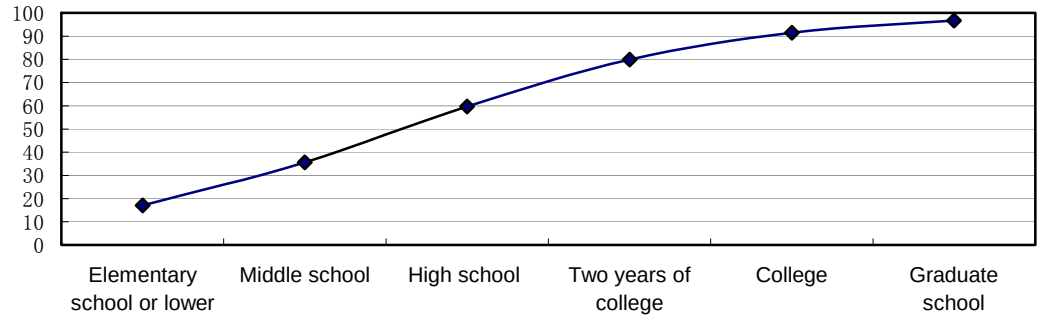
	Non-users	Users	N
Males	42.8%	57.2%	1,088
Females	57.5%	42.5%	1,288

3.3 Education

The survey results also show that education is bound up with Internet adoption: the higher an education a person has, the more likely he/she will go online.

Among the interviewees with bachelor's degrees or higher, about 90 percent are Internet users. Among the interviewees with middle school educations or lower, less than 15 percent are users. In the past, when we discussed the variance in education in terms of Internet adoption, we usually considered the level of knowledge or the knowledge threshold. That is to say, only the well educated can use the Internet because the Internet is considered to be based on high technology. However, knowledge is probably no longer a real gap for Internet adoption because computers and the Internet are becoming more and more user-friendly and also there are computer consultants in some places (especially in Internet cafés). Another more probable reason is that the Internet has a different "usefulness" to people with different educations. This issue will require further study to reach any conclusions.

Figure 3.2 User distribution within different education groups



3.4 Marital Status

Martial status may also have an impact on Internet adoption. In this research, we asked the interviewees about their marital status, including whether they were married, divorced, separated, widowed, cohabiting, single, and so on. However, for the sake of conciseness, this report analyzes marital status simply in terms of whether or not one has a spouse.

From the statistics, we can see that 77.2 percent of the single interviewees have already used the Internet, while only 33.7 percent of the interviewees with spouses are users. Thus it can be seen that the probability of users not having a spouse is much higher than the probability of non-users not having a spouse.

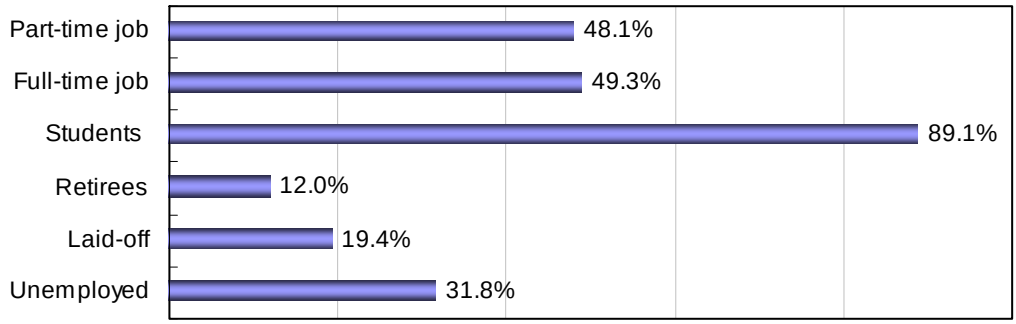
Table 3.3 Different marital statuses going online

	Non-users	Users	N
With spouse	66.3%	33.7%	1,529
Single	22.8%	77.2%	847

3.5 Employment Status

We have also analyzed the employment status of the interviewees, among which, 89.1 percent of students are Internet users, followed by 50 percent of the working population, both full- and part-time. The lowest rate is among retirees (12 percent). In recent years, due to changes in society, some people do not hold jobs: 19.4 percent of the unemployed respondents are using the Internet, while 31.8 percent of the laid-off respondents are using the Internet.

Figure 3.3 Proportion of people using the Internet by employment status



3.6 Occupation

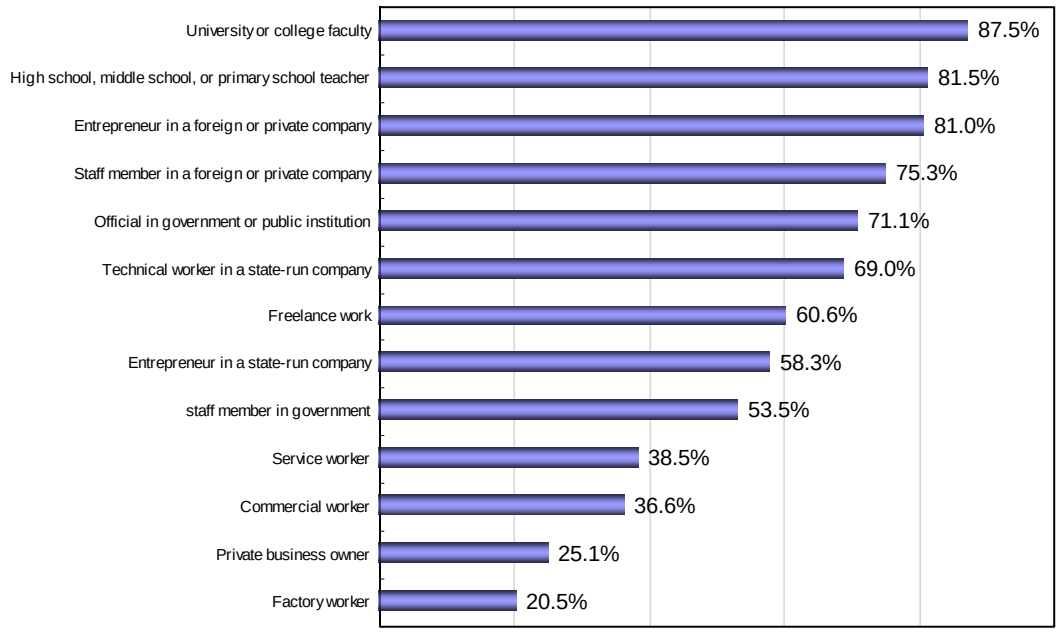
There is no single standard to name occupations in social surveys in China. Different surveys may refer to occupations by different names based on their different aims, requirements, or methods. The 2001 CASS questionnaire was quite simple regarding occupation, and the 2003 questionnaire adopted the occupational classifications used by the CASS Institute of Sociology. However, we encountered some difficulties in the analysis.

The 2005 survey uses a new classification for occupations, based on the eight definitions of occupations from the "national standard GB6565-86 of the People's Republic of China," together with a view to the recent dramatic changes in occupations as well as between occupations inside and outside the system, between mental and manual labor, and some popular survey standards.

Among the people of different occupations, 87.5 percent of the college teachers and researchers have already gone online. This is the highest proportion among all occupations. At the same time, the proportion of high school, middle school, or primary school teachers and entrepreneurs in foreign or private enterprises exceeded 80 percent. The proportion of entrepreneurs in state-owned enterprises (58.3 percent) is lower than that of technical workers (69 percent), while the proportion of entrepreneurs in foreign or private enterprises (81 percent) is higher than that of staff members (75.3 percent). In the same way, the proportion of officials in government or public institutions (71.1 percent) is also higher than that of

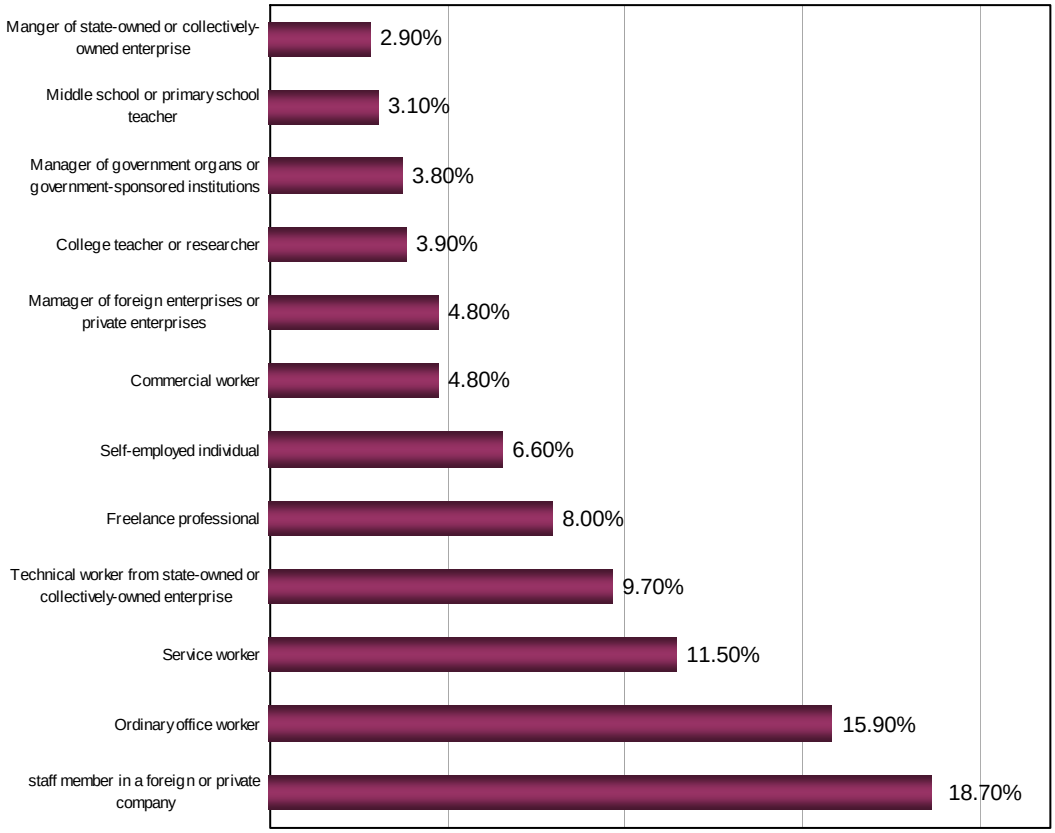
clerks or staff in government or public institutions (53.5 percent). Among the occupations in the survey, the lowest proportion of Internet users is among factory workers and private business owners; only 25.1 percent of the interviewed private business owners and 20.5 percent of the interviewed factory workers use the Internet.

Figure 3.4 Proportion of different occupations using the Internet



Since the behavior of Internet users is related to the content of the Internet services and the constitution of the users, we have examined the types of occupations together with the proportion of different occupations using the Internet. According to the survey results, staff members in foreign or private companies comprise the highest proportion of Internet users (18.7 percent), followed by ordinary workers (15.9 percent), and then service workers (11.5 percent). Basically, the lowest proportion of users interviewed was among white-collar workers: managers of foreign enterprises and private enterprises (4.8 percent), college teachers and researchers (3.9 percent), managers of government organs and government-sponsored institutions (3.8 percent), middle school or primary school teachers (3.1 percent), and managers of state-owned and collective enterprises (2.9 percent), etc.

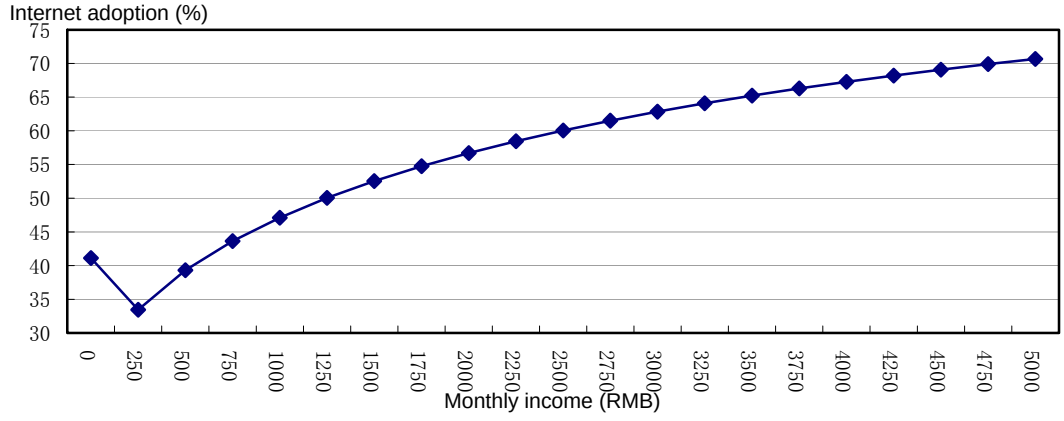
Figure 3.5 Occupation type among the users



3.7 Personal Income

Among the respondents, the higher their income, the more likely they are to use the Internet. The rate of Internet use increases significantly as income increases among those whose monthly income is less than 3,000 RMB,. On the other hand, people who have no income at all also comprise a high proportion of those going online -- nearly 80 percent are users, among whom 64.7 percent are students (N=356) and 24.2 percent are jobless (N=133).

Figure 3.6 User distribution within income groups

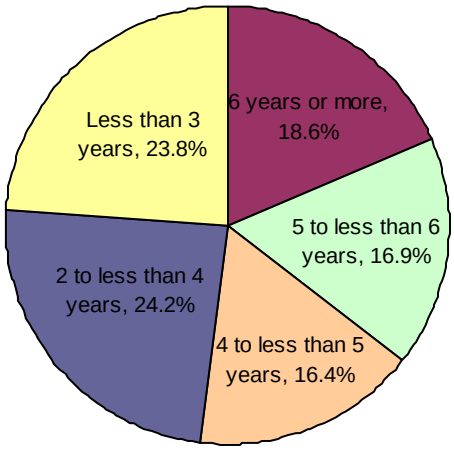


Generally, a typical Internet user in China would most likely be young, male, holding a job as a teacher or a white-collar worker with a high income, or a student. This not only sheds light on the probability of Internet adoption among the present population, but it also reflects that current adoption of the Internet in China is still in the process of development and lags behind the frequency of watching television. In addition, among the non-users, only about 5.5 percent think that they might go online within the next half year and 61.7 percent think they will not.

3.8 Internet Experience

The survey results on Internet experience also show that the Internet in China is still in the process of development; 64.4 percent of the interviewed users have less than five years of Internet experience, which means the average users' Internet experience is still relatively short, although the proportion is smaller than that in the survey results in 2003 (80.2 percent of the users had less than five years of Internet experience in the five big cities). As we have found from our past research and from the research of the USC Center for Digital Future, users with less than five years of Internet experience have a high probability of spending more time chatting and entertaining.

Figure 3.7 Distribution of Internet experience



In addition to an analysis of Internet adoption, we need to understand how Internet users are using the Internet, such as the average time spent on the Internet, location, frequency of going online, online activities, and so on.

PART FOUR
INTERNET USAGE

To present an overview of the current situation of Internet usage in China, certain variables were carefully examined, such as the duration, frequency, and location of Internet use. How does one get online? What are the users' online activities? And what are the Web sites that users often visit, etc.?

4.1 Duration

The survey results in 2001 show that Internet users' average daily time spent on the Internet in the five cities was 1 hour and 28 minutes. Two years later, the average daily time spent on the Internet increased by 26 minutes (1 hour and 54 minutes). In 2005, the time spent on the Internet increased significantly by 50 minutes (2 hours and 44 minutes), partly because of the unlimited use of broadband such as ADSL and because of the downloading of music and movies by P2P technology. The following table compares the different amounts of time spent on the Internet in 2001, 2003, and 2005.

Table 4.1 Time spent on the Internet in 2001, 2003, and 2005

Year	Hours per day
2001	1.47
2003	1.9
2005	2.73

4.11 Demographic differences in time spent on the Internet

Generally, male, young, higher educated and higher income users tend to spend more time online.

Gender

There are significant differences between male and female Internet users in terms of time spent online; male Internet users spend an average of 3.02 hours per day online, whereas female users average 2.41 hours per day online. Thus male users spend 20 minutes more than female users per day online.

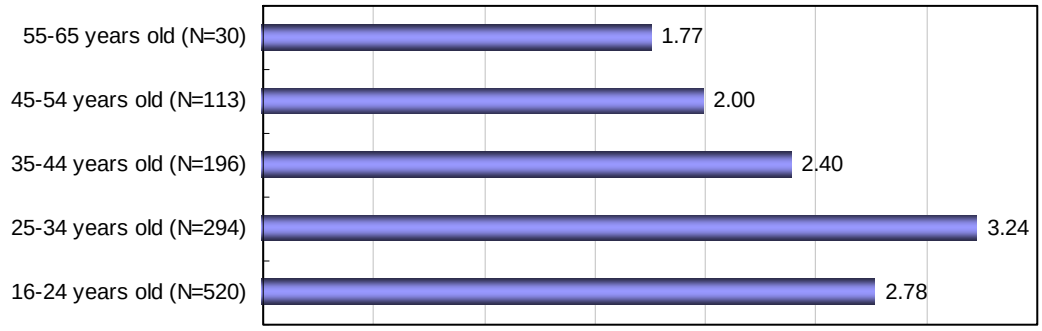
Table 4.2 Gender differences in terms of time spent on the Internet

	Hours per day	Number of cases
Male	3.02	612
Female	2.41	541

Age

The amount of time spent on the Internet by different age groups also varies, but the general tendency is that the younger the users, the more time they spend on the Internet. The 25 to 34 year-old age group spends the most time on the Internet partly because this group already has stable work and stable lives. On average, they spend 3 hours per day on the Internet, almost 1 hour more than the 55 to 65 year-old age group.

Figure 4.1 Time spent on the Internet by age groups



Education

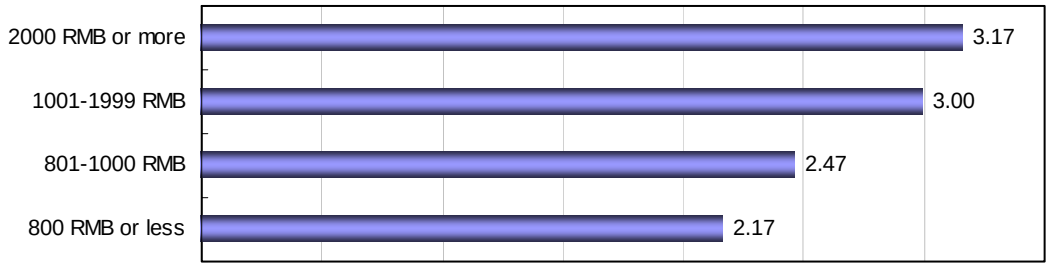
Similarly, the average amount of time spent on the Internet varies significantly according to the education level. There is a direct relation between the amount of time spent on the Internet and the education level. Users with a bachelor's degree or higher spend the most time on the Internet, whereas users with lower levels of education spend the least time on the Internet.

Figure 4.2 Different amounts of time spent on the Internet by groups with different education levels

Personal income

We also find that there is a direct ratio between the amount of time spent on the Internet and personal income; as income levels increase, the average amount of time spent on the Internet increases as well.

Figure 4.3 Time spent on the Internet by groups with different income levels



Note: 1 USD equals about 8 RMB

The data in 2005 show that there is a correlation between marital status and Internet adoption, but there is no significant influence of marital status on time spent online. Employment status and occupation also do not influence the amount of time spent on the Internet.

To consider whether the amount of time that users spend on the Internet is affected by whether or not they are students, we filtered the user samples into students and non-students, separating them by regression analysis in order to compare them:

4.12 The amount of time spent on the Internet by non-students[1]

Table 4.3 Analysis of the amount of time spent on the Internet by non-students (dependent variable: natural logarithm of the amount of time [hours] spent on the Internet)

constant	0.208001
Males	0.890755***
Education level	0.588538***
Natural logarithm of personal income plus one	0.046503*
Age	0.028449*
Age multiply the male	-0.01795**
Age multiply educational level	-0.01071**

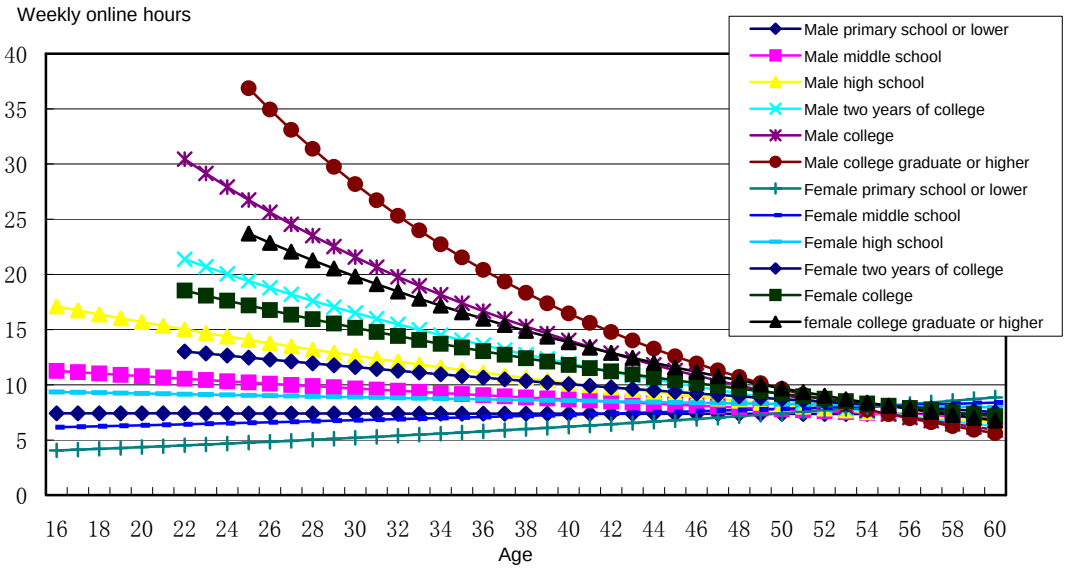
Note: *<0.05, **<0.01, ***<0.001

1 The statistics in sections 4.11 and 4.12 were obtained by Professor Liu Dehuan, of the School of Journalism and Communication, Peking University.

Because there are more non-line fits in the equation, the results will be shown in the following figures.

Influence of age, gender, and education levels

Figure 4.4 The average weekly time spent on the Internet by different age groups, gender, and education levels

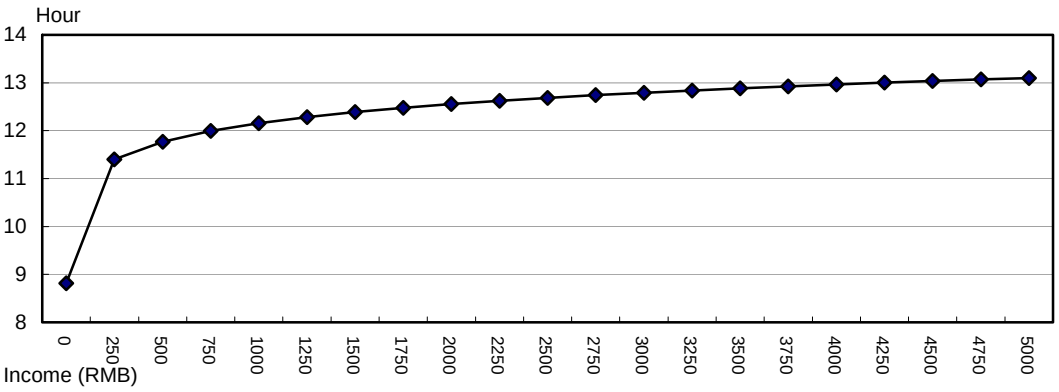


From the above Figure, we see that different ages, genders, and educational attainments are very complicated vis-à-vis the amount of time spent on the Internet, but they have the following basic characteristics:

- Among those users with a two-year college degree and males with high school degrees: the younger they are, the more time they spend on the Internet, especially among the males;
- Among those users with less than a two-year college degree: there is little difference in terms of the time spent on the Internet;
- Male Internet users spend more time online than female users, if their ages and education levels are the same;
- The higher the education, the more time one spends on the Internet among the same gender and age groups.

The amount of time spent on the Internet among non-students with different incomes

Figure 4.5 The amount of time spent on the Internet among non-students with different incomes



This figure shows that the amount of time spent on the Internet by non-students and users with no income is much less than the amount of time spent on the Internet by others. Among the users with incomes of less than 500 RMB (about US$ 62), the trend is the more income one earns, the more time one spends on the Internet, but there is little difference between different incomes.

4.13 Analysis of the amount of time spent on the Internet by students

In a separate analysis of the students, the following statistical results were found:

Table 4.4 Regression analysis on the amount of time spent by students (dependent variable: natural logarithm of the amount of time [hours] spent on the Internet)

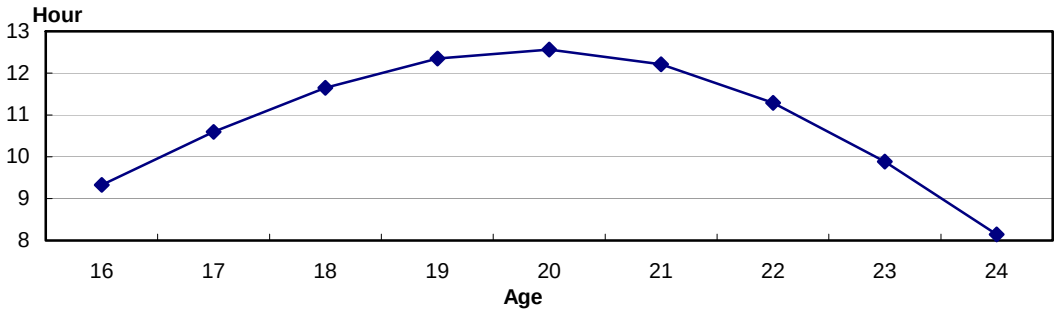
Constant	-2.8151
Age	0.297679*
Educational level	0.205912*
Males	0.365621***
four times of the age	-9.5E-06*

Note: *<0.05, **<0.01, ***<0.001

From the above model, we see that the amount of time spent on the Internet by male students is more than that of female students. Likewise, there are differences among different age groups and education levels.

Analysis of the amount of time spent on the Internet by students of different ages

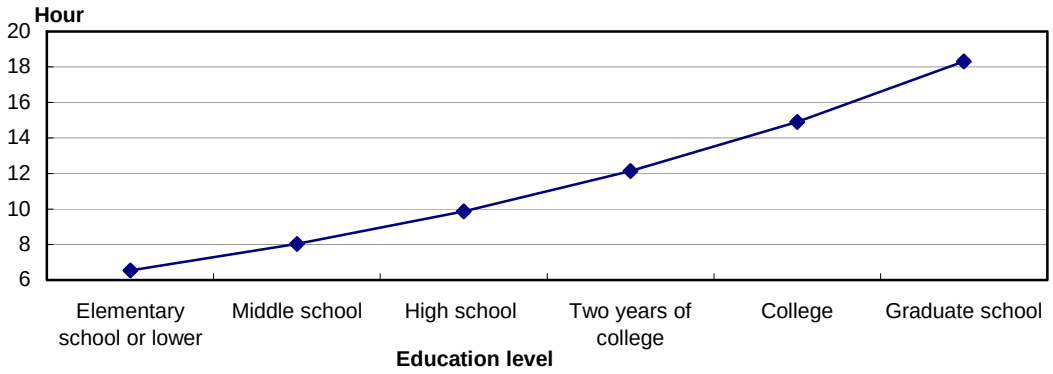
Figure 4.6 Amounts of time spent on the Internet by students of different ages



From the above figure, we see the peak value lies among the 20-year-old students; the closer one is to this age, the more time he/she spends on the Internet. This age group basically consists of students with two-year college degrees or sophomores and juniors in four-year colleges.

Analysis of the amount of time spent on the Internet by students with different education levels

Figure 4.7 Analysis of the amount of time spent on the Internet by students with different education levels



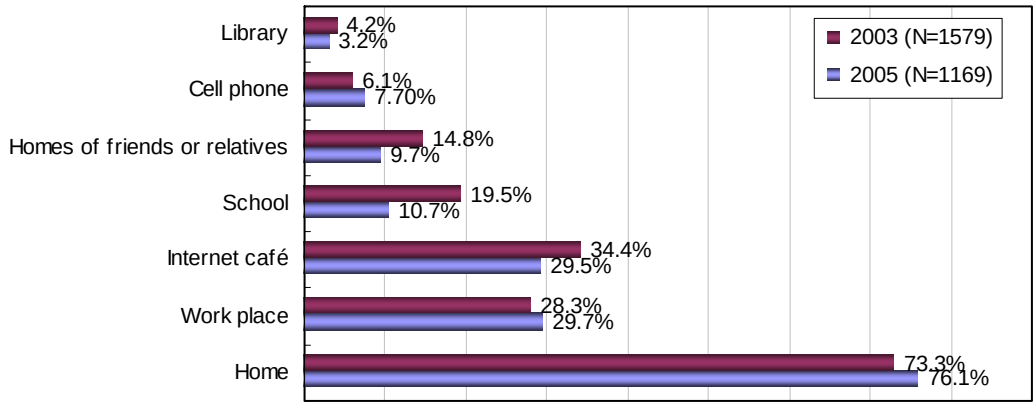
Among the students, it is quite significant that the higher the education of the users, the more time they spend on the Internet.

4.2 Location

Generally, there are twice as many users who go online at home than users who go online at each of other locations. This result shows that the home is the major location for going online. There were more users going online at home in 2005 than there were in 2003,

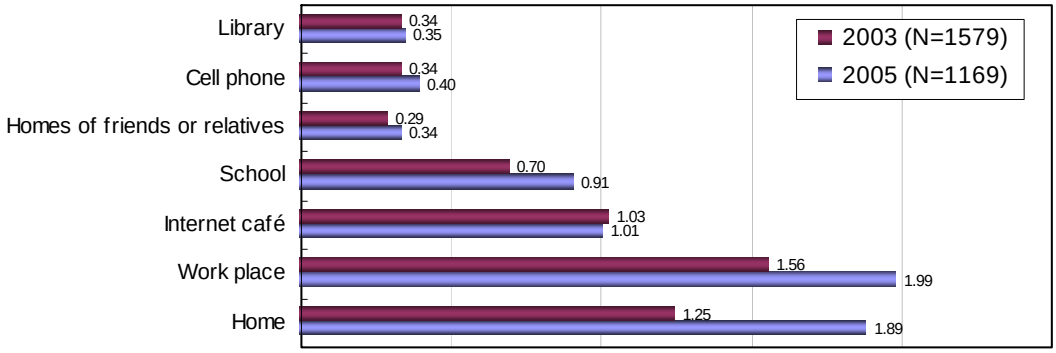
whereas there was a significantly lower percentage of users in 2005 going online at school, at the homes of friends or relatives, or at Internet cafés.

Figure 4.8 Distribution of online locations in 2003 and 2005, by percentage



With the application of broadband (mainly ADSL), there has been a significant change in the locations where users go online. Users spend the most time on the Internet from their homes, from their work places, or from school. One of the reasons that people go online at Internet cafés is for the high-speed access. But now that ADSL is available at homes for a reasonable price (about US$10-15 for unlimited monthly access), Internet cafés are losing their attraction in terms of speed. The survey results show that users spend the most time on the Internet when they go online at the work place, which reaches almost 2 hours per day, and the average amount of time spent on the Internet from home has reached 1 hour and 53 minutes.

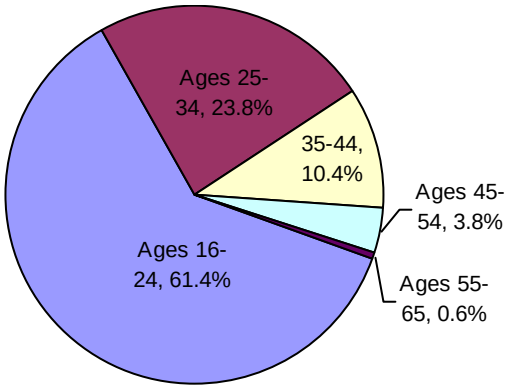
Figure 4.9 Time spent on the Internet per day at different locations in 2003 and 2005



We have analyzed the demographic distribution among the Internet café users. In general, most of the users going online at Internet cafés are male (60.3 percent), single (71.3 percent), with a low education level and with low or no income (41 percent of Internet café users have no income, and 21.5 percent of Internet café users have a monthly income of less than 1,000 RMB, or about US$125). At the same time, there is a larger percentage of young people

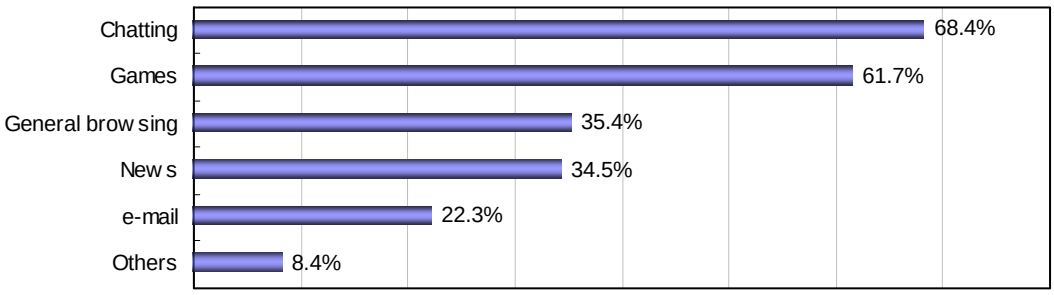
among the users in the Internet cafés. The following figure shows the age distribution among users going online in Internet cafés:

Figure 4.10 Age profile of Internet users going online in Internet cafes



The constitution of the population together with the atmosphere in the Internet cafés shows that the main purpose of going online at Internet cafés is not to seek information or to read the news. Among the interviewed Internet café users, 68.4 percent said the reason they go online is to chat, and 61.7 percent said they go online to play games. The following figure shows the purposes of going online in Internet cafés (multiple answers allowed):

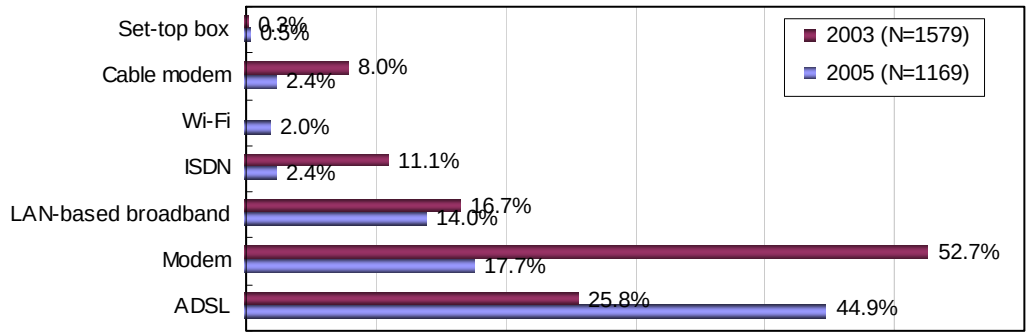
Figure 4.11 The purposes of going online in Internet cafes



4.3 Connections

There is a significant change in the methods used to go online: compared with 25.8 percent of Internet users using ADSL in 2003, half of the users going online at home in 2005 are using ADSL. The number of users going online by a traditional dial-up modem has dropped significantly from 52.7 percent in 2003 to 17.7 percent in 2005. At the same time, a greater number of users no longer use the out-of-date ISDN technology; the percentage has dropped from 11.1 percent to 2.4 percent.

Figure 4.12 Connection modes



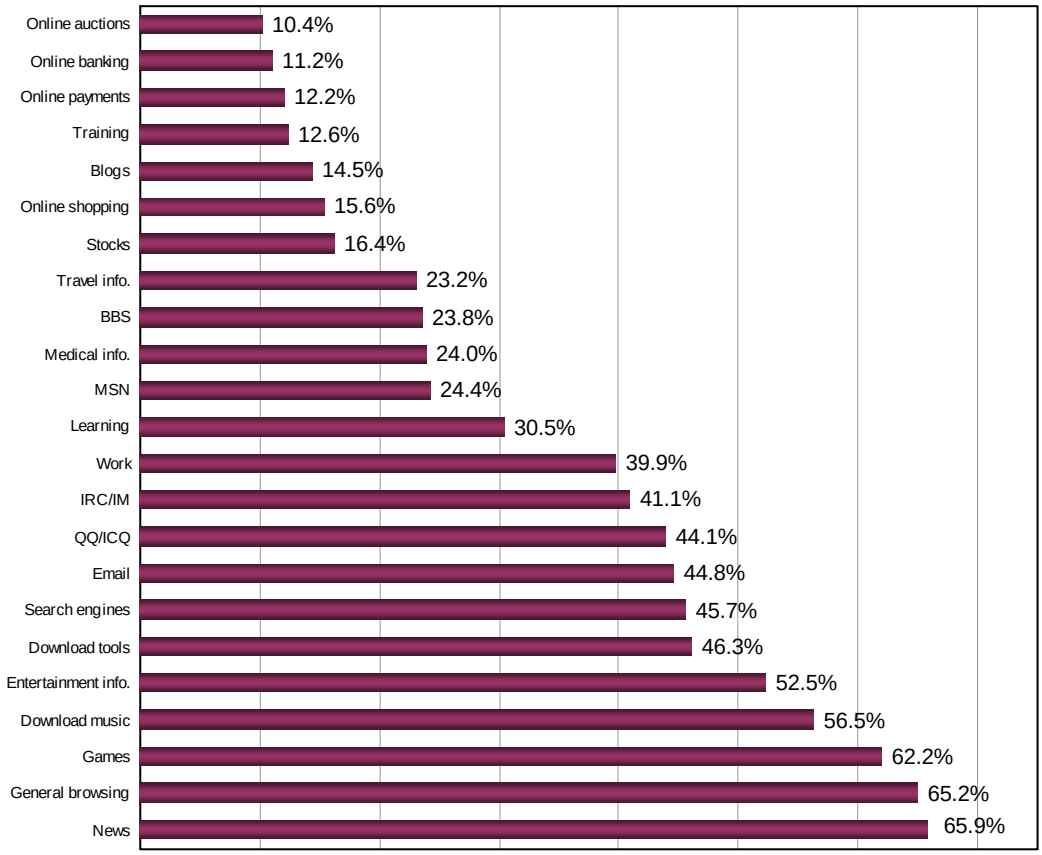
4.4 Online activities

A major difference between broadband Internet and a traditional dial-up modem is not merely the high-speed access but also the duration. Because of broadband Internet access, people no longer "carefully count the online time," and instead they are "always online." Hence, their online activities have changed.

In order to understand Internet usage and its effects, it is important to examine the users' online activities. One of the differences between the online activities of Chinese Internet users and the online activities of users in other countries is the amount of attention paid to the online news. In the questionnaire, we asked about the use of Internet functions in terms of "never," "occasionally," "sometimes," "often," and "always." We found that most users think their purpose of using the Internet is to read the news (65.9 percent).

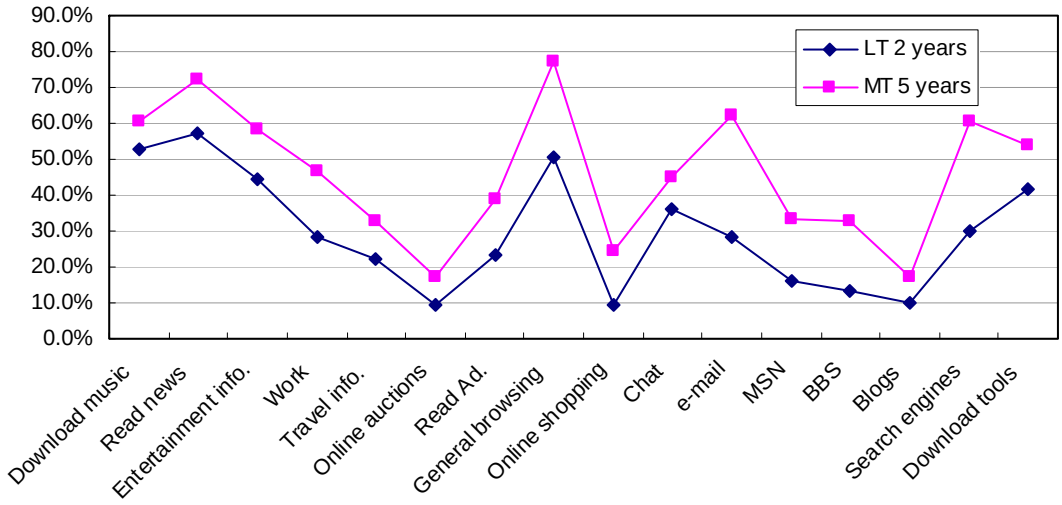
The second most-frequent used Internet function was "general browsing" (65.2 percent), followed by three entertainment functions: 62 percent of the users play online games; 56.7 percent of the users download music; 53.5 percent of the users download entertainment information. These results show that many Internet users go online not for information but for entertainment.

Figure 4.13 Proportions of Internet functions, as supplied by users



The longer the Internet experience, the more people who use a search engine, who browse, or who e-mail, etc. The significant different online activities between users who have less than two years of Internet experience and users who have more than five years of Internet experience are listed below in Figure 4.14. It is interesting that there is no significant difference between the two groups in terms of playing games or using QQ/OICQ.

Figure 4.14 Significant different online activities found between users with different online experiences



4.5 Frequently Visited Web Sites

By examining the Web sites that users visit, we can gain a general picture of their online behavior. In our questionnaire, we required the interviewees to list their five most frequently visited Web sites, and then we coded these Web sites by number and analyzed them using statistical software. According to the results of our analysis, the Web sites people prefer to visit are concentrated on a few Chinese portal sites. The top five are: www.sina.com.cn; www.sohu.com.cn, www.netease.com, www.baidu.com, and www.yahoo.com.cn. The frequency of visiting the other Web sites that appear on our questionnaire is significantly lower than that of the five listed above. The most dramatic change is that the Baidu appears on our list in 2005, whereas it did not appear in 2003. The rankings are shown as follows:

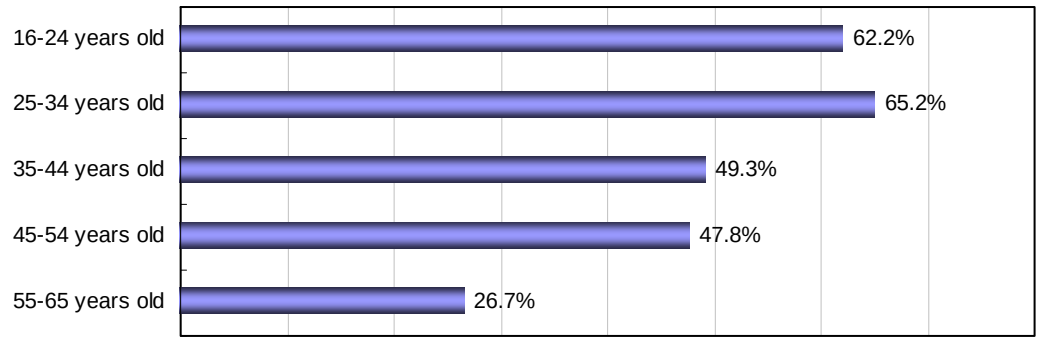
Table 4.5 The proportion of Web sites visited (N=1169)

	First List	Second List	Third List	Fourth List
1	Sina (30.9%)	Sina (20.8%)	Sohu (15.2%)	Sohu (10.5%)
2	Sohu (13.4%)	Sohu (19.4%)	Netease (12.7%)	Yahoo (10%)
3	Netease (13.4%)	Yahoo (9%)	Sina (11.2%)	Baidu (6.9%)
4	Baidu (6.7%)	Netease (8.9%)	Yahoo (7.6%)	Netease (6.9%)
5	Yahoo (6.3%)	Baidu (5%)	Baidu (7.1%)	Sina (5.7%)

4.6 Search Engines

Among the 1,169 interviewed Internet users, 41.6 percent do not use a search engine. Comparing the users who use a search engine with the users who do not use a search engine, we see that 61.0 percent of the male users use a search engine, whereas only 55.4 percent of the female users. Among the different age groups, there is a significant age difference among the proportion of those choosing to use a search engine. Among the users between the ages of 16 to 34, the proportion of users using a search engine is more than 60 percent, whereas among those between the ages of 55 to 65, the proportion of those using a search engine is only 25.7 percent. Therefore, younger Internet users tend to more often use a search engine.

Figure 4.15 Differences among users' ages in terms of using a search engine (N=1,161)

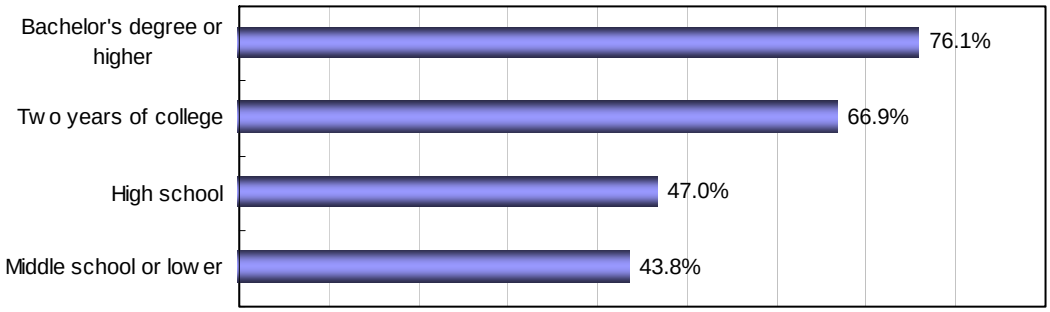


At the same time, the proportion of users with a high income increases with the use of a search engine. Among the interviewed users with incomes of more than 2,000 RMB, 68.9 percent use a search engine, whereas among the users with incomes of less than 800 RMB, only 43.9 percent use a search engine.

There are also significant differences in terms of Internet experience among the users who use a search engine. Among users with six years of Internet experience, 72 percent use a search engine, whereas among users with less than two years of Internet experience, only 44.4 percent use a search engine.

In addition, there are differences in terms of education level among users who use a search engine. A high proportion of users with a high level of education use a search engine.

Figure 4.16 Proportion of users using a search engine, by different education levels (N=1,161)



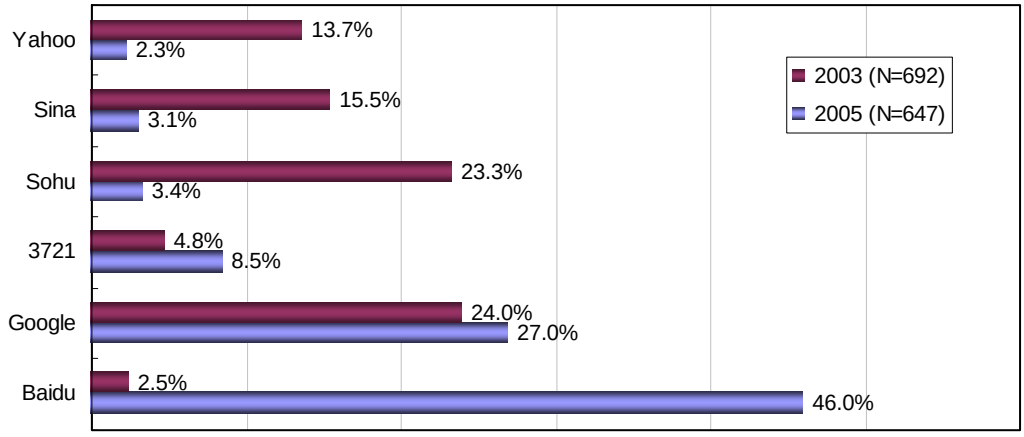
In the questionnaire, we required the interviewees to list the two most frequently used search engines. Similar to the Web sites they frequently visited, there were five most frequently used search engines. Among the interviewed users, 76.1 percent use Baidu to search, which is indicative of the popularity of Baidu among the Internet users.

Table 4.6 The rankings of search engines used (N=647)

Search engine	Listed first	Listed second
1	Baidu (46%)	Baidu (30.1%)
2	Google (27%)	Google (28.3%)
3	3721 (8.5%)	3721 (9.1%)
4	Sohu (3.4%)	Sohu (7.4%)
5	Sina (3.1%)	Sina (4.04%)

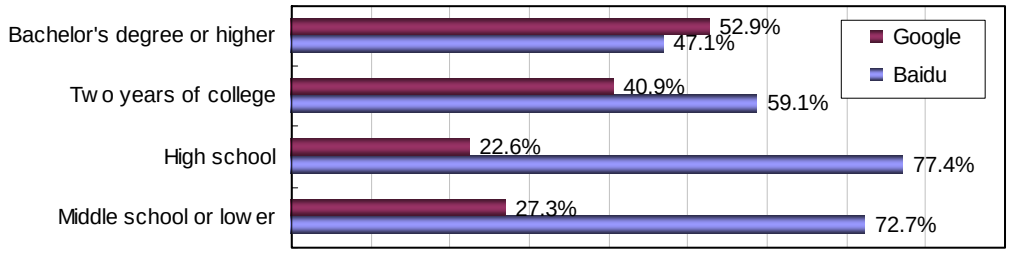
Comparing the most frequently used search engine as cited by the users in the five cities in 2003 and 2005, we find a change in the choice of search engines over the past two years. In 2003 only 2.5 percent used Baidu, but after only two years of efforts this percentage increased dramatically to 46 percent by 2005. Google's market share increased slowly from 24 percent in 2003 to 27 percent in 2005. Whereas Yahoo and Sohu were frequently used search engines in 2003, their customers declined dramatically by 2005.

Figure 4.17 Differences among search engine markets in 2003 and 2005



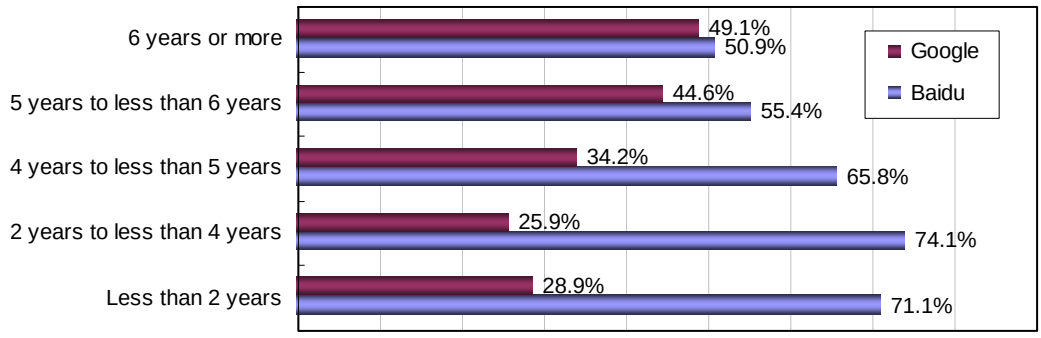
If we compare the users of Baidu and Google, we see little difference in terms of gender, age, or marital status, but there are significant differences in terms of education levels and length of Internet experience. A high proportion of users with a higher education choose Google, whereas users with a high school education or lower prefer to search using Baidu.

Figure 4.18 Differences in education levels of Google and Baidu users



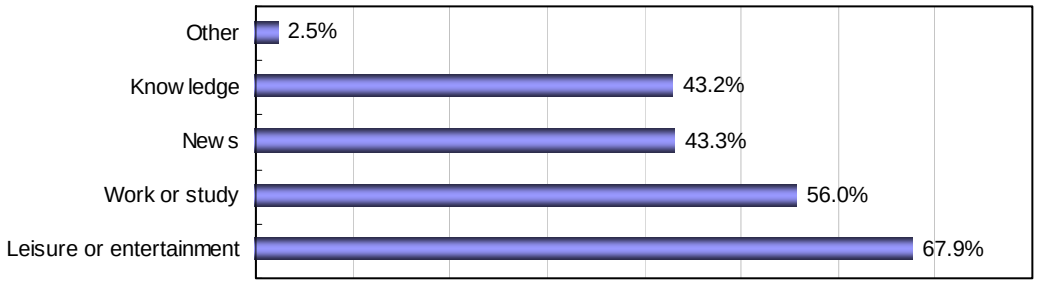
Likewise, users with longer Internet experience tend to use Google more than they use Baidu. The number of users with less than five years of Internet experience choosing Baidu is twice those with less than five years of experience choosing Google.

Figure 4.19 Proportions of users with different lengths of Internet experience choosing Google or Baidu (N=474)



The major topics of searches are leisure and entertainment (67.9 percent), followed by work or study (56 percent). The topics that are searched via search engines are shown in following:

Figure 4.20 Topics searched by search engines (N=679)



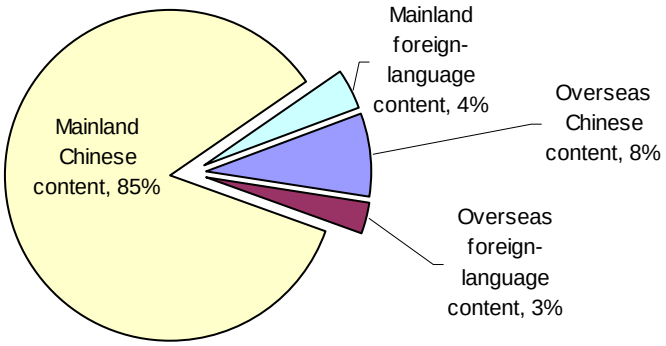
On the whole, the users are relatively satisfied with the results that search engines provide. We listed five categories and asked the users if they can find the information they need by using the search engines (always, often, sometimes, seldom, or never). None of the respondents thought that they seldom or never find the needed information by using the search engines. 14.3 percent interviewed Internet users thought they can always find the answers, 55.5 percent thought they often find the answers, and 30.2 percent thought they sometimes find the answers (N=672) .

Therefore, we may assume that the reason why some Internet users do not use search engines is not because the search engines are ineffective, but because they go online mainly for chatting or entertainment, so they do not really need to search anything. Another reason may also be that they do not have any experience using search engines or they do not know how to use search engines.

4.7 Languages

As in the last two surveys, we examined the amount of time users spend on Web sites with content in different languages. Generally, Web sites with domestic content are still the most popular Web sites visited. Overall, the interviewed users spend about 85 percent of the time they spend online visiting Web sites with mainland Chinese content; compared to the figure from 2003, this percentage increased by more than 5 percent in 2005. In addition, the interviewed users reported spending about 8 percent of their time visiting Web sites with overseas Chinese content, and 4 percent of their time visiting Web sites in foreign languages launched by mainland China and 3 percent of their time visiting Web sites in foreign languages not launched by mainland China.

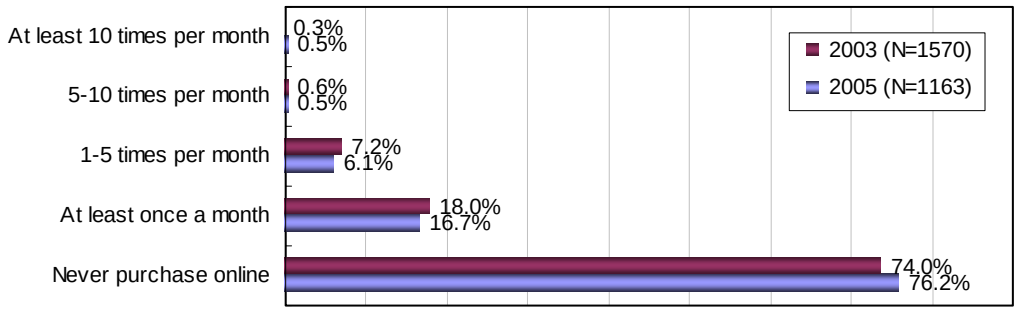
Figure 4.21 Users' time spent on Web sites of different languages



4.8 Online purchasing

For years, the media have focused on the advantages of online purchases, yet the B2C model fails to attract customers even though it provides all kinds of benefits to encourage online purchasing. This research shows that the number of online shoppers has not increased. Among the interviewed users, 76.2 percent have never purchased anything online, and only 10 percent make purchases at least once a month. The following figure compares the frequency of online purchases in 2003 and 2005.

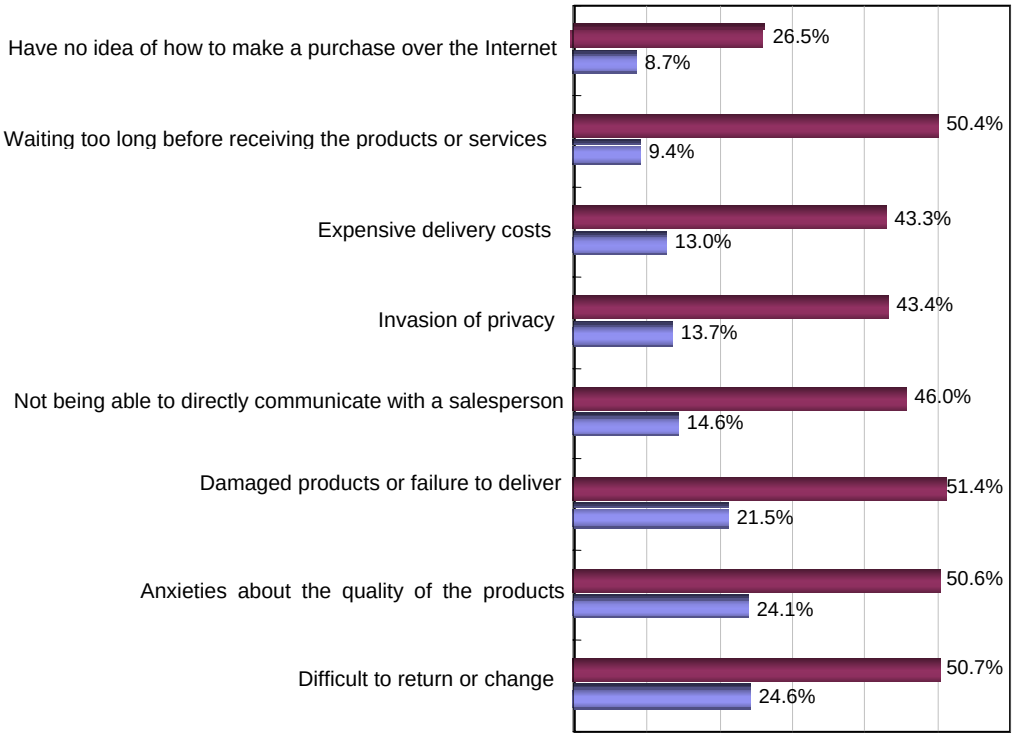
Figure 4.22 The frequency of online purchase in 2003 and 2005



At the same time, the average consumption by users purchasing online is very low, at about 95.8 RMB (N=268). In view of the fact that the five cities included in the survey are major cities or capital cities, the users should be more likely to make purchases online. Thus, we see that there is still a long way to go for a real B2C in China.

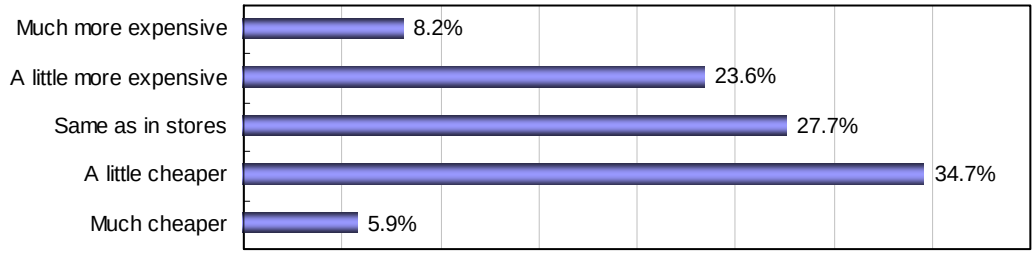
In addition to the objective conditions, such as quality, payment mechanisms, and shipping, what other factors discourage users from purchasing online? Subjectively, the main problem concerns services. More than 70 percent of the users were concerned about the quality of the products, the possibility of receiving damaged products, or receiving no products at all.

Figure 4.23 Concerns about online purchasing (N=1166)



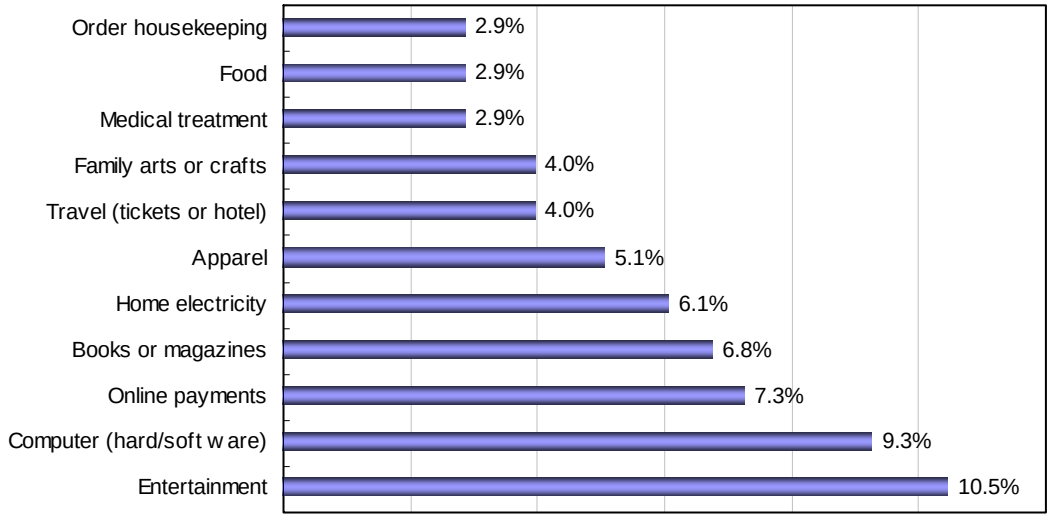
Actually, online purchases reduce the middle flow of goods, thus reducing the price. However, in our survey only 40.6 percent of the online shoppers believe that it is cheaper to shop online than in stores, whereas 30 percent of the users think it is more expensive to purchase online.

Figure 4.24 Is online shopping cheaper?



The products or services paid for by Netizens are still somewhat related to computers; 9.3 percent of those who buy things online "frequently or always" spend money on computer hardware or software, 7.3 percent of those who buy things online "frequently or always" buy some online services (most likely pay phone cards, Internet access cards, or game cards). But in general, shopping or making payments online are still limited activities based on our survey results.

Figure 4.25 "Frequently or always" paid products or services online



In general, even though the commercial Internet service has been in China for about ten years and the number of Internet users has reached over 100 million, Internet development in China is still at a preliminary stage. The proportion of Internet users in China is only about 8 percent of the total population. The demographic distribution of Internet users is significantly different from the demographic distribution of the whole population. Only 35.5 percent of Internet users have more than five years of experience using the Internet. Online activities are mainly related to entertainment. Less than 60 percent of Internet users use a search engine and less than half Internet users use e-mail. Further more, less than 25 percent of the Internet users make purchases online. However, in the urban areas, especially in the large cities, nearly half of the citizens have experienced some online activities. Thus, the influence of the Internet in urban areas is becoming greater, especially in the media, communication, and public opinion.

PART FIVE

THE INTERNET AND MASS MEDIA

Modern people live in an environment full of various media and they depend on a variety of mass media to receive the information they need in their daily lives. Thus, the mass media are an important part of modern life. The Internet is a new medium in China that has developed over the past ten years. Its current influence, social status, political recognition, and reporting ability of major events are all indicative of the fact that the Internet has become part of the mainstream media in China.

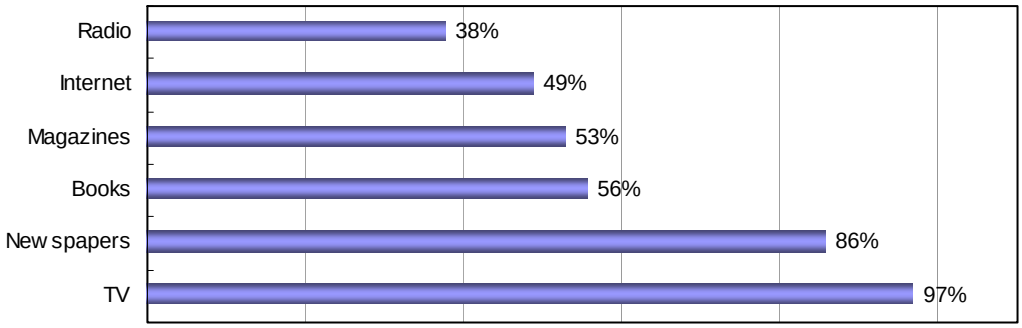
As an interactive new media, the Internet is having a profound impact on our lives. It is not only a medium to distribute information to the masses, but also a vehicle to express public opinion, and an online consensus is actualized through its focus reports, Internet users' comments, and extensive transmissions on Web sites. In 2003, a series of events such as the case of Sun Zhigang, SARS, Liu Yong and the BMW accident all resulted in online condemnation and petitions, showing that an online consensus was beginning to have a direct impact on the traditional media, public opinion, and even state policy and laws, thus becoming an important source for promoting social reform.

An orientation of media consensus will directly impact the perceptions and emotions of the masses and social stability. The emergence of the Internet has changed the ecology of the traditional media. Therefore, the CASS Internet report focuses equally on online media and traditional media, and on a comparison of the two.

5.1 Media Use

The survey results indicated that television was still the dominant mass media. Among the 2,367 interviewees, 2,312 people (97 percent) watched television, 2,028 (86 percent) read newspapers, 1,335 (56 percent) read books, 1,252 (53 percent) read magazines, 1,153 (49 percent) accessed the Internet, and 910 (38 percent) listened to the radio.

Figure 5.1 Media penetration rates (N=2,367)

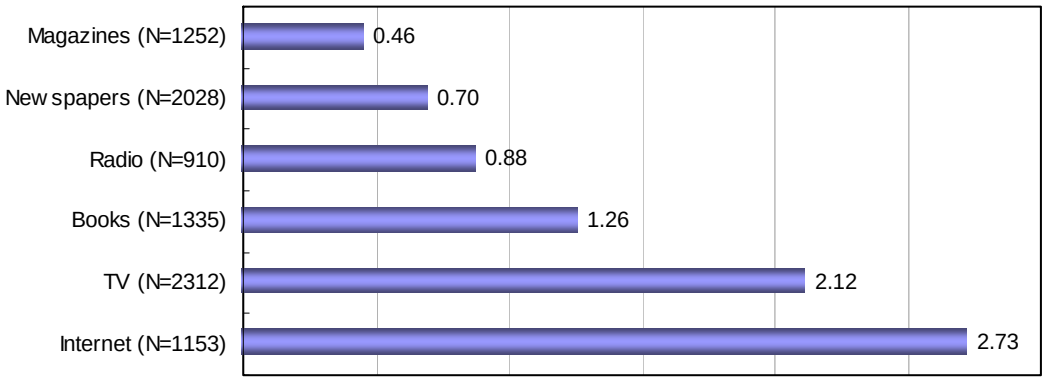


Because the survey was conducted in large cities, and the ages of the interviewees were restricted to between 16 and 65 years old, the penetration rate of using the Internet as a source of media reached 49 percent, largely exceeding the average in the countryside.

An important index of media use is the duration of uses, since the time spent on each medium represents the users' dependency on this medium. We can see from the following figure that the average time spent on the Internet has reached 2.73 hours, at least one hour more than the average time spent on other media, such as newspapers, books, magazines, the radio, and movies.

The fact that people spend much more time on the Internet than on any other media is partly related to the multi-functions of the Internet. (For example, many people go online just to play games, i.e., the entertainment function of the Internet, not to take advantage of the information communication function. We will analyze the effects of different media on these two functions later.) However, to some extent it also reflects the current status and effect of the Internet on media use.

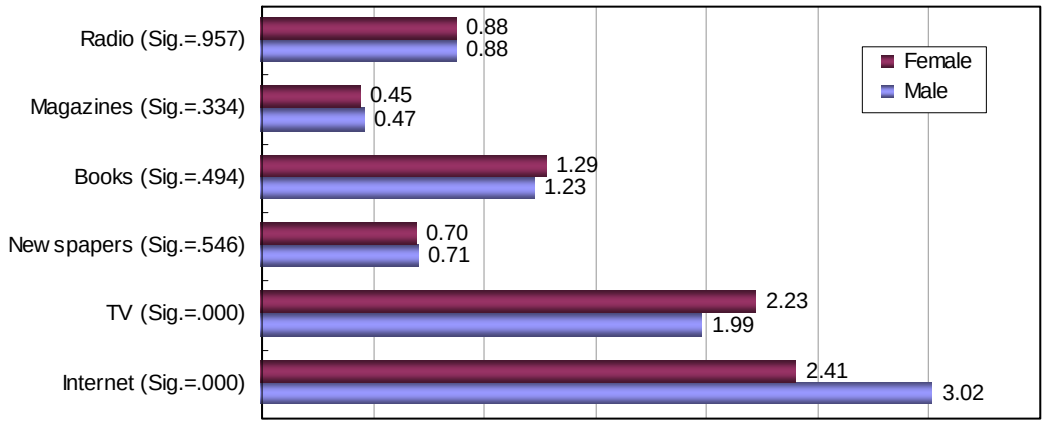
Figure 5.2 Average hours per day spent on different media



5.11 Gender and media use

Media use varies from person to person. With respect to gender, males and females do not significantly differ in terms of the amount of time they spend with the radio, magazines, books, and newspapers. However, there are significant differences between males and females in terms of the time spent accessing the Internet or watching television. The average time spent online by males is more than that of females, reaching 3.02 hours per day, whereas the average time spent watching television by males is less than that of females.

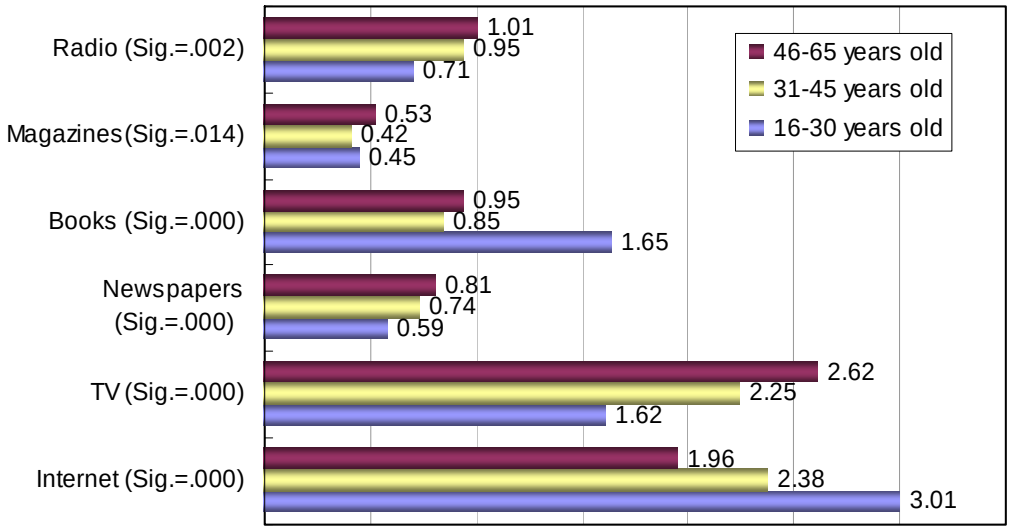
Figure 5.3 Average hours spent on different media per day by gender



5.12 Age and media use

There are significant differences in the amount of time spent using the different media among the different age groups. With the exception that age differences are not apparent in terms of time spent reading magazines, users of different ages differ greatly in the amount of time they access the Internet, watch television, read newspapers, read books, and listen to the radio. Young people spend much more time accessing the Internet and reading books than older people, whereas they spend less time watching television, reading newspapers, and listening to the radio than older people. The group above 45 years old spends one hour more watching television than the group below 31 years old, whereas the over 45 year-old group spends one hour less accessing the Internet. The group between the ages of 16 and 30 spends twice the amount of time reading than the other groups, significantly related to the high proportion of students in this age group.

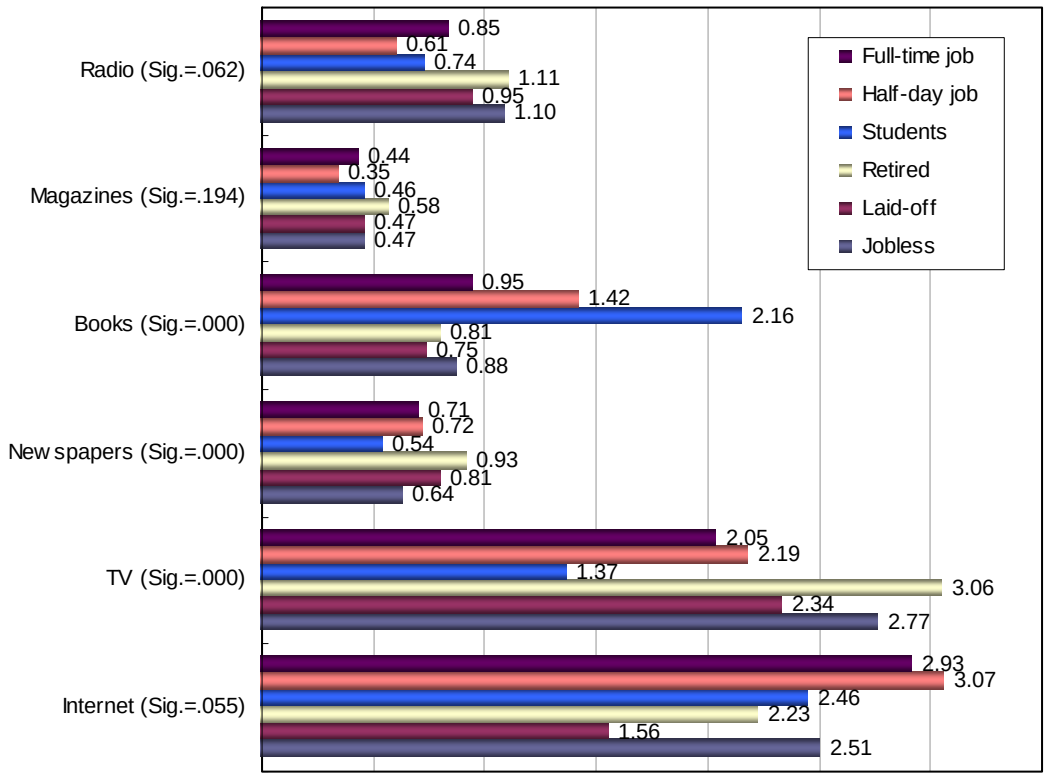
Figure 5.4 Time spent by people of different age groups on different media per day



5.13 Occupation and media use

Chinese society is undergoing a major transformation, resulting in various employment statuses among the people. In this survey, besides full-time workers, the interviewees also included a number of unemployed, half-time, and laid-off personnel. Groups of different employment statuses differ in terms of their media use. However, this difference is not apparent in terms of reading magazines, listening to the radio, and accessing the Internet. But it is significant in terms of reading books, reading newspapers, and watching television. Students spend twice as much time as the other groups reading books; half-time workers also spend more time reading books than the other groups. Having no work, retirees spend much more time reading newspapers and watching television than the other groups: over three hours per day watching television, and almost one hour per day reading newspapers. The jobless spend 2.77 hours per day watching television, whereas they spend only 0.64 hours per day reading newspapers. Because of their busy school schedules, students spend half the time of the retirees and the jobless watching television, and they also spend the least amount of time reading newspapers. The following figure reflects the differences in amount of time spent on different media use among people of different employment statuses.

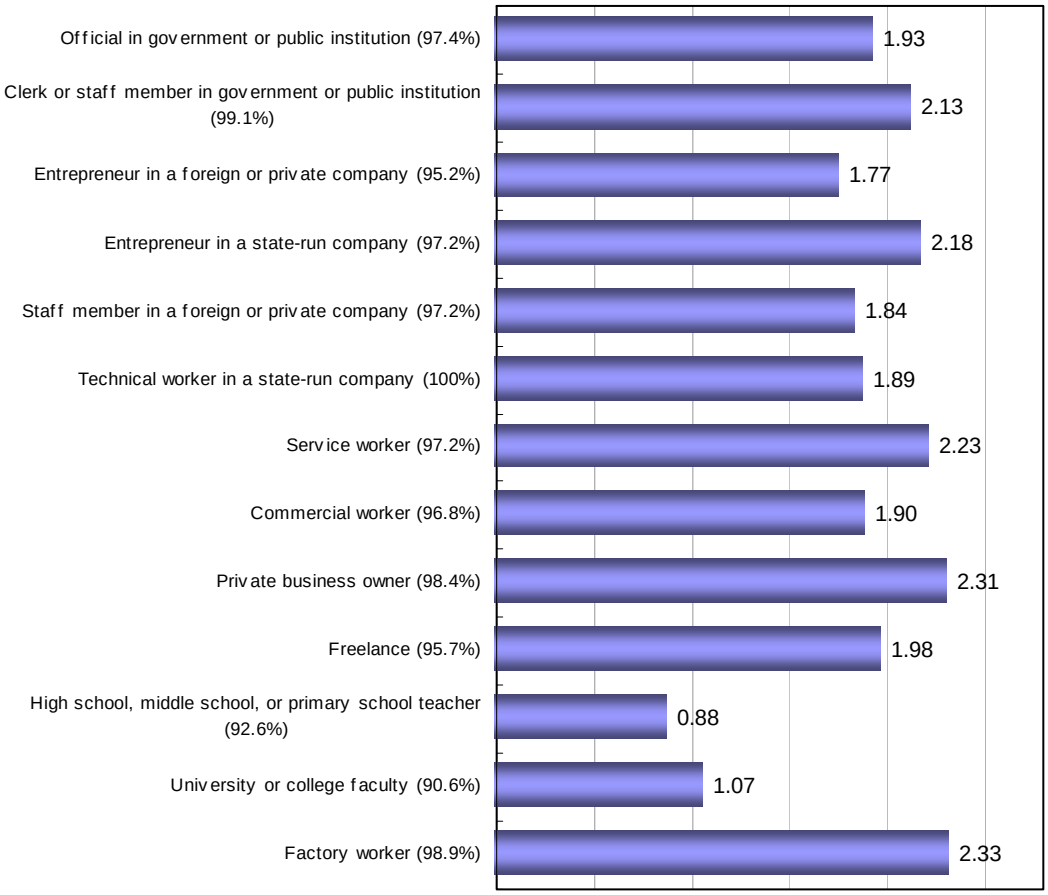
Figure 5.5 The average hours spent on different media per day by people of different employment statuses



As far as different occupations are concerned, the time spent on the different media displays a regular pattern. There are no significant differences in time spent accessing the Internet, reading magazines, and listening to the radio, whereas there are significant differences in time spent watching television, reading newspapers, and reading books.

As a dominant medium with the highest penetration rate, television has intensive and deep effects on the masses. According to the survey results, the group of factory workers, private business owners, service workers, and clerks or staff members in government or public institutions, watch television the most, while high school, middle school, or primary school teachers and university or college faculty watch television the least. The difference between the two groups is more than one hour. Meanwhile, the proportion of university or college faculty who do not watch television at all reaches over 9 percent, and the proportion of high school, middle school, or primary school teachers who do not watch television at all reaches over 7 percent.

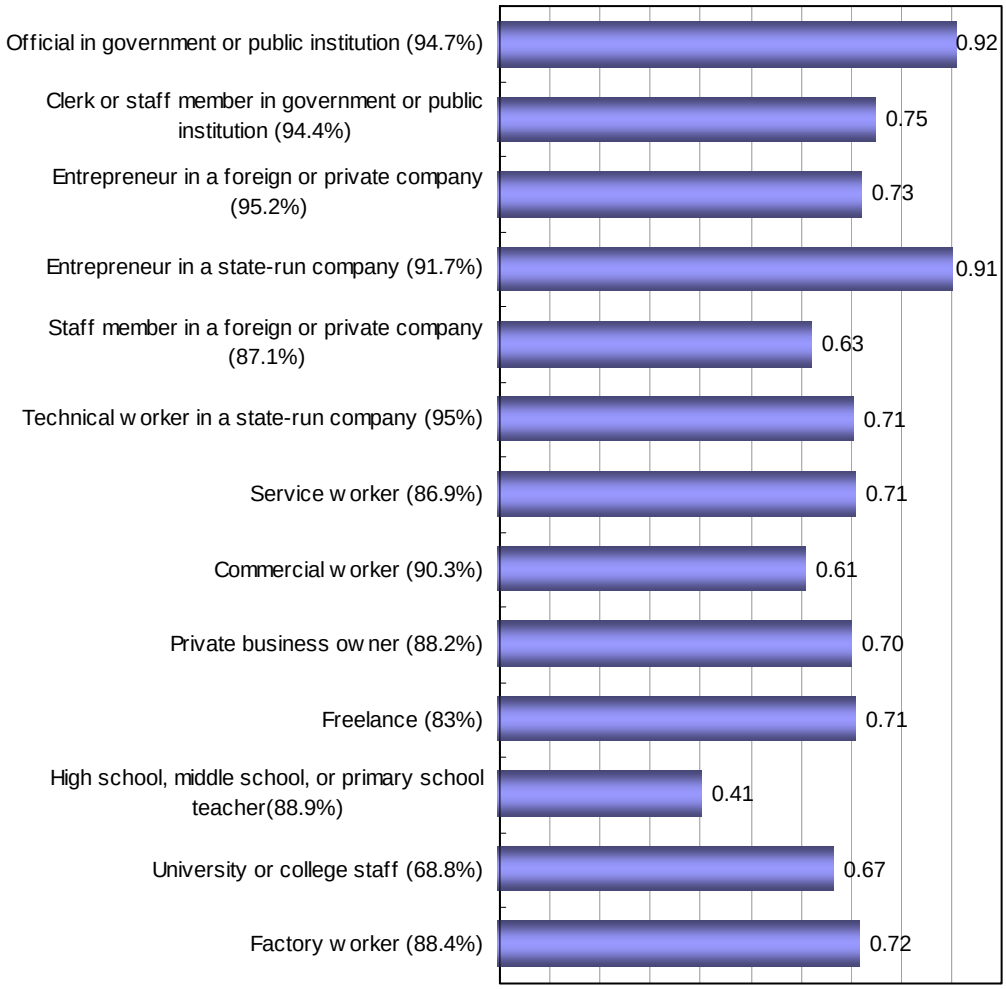
Figure 5.6 The average hours spent watching television by people of different occupations



Note: The percentages on the left show the media penetration rates, and the numerical values on the right show the average hours users spend on watching television.

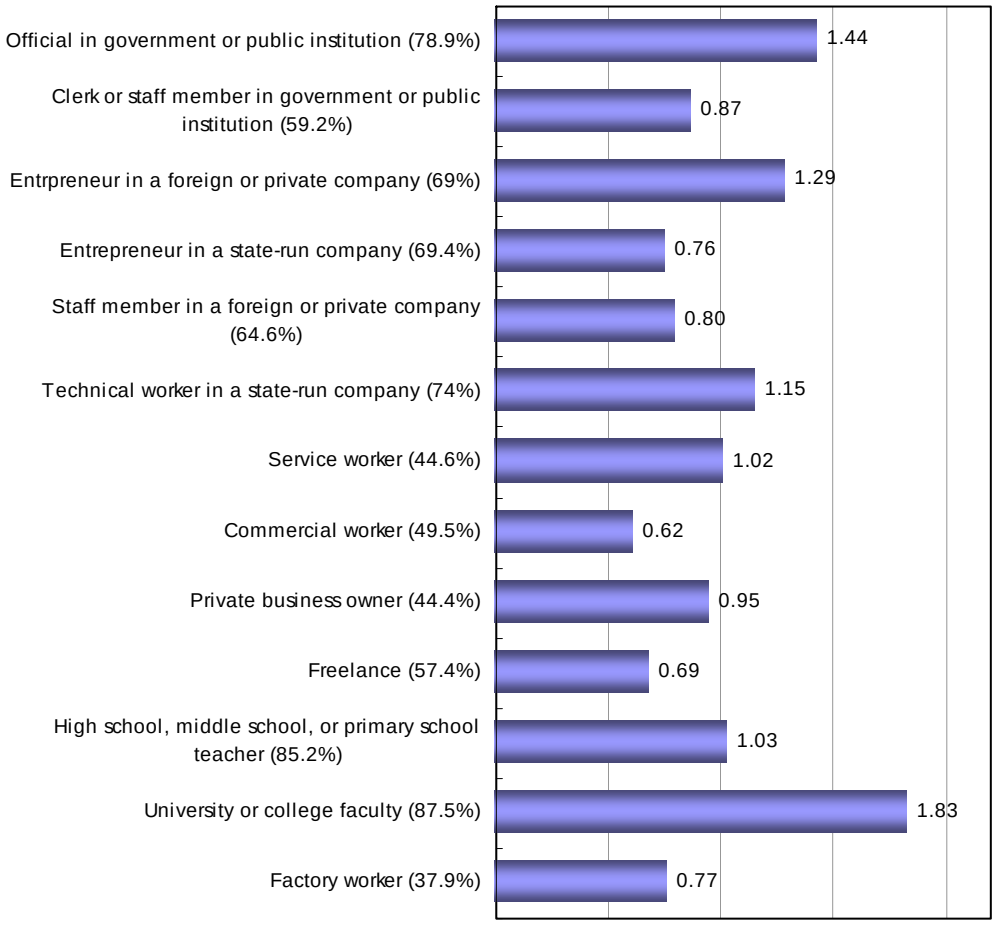
Although the differences in terms of time spent reading newspapers by different occupations is not statistically significant (Sig.=.067), compared with other classes, the proportion of intellectuals who read newspapers is low. Among university or college faculties, the average time spent reading newspapers per day is 0.67 hours, with the penetration rate of newspapers in this group the lowest; over 30 percent do not read newspapers. High school, middle school, or primary school teachers spend the least amount of time reading newspapers -- less than a half hour per day.

Figure 5.7 The average hours per day spent reading newspapers by people of different occupations



People of different occupations spend significantly different amounts of time reading books. University or college faculty spend the most amount of time reading books, much more than people holding other occupations, whereas commercial workers spend the least amount of time reading books; the reading time of the former (1.83 hours per day) is three times that of the latter (0.62 hour per day). Entrepreneurs in state-run companies and foreign or private companies all spend more time reading books than common staff members in those companies. Although high school, middle school, or primary school teachers do not spend much time reading books per day (only one hour), 85.2 percent have the habit of reading books; this proportion is second only to university or college faculty and twice the amount of time of factory workers (37.9 percent).

Figure 5.8 The average hours spent reading books by people of different occupations

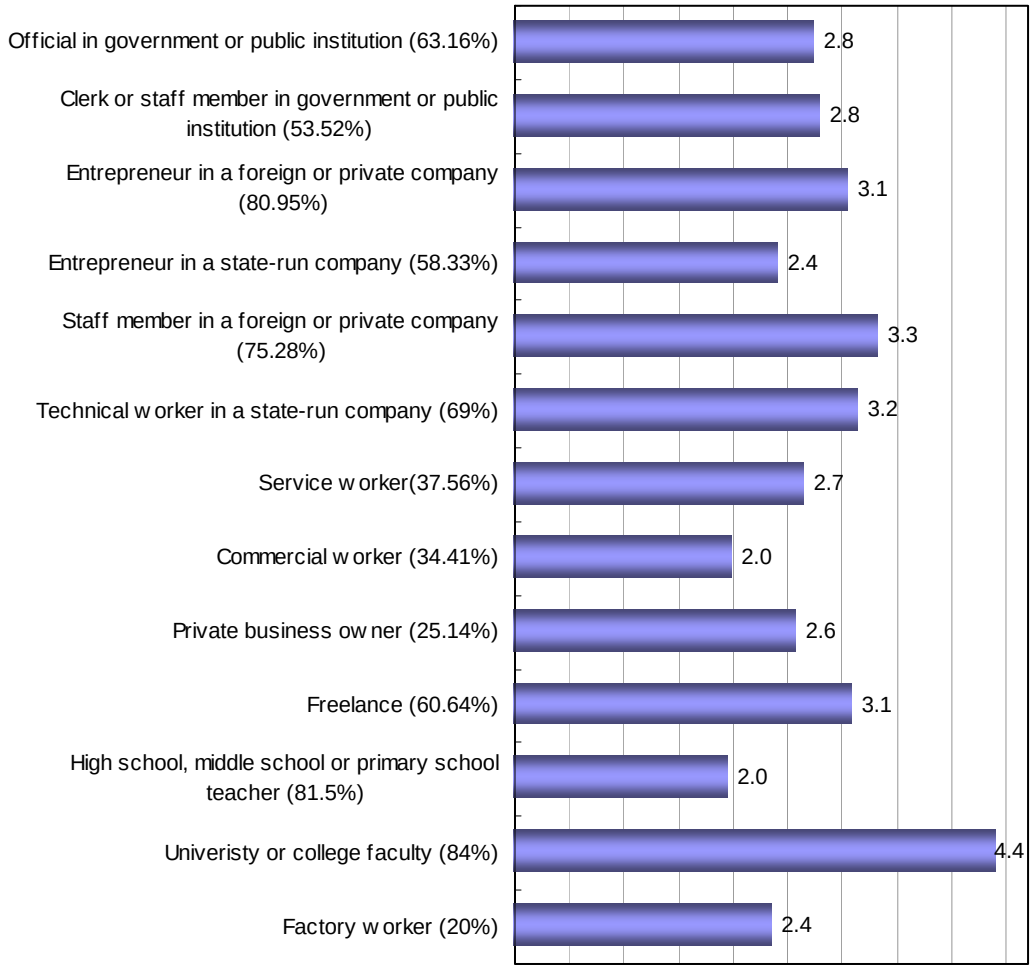


University or college faculty also spend more time accessing the Internet than other groups, reaching approximately four and a half hours per day. Although high school, middle school, or primary school teachers spend on average only two hours per day accessing the Internet, half the time spent by university or college faculty, their rate of accessing the Internet reaches 81.5 percent (second only to university or college faculty). Among factory workers and private business owners, the proportions accessing the Internet are the lowest, 20 percent and 25.14 percent respectively.

Therefore, in terms of the popularization of the Internet in China, the digital divide not only represents the differences between the urban and rural areas, but also represents the differences between the developed and developing areas. Even in the big cities, blue-collar classes with lower educations and incomes are significantly less likely to use the Internet than people from the intellectual and management classes with higher educations. Because of the drop in the cost of computers and the existence of Internet cafés, the economic threshold for Internet adoption is not as high as imagined, while the friendly interfaces of computer and Internet software also reduce the knowledge threshold for Internet adoption. Thus, the differences in Internet adoption resulting from the digital divide cannot be simply attributed to the users' educations and incomes, but should also take into account the practicality of the

Internet, i.e., who benefits from the Internet and which facets of the Internet they benefit from. This point can be observed in the differences in Internet adoption and the amount of time spent on the Internet by people of different occupations.

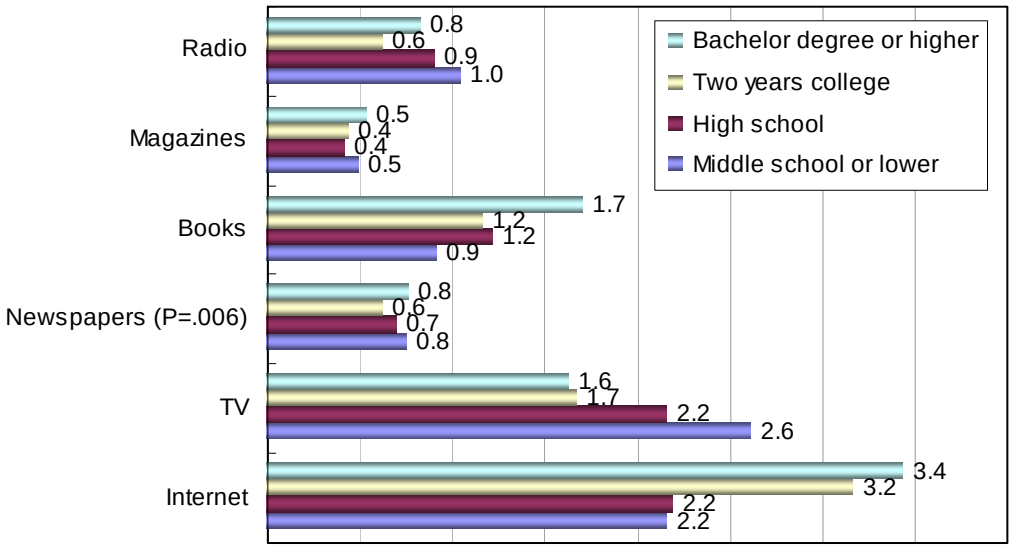
Figure 5.9 The average hours spent accessing the Internet by people of different occupations



5.14 Education and media use

Education will directly impact on the adoption and use of media: the higher an interviewee's education, the more time they spend accessing the Internet and reading books, but the less time they spend watching television. Interviewees with a bachelor's degree or above spend the most time reading books, whereas those with a middle-school diploma or below spend the most time watching television. However, the differences in time spent reading newspapers are not significant among interviewees with different educational backgrounds.

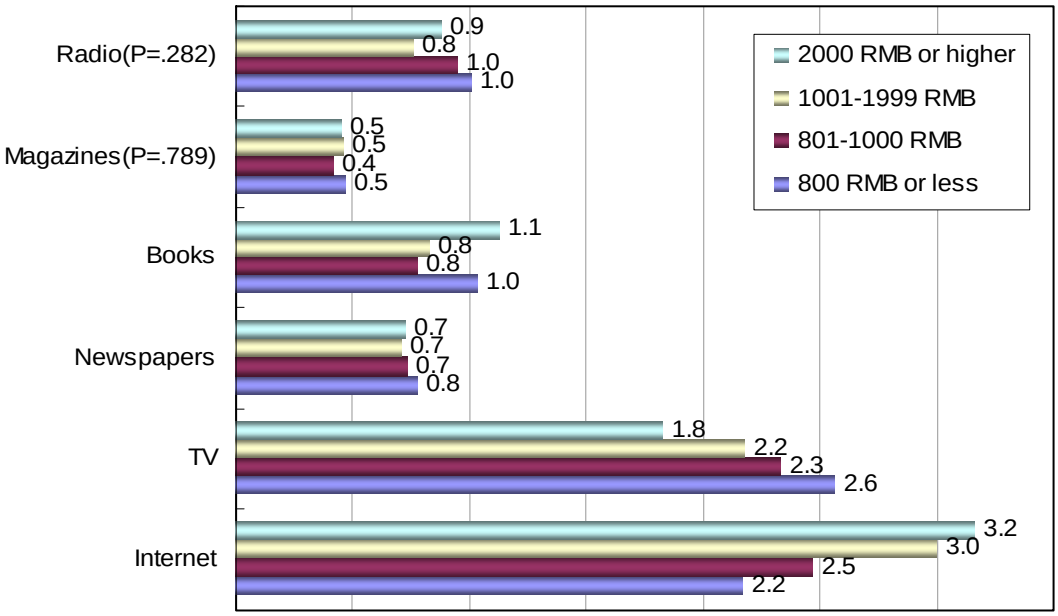
Figure 5.10 The average hours spent on media use by people with different educational backgrounds



5.15 Income and media use

The overall tendency is that groups with different incomes do not display significant differences in terms of listening to the radio and reading magazines. In terms of reading books, the group with the highest incomes and the group with no incomes spend more time, while the middle-income groups spend less time. In the case of watching television; the group with the higher incomes spend less time, while the middle-income groups spend more time, among which, the group with personal incomes of under 800 RMB (about 98.77 USD) spend the most time. The trend in Internet use is the opposite of that for watching television; the higher the personal income, the more time spent online.

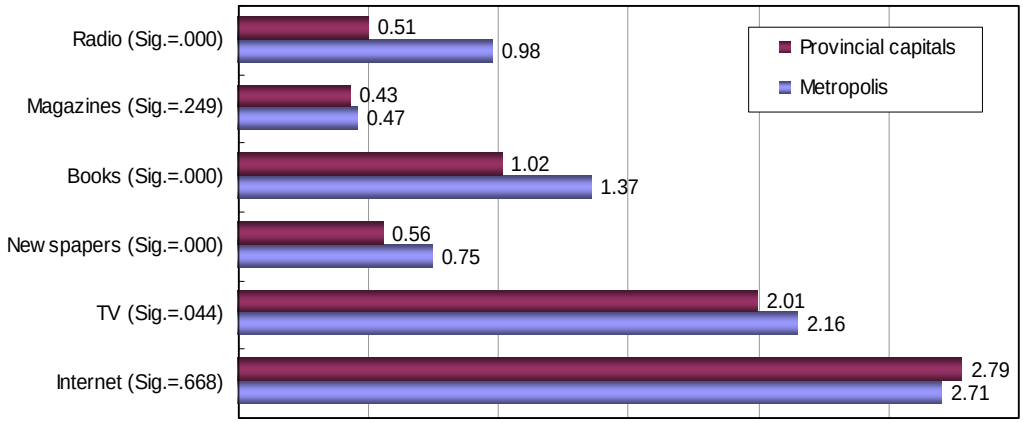
Figure 5.11 The average hours spent on media use by people of different incomes



5.16 City scale and media use

According to the survey results, the interviewees living in metropolitan cities such as Beijing, Shanghai, and Guangzhou and those living in provincial cities such as Chengdu and Changsha do not display significant differences in the amount of time they spend reading magazines, watching television, and using the Internet, whereas residents in the metropolitan cities spend more time listening to the radio and reading newspapers and books than those in the provincial cities. Interviewees in the metropolitan cities may spend more time listening to the radio because of its abundant local content.

Figure 5.12 The average hours spent on media use by residents in cities of different scales



5.2 The Functions of the Media

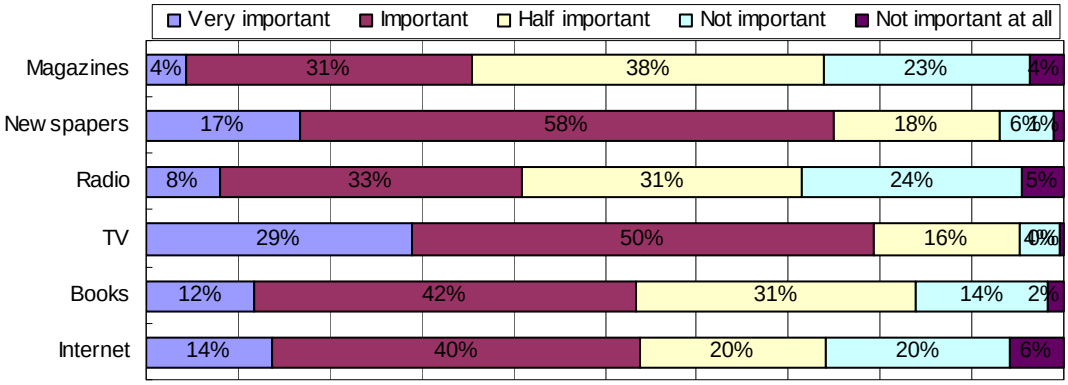
The media play various roles in modern society, and these roles are not limited solely to information communication. In terms of media content, the media can provide people with both information and entertainment. The modern media (such as television and the Internet) can simultaneously satisfy the people's demands for information and for entertainment. These information demands can include learning about news events, obtaining new knowledge, and also exchanging viewpoints, etc. With the competition and co-existence of various media, it is useful to examine the roles that the different media play in providing content and meeting various demands. Below we will analyze the various roles of the different media in providing information and entertainment to meet the people's daily demands.

5.21 The importance of the media in to obtain information

In the past, the main channel for people to obtain information was the mass media, including television, newspapers, books, and magazines. Since its entry into social life over the last ten years, the Internet has now become the main information medium. In an environment of various media, the different media play different roles in terms of providing information. Overall, television and newspapers are still the most important information

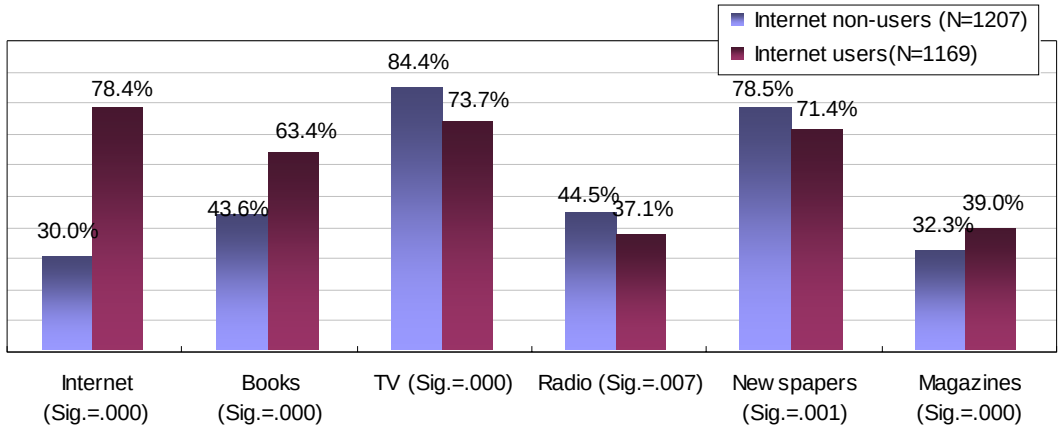
sources, with as many as 79 percent of the interviewees regarding television as very important or relatively important to obtain information, and 75 percent regarding newspapers in the same way. The second most important is the Internet and books, with about 50 percent believing that the Internet and books are important information sources. Only 41 percent of the interviewees regard the radio as an important information source, whereas magazines are the least important information source, with only 35 percent of the interviewees regarding magazines as an important source of information.

Figure 5.13 The importance of the different media in providing information (N=2376)



However, there are differences regarding the importance of the various media, with the exception of the case of the radio, among Internet users and non-users. For Internet users, the importance of the Internet as an information source significantly surpasses the other media. Meanwhile, over 70 percent of Internet users and non-users regard television and newspapers as important information sources, which means that so far the use of the Internet has not fundamentally changed the structural function of the traditional media in people's lives. On the other hand, with respect to each medium, more non-users than users regard television and newspapers as relatively important to provide information, whereas more Internet users than non-users think that books and magazines are relatively important. This shows that Internet users and non-users have different orientations regarding media use, and people who read more books and magazines will more likely obtain information through the Internet.

Figure 5.14 The importance of the different media to provide information, by Internet users and non-users

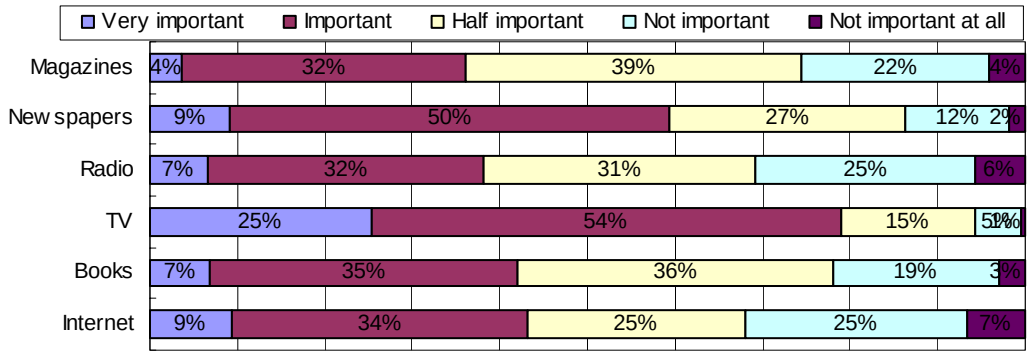


5.22 The importance of the different media for entertainment

In addition to providing information, the mass media also function as a source of entertainment. Because of advances in modern productivity, people do not need to spend all their time working. Therefore, entertainment has become an important part of people's daily lives, and the media have become important means for people to obtain entertainment.

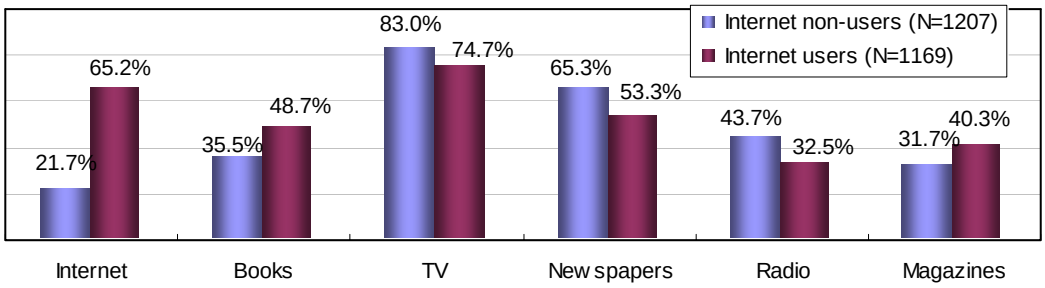
Similar to the importance of the media to provide information as discussed above, 79 percent of the interviewees regard television as the most important source of entertainment. However, the proportion decreases to 59 percent for people who regard newspapers as an important entertainment source. It is understandable why very few people regard books, magazines, or radio as important entertainment sources. But 43 percent of the interviewees regard the Internet as an importance entertainment source. Yet because of differences in experiences of using the Internet, there are large differences between the attitudes of Internet users and non-users.

Figure 5.15 The importance of the different media as a source of entertainment (N=2376)



There are significant differences between Internet users and non-users regarding the importance of the different media as sources of entertainment. Because of differences in personal experiences in using the Internet, as many as 65 percent of Internet users believe that the Internet is an important entertainment source, whereas only 22 percent of non-users regard the Internet as an important entertainment source. It should be noted that the Internet has not replaced television as the principal source of entertainment. As many as 83 percent of non-users agree on the importance of television as an entertainment source, and even among the Internet users 75 percent agree on the importance of television. Among the Internet users, the proportion agreeing on the importance of television for entertainment is 10 percent greater than the proportion of those who agree on the importance of the Internet for entertainment. According to the statistics, Internet users are more inclined than non-users to agree on the importance of the Internet, books, and magazines for entertainment; non-users are more inclined than users to agree on the importance of television, newspapers, and radio for entertainment.

Figure 5.16 The importance of the different media as a source of entertainment, by Internet users and non-users



5.23 The degree to which the media meet the people's daily demands

In order to analyze the function of the media to meet the people's daily demands, we classify the basic media-related demands in the people's daily lives into the following groups:

1. To obtain news
2. To obtain information about personal life (shopping, traveling, etc.)
3. To obtain information for study
4. For entertainment or personal hobbies (games and music, etc.)
5. To express personal opinions or views, or to publish personal writings
6. To exchange ideas or information with others
7. To participate in social activities
8. To promote personal relationships

Among the eight demands, the former four are one-sided, and are more in accordance with the characteristics of the traditional mass media; the latter four are interactive, and are more in accordance with the characteristics of the Internet. As for approval of the various media to satisfy the people's daily needs, the attitudes of Internet users and non-users are quite different. The overall tendency is that Internet users are more likely than non-users to approve of the Internet to satisfy various daily needs. However, it is interesting that although non-users do not use the Internet, some of them still approve of the Internet to satisfy various daily needs.

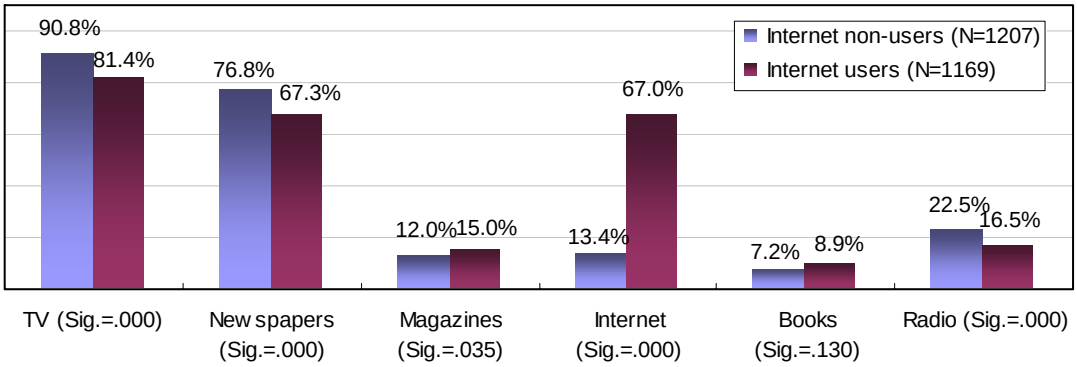
In the following, we will analyze how each of these media meets the above needs.

5.23a. To obtain news

Neither Internet users nor non-users think that the news can be obtained through magazines or books, and there is little difference between them about this. Although Internet users and non-users diverge in terms of the functions of television, newspapers, the Internet,

and the radio to learn about news events, television and newspapers are still considered to be the principal channels to obtain the news. Even Internet users agree that television and newspapers can meet news demands more than the Internet. Therefore, television and newspapers remain the main channels to obtain the news.

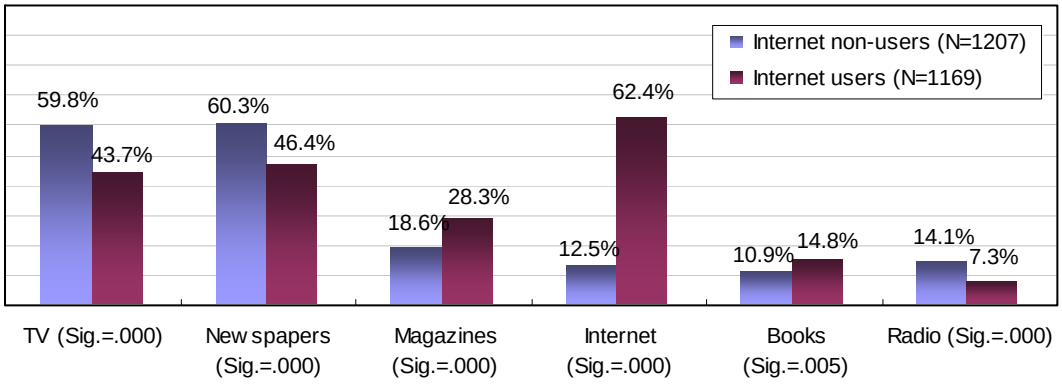
Figure 5.17 The function of the media to learn about news events



5.23b To obtain information about personal life

Internet users and non-users diverge in terms of the importance of the various media to obtain information about personal life. On the one hand, Internet users and non-users both agree on the function of television and newspapers to provide information about personal life. However, non-users depend significantly more on television and newspapers than do Internet users. It should be noted that the proportion of Internet users who agree that the Internet is a source of information about personal life is much higher than the proportion of users who think that television and newspapers are a source of information about personal life. This indicates that Internet users obtain information about personal life mainly through the Internet, not from television or newspapers, which may be linked to the timely updating and searching possibilities of online information.

Figure 5.18 The function of the media to obtain information about personal life

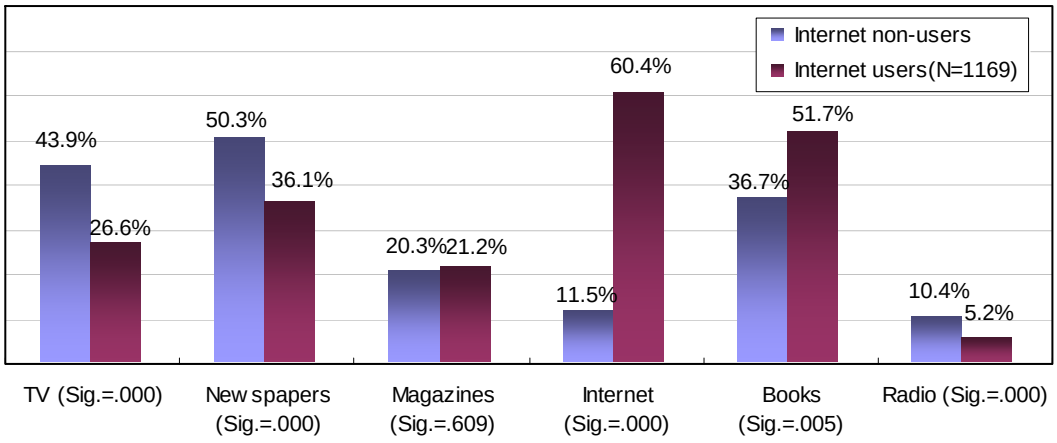


5.23c. To obtain information for study

The perceptions of Internet users and non-users differ significantly (except for the opinions about magazines) in terms of meeting learning and study needs through the different media. More Internet users agree on the importance of the Internet and books for learning and study, whereas more non-users agree on the importance of television and newspapers for learning and study.

Because they have experience in using the Internet, the proportion of Internet users who agree that the Internet satisfies learning and study needs reaches 60.4 percent. This is 34 percent higher than the proportion of Internet users who agree that television meets learning and study needs.

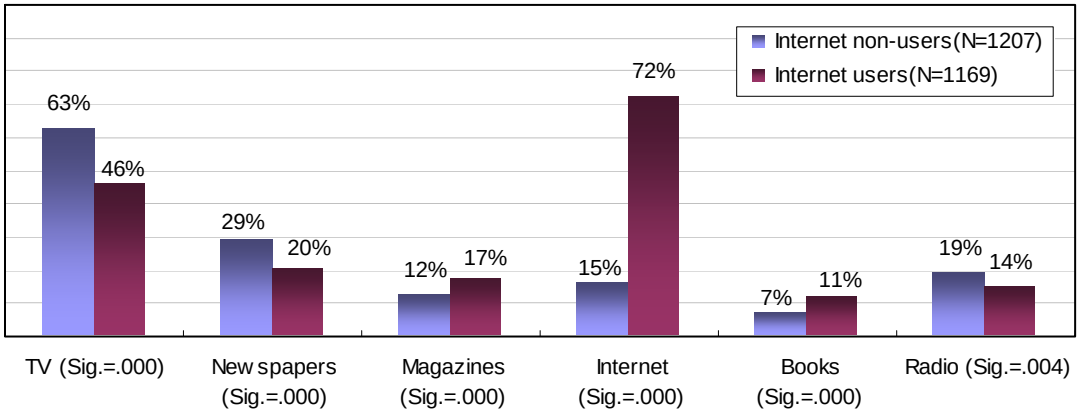
Figure 5.19 The function of the media for learning and study



5.23d. For entertainment or personal hobbies

With respect to the function of the media to satisfy demands for entertainment and personal hobbies, the perceptions of Internet users and non-users also diverge. The favorite medium of Internet users is the Internet, much more so than television, whereas television is still the favorite among non-users. It should be noted that the proportion of Internet users who agree that the Internet meets personal entertainment and hobby needs is greater than the proportion of non-users who agree that television meets personal entertainment and hobby needs. Of course, during a beginning stage of using the Internet, some Internet users particularly emphasize the entertainment function of the Internet.

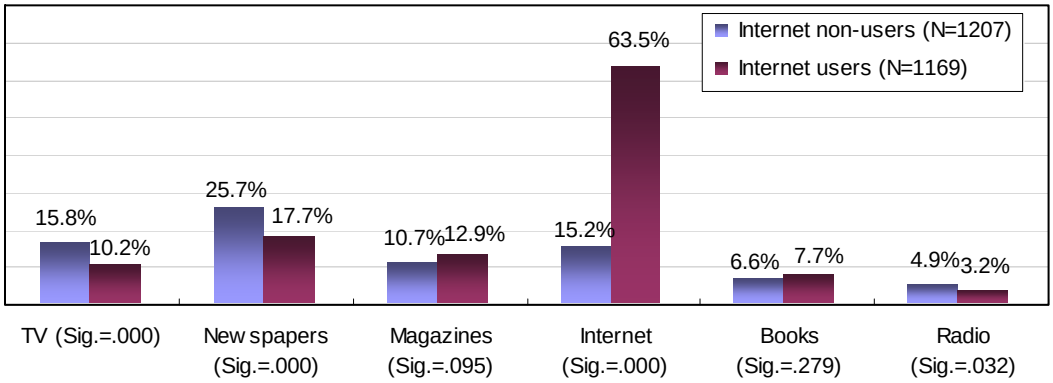
Figure 5.20 The function of the media for entertainment or personal hobbies



5.23e To express personal opinions or views or to publish personal writings

As a new interactive medium, the Internet has unique advantages to allow people to express opinions or to publish works, since common people often have difficulties in obtaining opportunities to express their opinions or to publish works through such traditional media as the radio, magazines, and books. Therefore, Internet users and non-users do not differ greatly in their perceptions of the role of the traditional media, radio, magazines, and books, in allowing for expression of opinions or publication of works. Even in terms of expressing opinions in newspapers, only 25.7 percent of the non-users agree that this is a viable medium. In contrast, the Internet is a relatively perfect place to express opinions and to publish works, and 63.5 percent of Internet users agree on the function of the Internet to express opinions and to publish works.

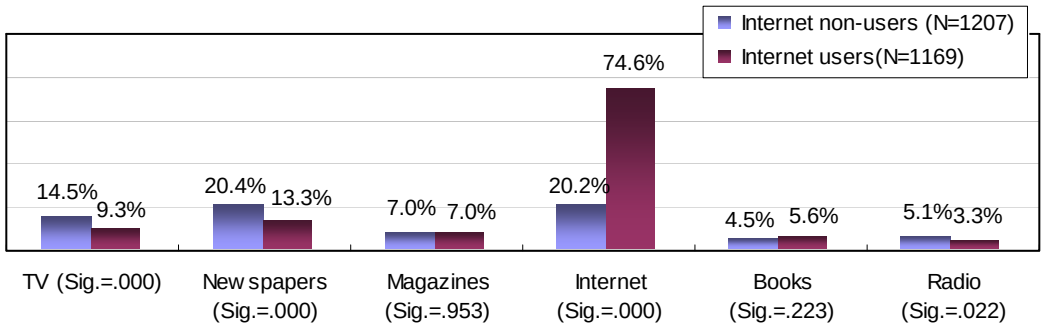
Figure 5.21 The function of the media to express opinions and publish works



5.23f To exchange ideas or information with others

One of the most intensive functions of the Internet is interpersonal communications. Among the eight types of media functions, Internet users are most in agreement that opinions or information can be exchanged on the Internet. Even 20.2 percent of the non-users agree that the Internet can serve the function of exchanging opinions or information. This is lower than the proportion of non-users who agree that newspapers can serve the function of exchanging opinions or information, but it is higher than the proportion of non-users vis-à-vis other media. Similar to the results above, the other media cannot serve this function.

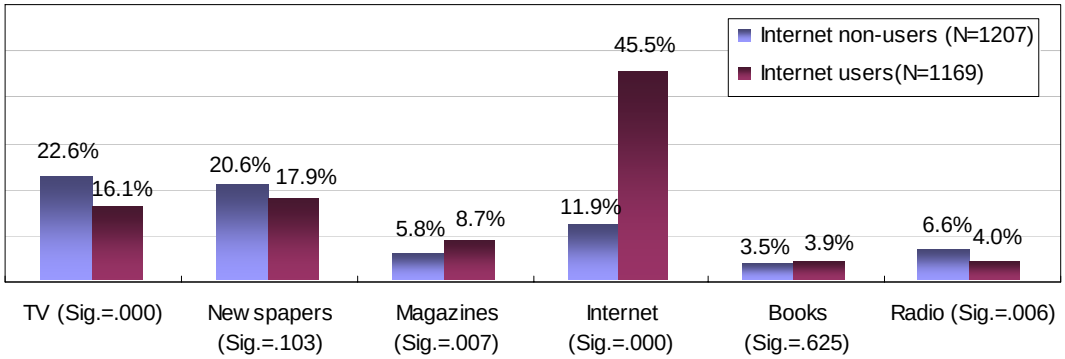
Figure 5.22 The function of the media to exchange opinions or information



5.23g. To participate in social activities

Social activities consist of face-to-face communications between people; other than making contact, the function of the media is limited. Because of this, the proportion who agree that the traditional media can satisfy the people's needs to participate in social activities is under 25 percent, while the favorite medium of Internet users is the Internet, with the proportion of those agreeing reaching 45.5 percent, much higher than the proportion of other media, both among Internet users and non-users.

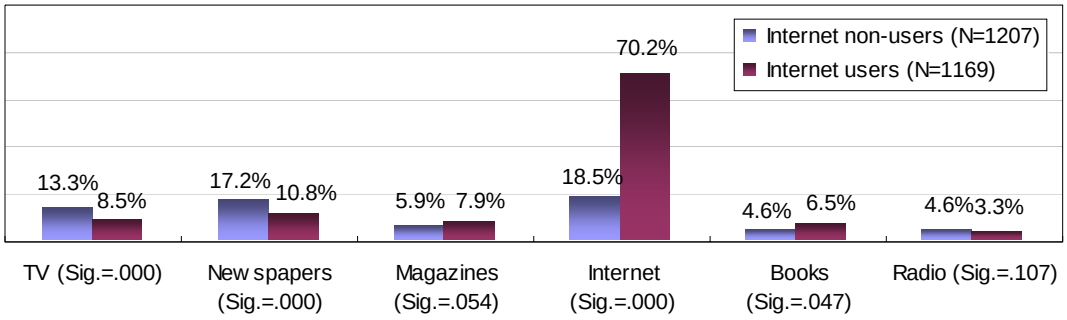
Figure 5.23 The function of the media to participate in social activities



5.23h To enhance personal relationships

It is also difficult for traditional media to enhance personal relations. Therefore, though Internet users and non-users diverge due to different Internet experiences, they both choose the Internet as the principal medium to enhance personal relations. The proportion of Internet users who agree that the Internet enhances personal relations reaches 70.2 percent, whereas among the non-users, there is no medium that can effectively enhance relations. Among the non-users who agreed that the Internet can enhance personal relations, the proportion was only 18.5 percent.

Figure 5.24 The function of the media to enhance personal relations



Thus it can be seen that among the eight daily demands listed above some can be provided for by the traditional media, while others cannot at all be provided by the traditional media due to their lack of interaction with the audience. The last four items (including to express opinions or viewpoints, to communicate with others, to participate in social activities, and to enhance personal relations) all have problems in the traditional media, and the Internet is able to function in these areas where the other media cannot.

Even among the former four items where the traditional media have advantages, the Internet has begun to surpass them. Except for television and newspapers which are still the main channels to learn about the news, Internet users obtain information about personal life, learning, and entertainment more through the Internet than through the traditional media, and the proportion of Internet users selecting the Internet to meet these demands exceeded that of non-users selecting other media. Therefore, the Internet has become the principal medium to satisfy the above-mentioned needs.

5.3 The Influence of the Internet on Media Use

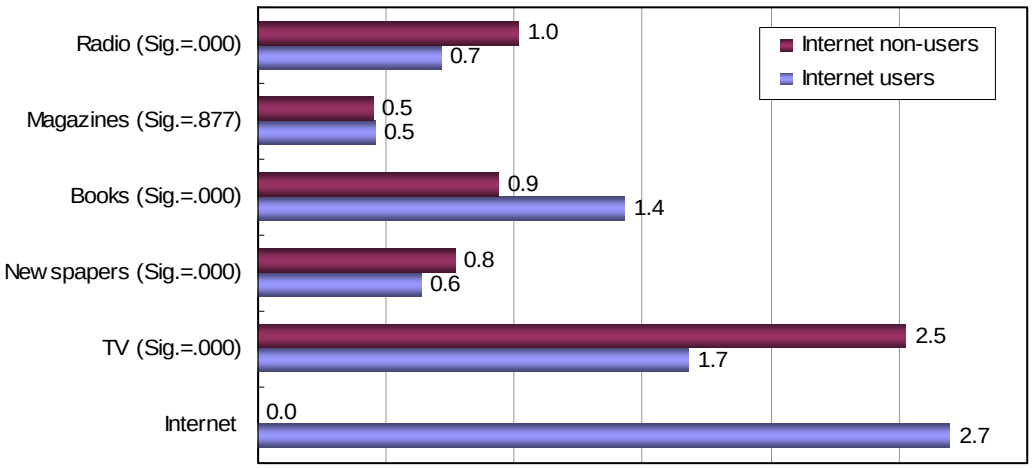
As stated above, both the Internet and other traditional mass media can provide various information contents and entertainment, and at different levels they both can satisfy the people's various daily needs. Below we will analyze the influence of the Internet on the use of the different the media.

5.31 Internet use and time spent on media

People have different expectations from different facets of the various media. Therefore, the degree and time people spend using the various media will vary. After an analysis of the time spent by Internet users and Internet non-users on the various media, the differences between the users and non-users become apparent.

First, Internet users spend the longest time on the Internet, reaching 2.7 hours per day, which is more than the time spent on television by non-users per day (2.53 hours). Overall, except in the case of reading magazines, there are significant differences among users and non-users in the amount of time spent on other media per day. Internet users spend much less time watching television, listening to the radio, and reading newspapers than non-users, whereas they spend much more time reading books.

Figure 5.25 Average hours per day spent on media, by Internet users and non-users



5.32 Locations for going online and media use

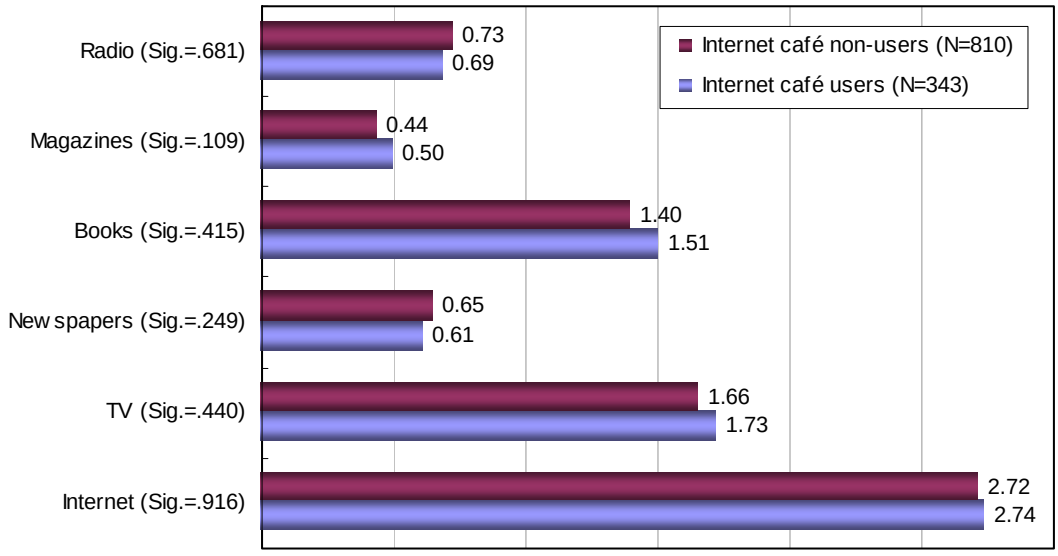
Currently, Chinese Internet users access the Internet in various places: some at home, some in the office, and others in Internet cafés. Because to go online in Internet cafés is controversial, we paid special attention to the possible differences between Internet café users and users going online in other places.

5.32a. Internet café users and media use

This research defines Internet users who frequently or only go online in Internet cafés as Internet café users; Internet users who do not go online in Internet cafés are defined as Internet café non-users. According to a statistical analysis (the detailed figures are omitted due to space limitations), significant differences exist in terms of gender (Sig=.002), age (Sig=.000), marital status (Sig=.000), employment (Sig=.000), and income (Sig=.000), while no significant differences exist in terms of occupation.

However, when we analyze the differences in media use between Internet café users and Internet café non-users, Internet café users spend more time accessing the Internet, watching television, and reading books and magazines than Internet café non-users, while they spend less time reading newspapers and listening to the radio. But there are no significant statistical differences between the two.

Figure 5.26 Average hours per day spent on media, by Internet café users and Internet café non-users

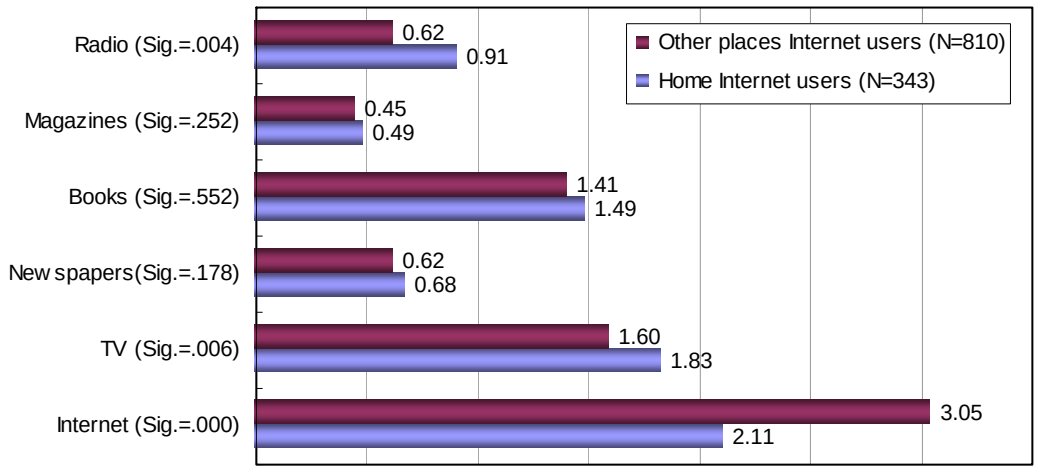


5.32b. Home Internet use and media use

We analyzed users who go online only at home and users who also go online elsewhere. Significant demographic differences can be found between them, including age, education, employment, occupation, and marital status. However, the degree of significance is somewhat lower for gender (Sig=.034) and personal income (Sig=.019).

Users who go online only at home spend less time per day accessing the Internet than users who go online in other places, while they spend more time listening to the radio and watching television.

Figure 5.27 Average hours per day spent on media, by at-home Internet users and users going online in other places



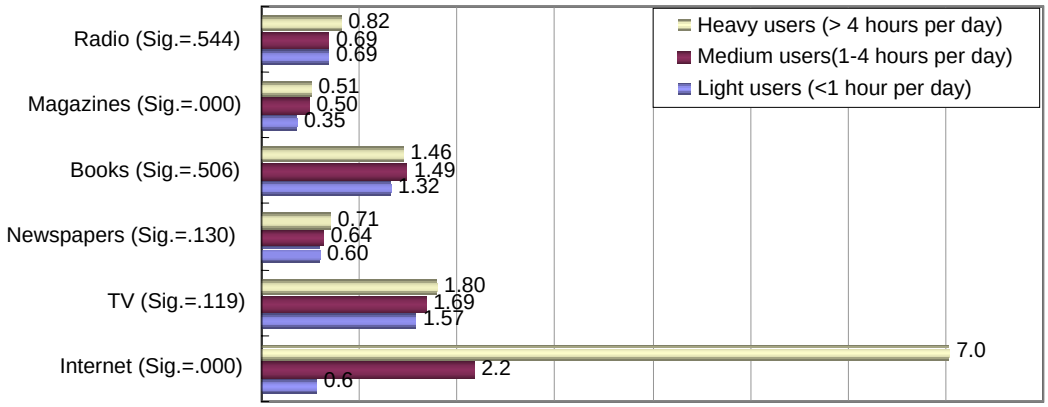
Therefore, the differences between Internet café users and Internet café non-users in terms of media use are not significant, whereas the differences between home Internet users and users who go online elsewhere are significant.

5.33 The degree of using the Internet and media use

According to the duration of Internet use per day, we can classify Internet users into three types: Internet users who use the Internet less than one hour per day can be classified as light users; those who use the Internet one to four hours per day can be classified as average users; and those who use the Internet over four hours per day can be classified as heavy users. By analysising the daily duration of using the Internet, we can learn about the possible effects of Internet use on other media use.

As the data indicate, except for the time they spend accessing the Internet, these three types of users do not differ in terms of the average time they spend listening to the radio, reading books and newspapers, and watching television; they only differ in terms of the amount of time they spend reading magazines.

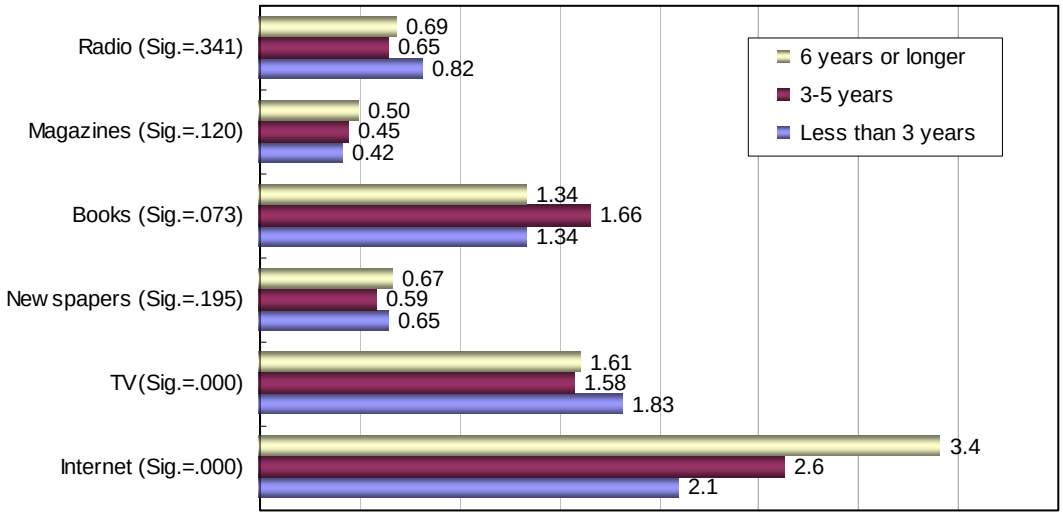
Figure 5.28 Degree of Internet use and average hours per day spent on various media



5.34 Internet experience and media use

Internet experience refers to how long Internet users have been using the Internet; The longer one's experience of using the Internet, the greater the possibility that he/she has been influenced by the Internet. In this research, we classified the interviewees into three groups in terms of their Internet experience: less than three years, three to five years, and six years and over. Internet users with long Internet experience spend more time accessing the Internet than users with less Internet experience, whereas those with less Internet experience spend more time watching television than those with long Internet experience. Time spent on other media does not vary with the amount of Internet experience.

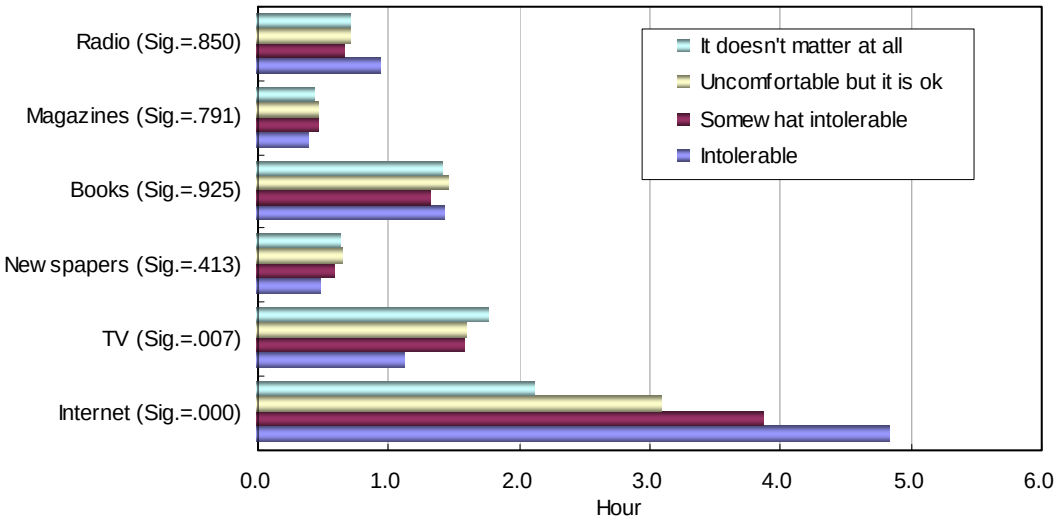
Figure 5.29 Internet experience and average hours per day spent on various media



5.35 Internet dependency and media use

In addition to a group of quantitative forms to survey users' dependency on the Internet, we asked the interviewees about their subjective feelings if they were not to be allowed to use the Internet for one week. Due to time and space limitations, this report does not analyze the Internet dependency index, but to the question surveying subjective feelings, 3.4 percent of the interviewees reported that they would feel that it was unbearable, 11.5 percent reported that they would feel relatively uncomfortable, 31.4 percent reported that they would feel uncomfortable but could accept it, while 53.6 percent reported that it would not matter. Through a cross-analysis, we found that among these four groups of people with different Internet dependencies, they only differ significantly in terms of the time spent on the Internet (indirectly justifying the validity of this question), and they differ greatly in terms of the time spent watching television: the higher their Internet dependency, the less time they spend watching television; the lower their Internet dependency, the more time they spend watching television.

Figure 5.30 Internet dependency and average hours per day spent on various media

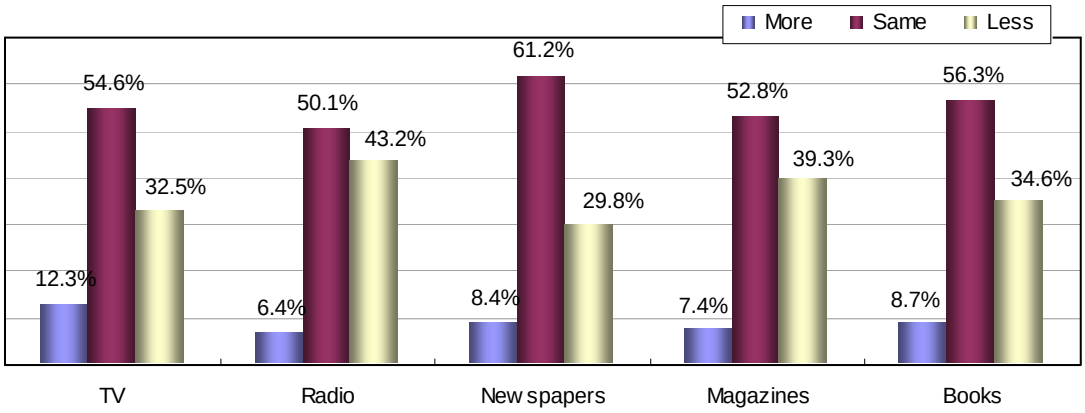


Therefore, with respect to the above several groups of questions, thus far Internet use has mainly influenced television watching, and has not greatly impacted other media use. Internet users generally spend less time watching television than Internet non-users. Internet users who spend more time accessing the Internet, who have longer Internet experience, and who are more dependent on the Internet may spend less time watching television.

5.4 The Change in the Amount of Time Spent on Traditional Mass Media after Using the Internet

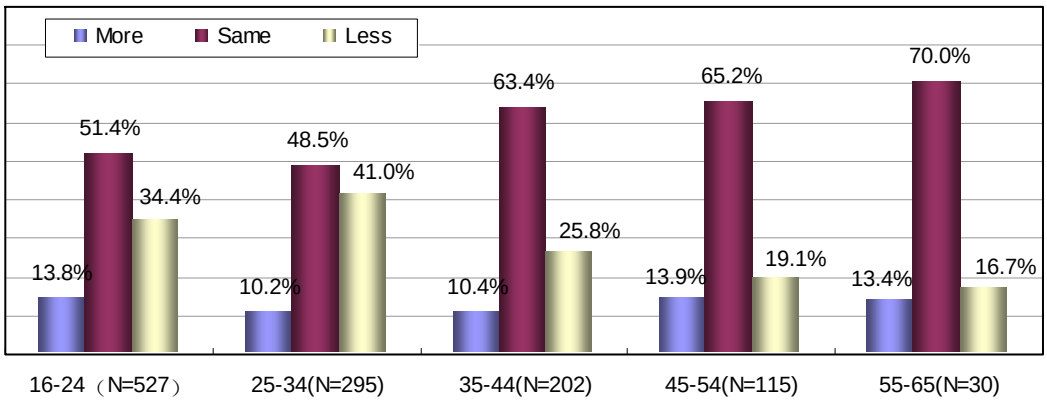
We also surveyed the change in the amount of time spent on traditional mass media based on the Internet users' personal feelings. Earlier research in this report indicates that Internet users in different places, to different degrees, and with different experiences do not differ significantly in terms of the amount of time they spend on various media. But does their time spent on media change after accessing the Internet? Over one-half of the Internet users spend the same amount of time on the mass media, such as television, while about one-third of Internet users spend less time on other mass media. In particular, people think that the greatest change is in the amount of time they spend listening to the radio, with 43.2 percent of Internet users believing that after accessing the Internet, they spend less time listening to the radio. Second, 39.3 percent of Internet users believe that after accessing the Internet, they spend less time reading magazines. The interviewees reported that after using the Internet, there is the least change in the amount of time they spend reading newspapers, but still 29.8 percent of the Internet users believe that they spend less time reading newspapers.

Figure 5.31 Changes in the amount of time spent on various media after accessing the Internet



If we conduct a cross-analysis of Internet users by age, we find that age differences are insignificant in terms of the change in the amount of time spent on various media after accessing the Internet, except for a significant difference in terms of the amount of time spent watching television. The older the person, the less possibility that there is a decrease in the amount of time spent watching television; the proportion of Internet users between the ages of 55 and 65 who spend the same amount of time watching television after accessing the Internet is the highest, whereas the proportion of Internet users who are between the ages of 25 and 34 who spend less time watching television after accessing the Internet is the highest.

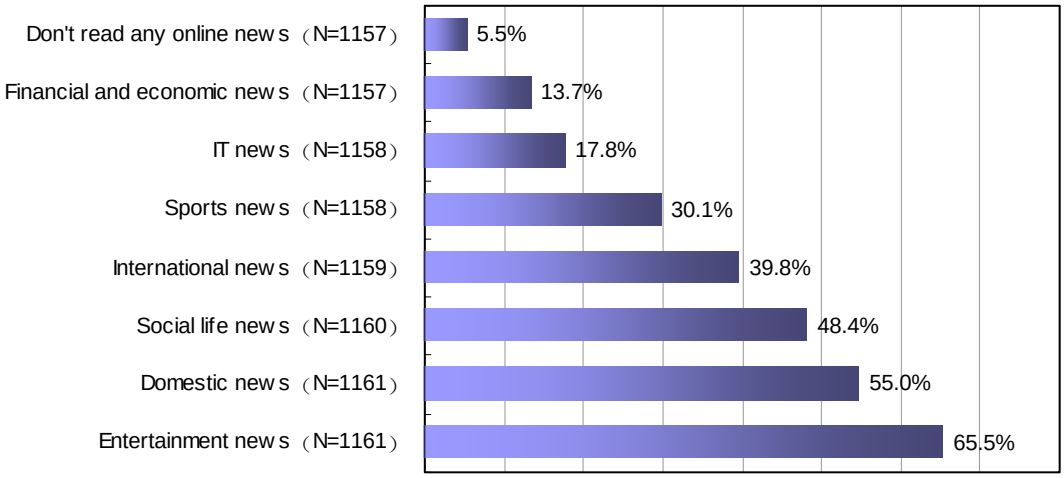
Figure 5.32 Changes in the amount of time spent watching television after accessing the Internet, by different age groups



5.5 Contents of Online News Read by Internet Users

Reading news online is an important online activity for most Internet users, so a survey of the types of news read by Internet users will be helpful not only to understand the online activities of Internet users, but also to analyze the characteristics of different Internet users and their purposes in reading online news. This survey classifies online news contents into seven groups, such as international current affairs and domestic current affairs, etc. The survey indicated that the most online content read by Internet users was entertainment news, second, domestic current affairs, social life, and international current affairs. In terms of special news, the proportion of Internet users reading sports news is higher than those reading IT and financial news. Meanwhile, 5.5 percent of Internet users do not read online news at all.

Figure 5.33 Contents of online news read by Internet users

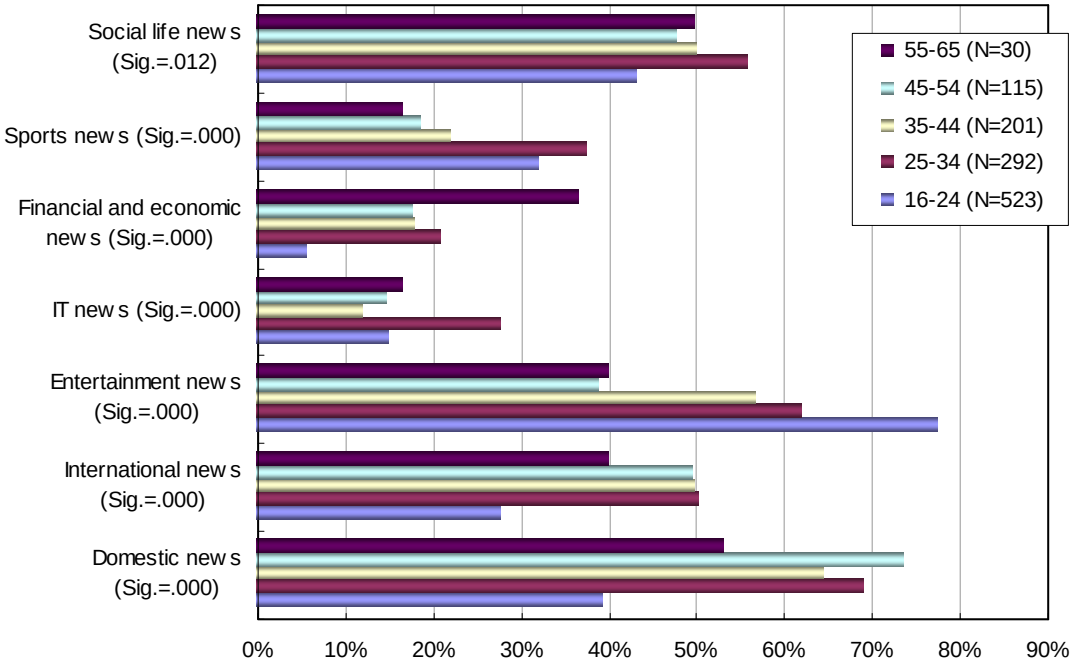


5.51 Age differences in terms of contents of online news read by Internet users

Internet users of different age groups differ in terms of the kinds of news they read online. Internet users between the ages of 16 and 34 read entertainment news the most, and financial news the least; Internet users between the ages of 35 and 65 read domestic current affairs the most and IT news the least. Therefore, those at 35 years of age are at a turning point.

The age group between 25 and 34 years reads sports news the most, whereas the age group between 55 and 65 years reads sports news the least. The age group between 55 and 65 years reads financial news the most, whereas the age group between 16 and 24 years reads financial news the least. The group between 25 and 34 years reads IT news the most, and the age group between 35 and 44 reads IT news the least. The age group between 16 and 24 reads entertainment news the most, and the age group between 45 and 54 reads entertainment news the least. The proportion of interviewees between the ages of 25 and 54 who read international current affairs is relatively high, whereas young people between the ages of 16 and 24 read international current affairs the least. The age group that reads domestic current affairs the most is the middle-aged group between the ages of 45 and 54, whereas the young people between the ages of 16 and 24 read domestic current affairs the least. The following figure displays the kinds of online news read by the different age groups of Internet users (below we present only the most and the least of each kind).

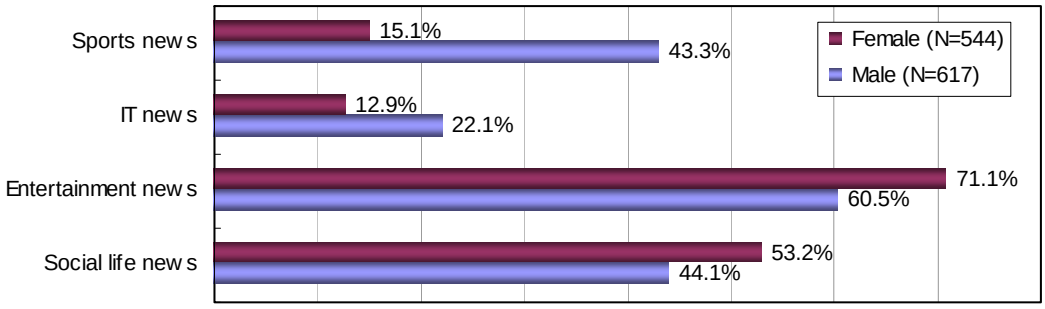
Figure 5.34 Age differences in contents of online news read by Internet users



5.52 Gender differences in online news contents read by Internet users

In reading online news, Internet users of different genders select different contents. Gender differences in reading online sports news, IT news, entertainment news, and social life news are significant. Male Internet users are more inclined to read sports and IT news, whereas female Internet users are more inclined to read entertainment and social news. The gender differences in reading online news by Internet users are displayed in the following figure:

Figure 5.35 Gender differences in contents of online news read by Internet users

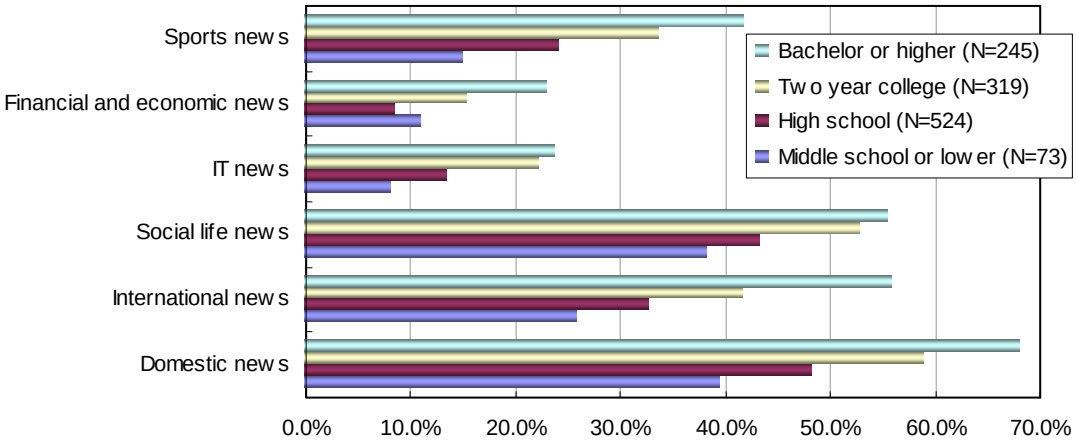


5.53 Education differences in online news contents read by Internet users

The kinds of online news read by Internet users of different educational backgrounds also differ significantly. The overall tendency is that the higher one's education, the higher the proportions of the various news that is read. Regardless of the type of news, Internet users with a bachelor's degree or higher read the most news, whereas users with a middle school diploma or below read the least news (with the exception of users with higher middle school diplomas who read financial news the least) .

Internet users with middle-school diplomas or below read domestic current affairs and social life news the most, and they read IT news the least. Internet users with higher middle-school diplomas, two-year college degrees, bachelor's degrees, or higher read domestic current affairs the most, and financial news the least. Therefore, the higher middle-school diploma is a turning point.

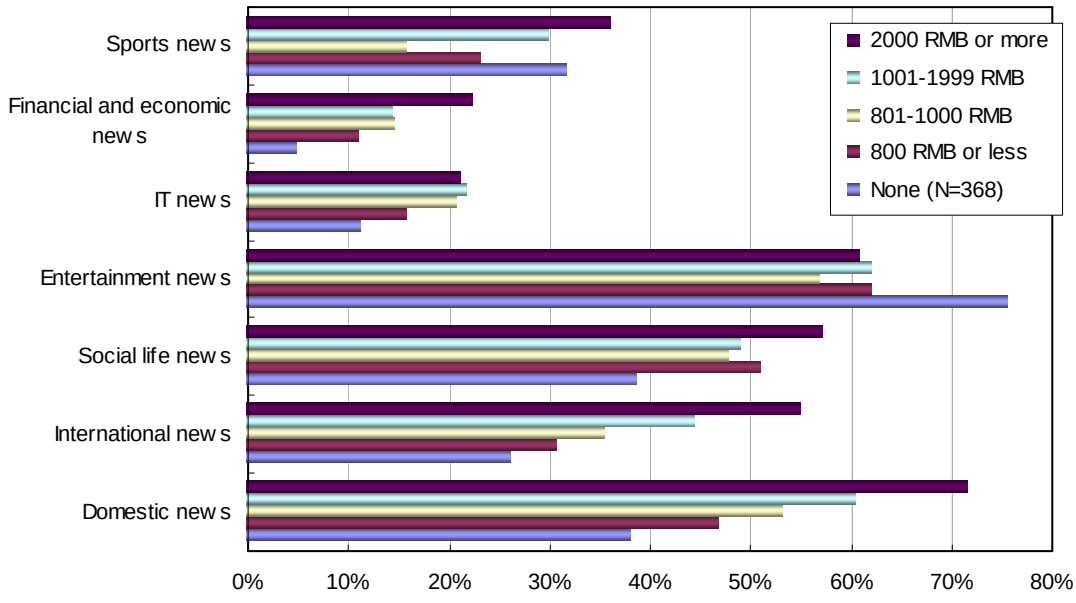
Figure 5.36 Education differences in contents of online news read by Internet users



5.54 Personal income differences in online news contents read by Internet users

As there are differences in the personal incomes of Internet users, there are also significant differences among the various income groups in terms of the online news that they read. Overall, Internet users with higher incomes read more online news. With the exception of entertainment news, the higher the income, the higher the proportion of Internet users reading domestic and international current affairs, social life, financial, and sports news. Entertainment news is the most popular online news content, as we analyze above; an average of 65.5 percent of Internet users read entertainment news. Moreover, the proportions of Internet users of various incomes who read entertainment news do not differ greatly, the only exception being that the proportion of Internet users with no incomes who read entertainment news is 76 percent.

Figure 5.37 Personal income differences in contents of online news read by Internet users



To summarize, with the popularization of the Internet in Chinese cities, the Internet has begun impacting the traditional media. From the survey results, we find that though the penetration rates of television and newspapers are still much higher than those of the Internet, among the interviewees, the time spent on the Internet per day was at least twice the time spent on other media. Yet, for Internet users, the Internet as an information source is only second to television, but it is their primary entertainment source. In meeting people's daily communication needs, Internet users not only first select the Internet for interactive communication, but they also choose to use the Internet in such fields dominated by the traditional media, such as to learn about news, to obtain information about personal life, and for learning and entertainment. In terms of use distribution, the differences between Internet use and traditional media use mainly occur with respect to television: the more time that is spent on the Internet, the less time that is spent on television. However, the time spent using the various media is only one facet reflecting the impact of the media; another important factor is trust in the media.

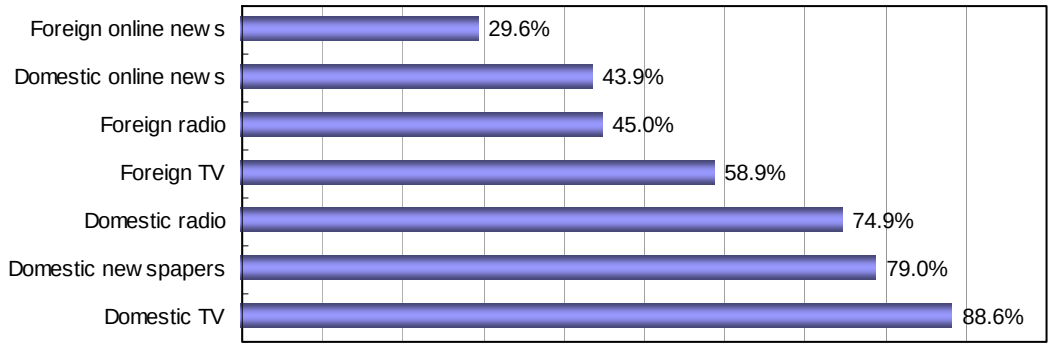
5.6 The Internet and Media Trust

As a social public tool to diffuse information, the media ought to have the trust of the public, and the degree of the people's trust in the various media sources is an important index to measure the impact of the media. In the surveys during the past years, we have paid keen attention to the people's trust in the various media sources, and we made trust one of the standards by which to judge the Internet's impact on the various media. In the questionnaire, we classified the kinds of media sources from which people obtained news into domestic television, foreign television, domestic newspapers, foreign newspapers, domestic radio, foreign radio, domestic online news, and foreign online news to analyze the differences in the degrees of the people's trust in these media.

5.61 The degrees of people's trust in various media

Overall, the people most trust domestic television, domestic newspapers, and domestic radio news, with television being the media the people trust the most. The degree of people's trust in foreign media news is lower than their trust in domestic media news, and the degree of people's trust in the Internet media is much lower than their trust in traditional media. Therefore, although the Internet has become an important medium for people to read the news, its credibility still needs improvement. This conclusion is in accordance with the findings from our two former surveys.

Figure 5.38 The degrees of people's trust in various news sources



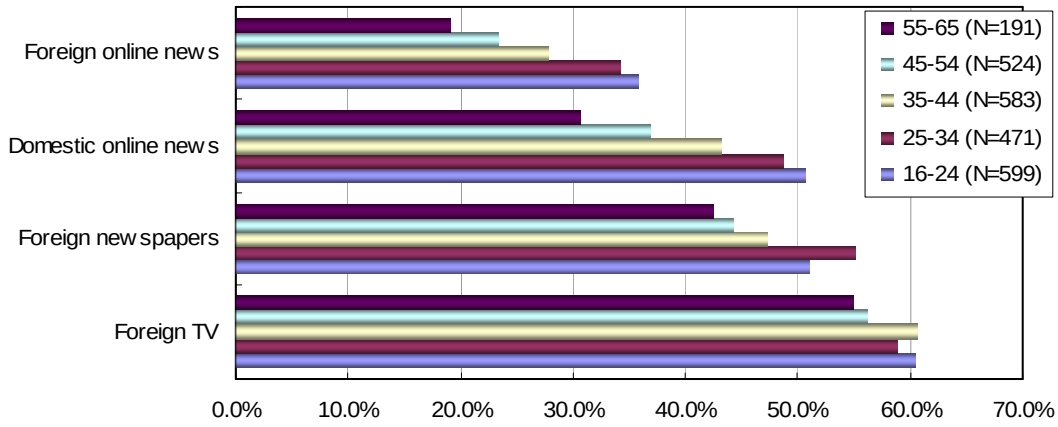
5.62 Demographic distribution of media trust

According to the statistical results, the interviewees' genders, occupations, scale of cities of residence, and whether they are Internet café users or have Internet experience do not have any significant impact on the degree of trust in the media. We will analyze the demographic characteristics that have significant impacts on the degree of media trust individually below.

Age

Interviewed groups of different ages do not display significant differences in the degrees of trust in domestic television, domestic newspapers, and domestic and foreign radio. However, for online news, regardless of whether it is foreign or domestic online news, the degree of people's trust decreases as their age increases: the younger the age group, the greater their trust in the Internet. For example, half of the group between the ages of 16 and 24 trust the domestic online news. Therefore, it can be seen that, the most popular audience for the Internet consists of young people. As far as foreign newspaper news and foreign television news are concerned, the most popular age group is that between 25 and 44 years old, whereas the 55 to 65 age group has the least trust in both domestic and foreign newspaper and television news.

Figure 5.39 The degrees of trust in different news sources by people of different ages

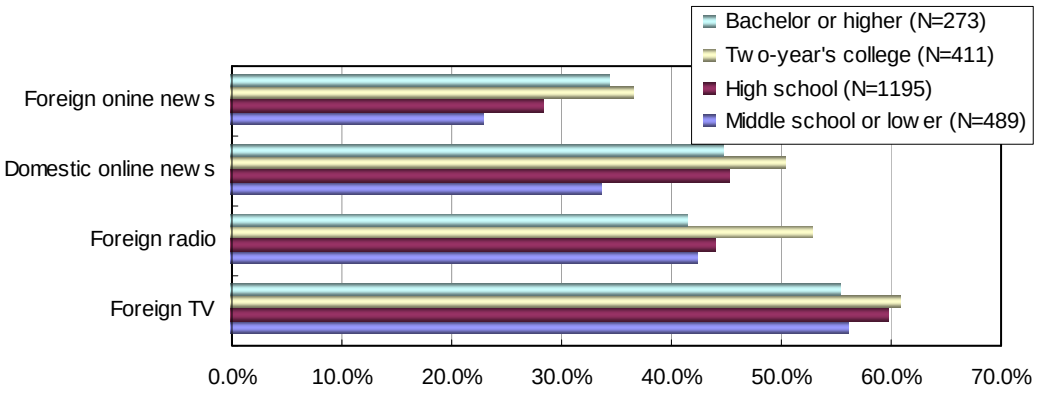


Education

The degree of trust in the media among the interviewees with different educational backgrounds does not display significant differences in terms of domestic television, domestic radio, and domestic and foreign newspapers. However, there are significant differences in terms of trust in other media sources.

In the same way, there is a huge difference in the degree of trust in online news by groups with different educational backgrounds. The overall tendency is that the higher the educational background, the more likely one will trust the online news. Interviewed groups with bachelor's degrees and two-year college degrees have a higher degree of trust in domestic and foreign online news and foreign radio and television news than those with high school and middle-school diplomas or below. The group with a two-year college education has the highest trust in the four sources, whereas the group with a middle-school diploma or below has the least trust in the four sources.

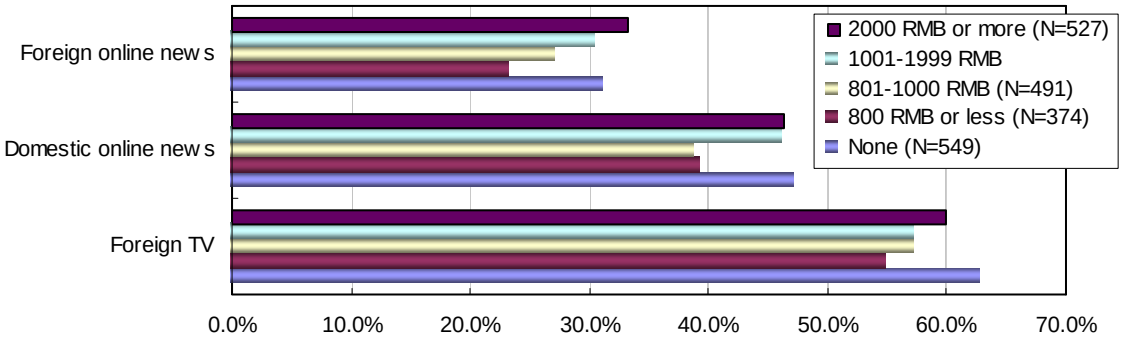
Figure 5.40 The degrees of trust in news sources by people with different educational backgrounds



Personal Income

People of different income levels do not differ significantly in their degree of trust in domestic television, domestic and foreign radio, and domestic and foreign newspapers, but they do differ significantly in their trust of other media sources. The group with no income has the highest degree of trust in online domestic news and foreign television news. Except for the group with no income, as the income increases, the groups display an increasing tendency in terms of trust in the domestic and foreign online news and foreign television news. The group of interviewees with incomes more than 2000 RMB (about 246.90 US$) per month has the highest degree of trust in domestic and foreign online news, whereas the group of interviewees with monthly incomes of less than 800 RMB (about 98.80 US$) has the lowest degree of trust in domestic and foreign online news and foreign television news.

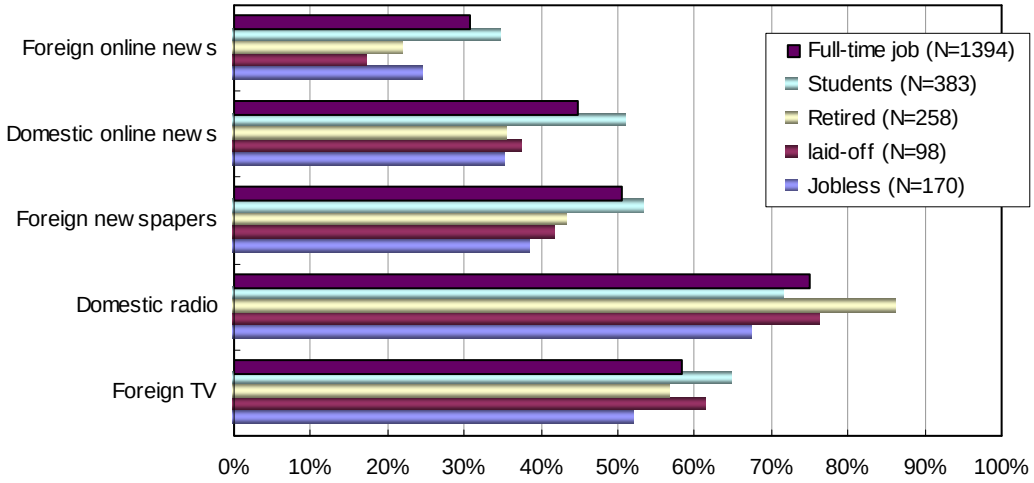
Figure 5.41 The degrees of trust in news sources by people with different personal incomes



Employment Status

The people's degree of trust in the media is closely related to whether or not they are employed. According to the survey results, people of different employment statuses do not differ significantly in terms of their trust in the domestic television news, foreign radio, and domestic newspapers, but they do differ significantly in their degree of trust in other media. The most trusted media for students are domestic online news, foreign newspaper news, and foreign television news, and their degree of trust in foreign online news is second only to that of part-time workers. Therefore, the student group is relatively inclined to trust the foreign media and the Internet. In contrast, those who have the least trust in foreign online news are laid-off workers; those who have the least trust in foreign television news are the jobless; those who have the least trust in foreign newspapers are the jobless; and those who have the least trust in domestic online news are the retirees. With the transformation of society, a part-time worker group, which is a relatively special group, has begun to appear in China. They trust foreign online news the most, and their trust of domestic online news is second only to on-campus students. Those who have the highest trust in domestic radio news are the retirees, whereas those who have the lowest trust in domestic radio news are the part-time workers.

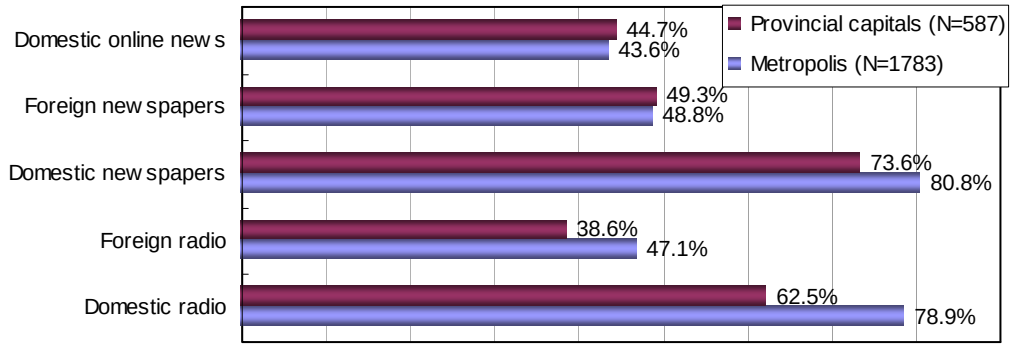
Figure 5.42 Employment status and different degrees of trust in news sources



City Scale

The 2005 CASS Survey not only covered the metropolitan cities of Beijing, Shanghai, and Guangzhou, but also included the provincial capitals of Chengdu and Changsha. The survey results indicated that interviewees living in metropolitan and provincial capitals did not differ in their degree of trust in domestic and foreign television and foreign online news, but those in the provincial capitals had higher degrees of trust in domestic online news and foreign newspaper news than those living in the metropolitan cities. Interviewees in the metropolitan cities had much higher degrees of trust in domestic newspapers and domestic and foreign radio than interviewees in the provincial capitals.

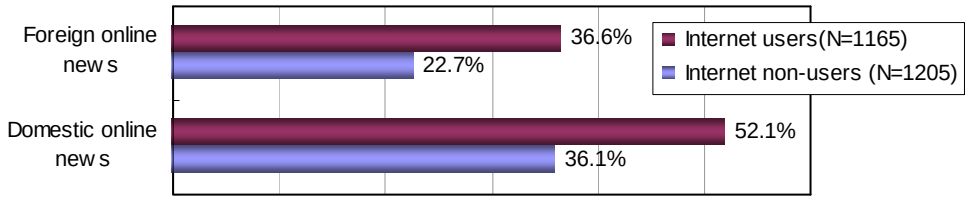
Figure 5.43 Scale of city of residence and degree of trust in news sources



5.63 Internet use and media trust

Internet users and Internet non-users do not differ significantly in their degrees of trust in the media, with the exception of the online news. The proportions of Internet users who trust online news, whether domestic or foreign, are much higher than the proportions of non-users.

Figure 5.44 The degree of trust in news sources, by Internet users and non-users



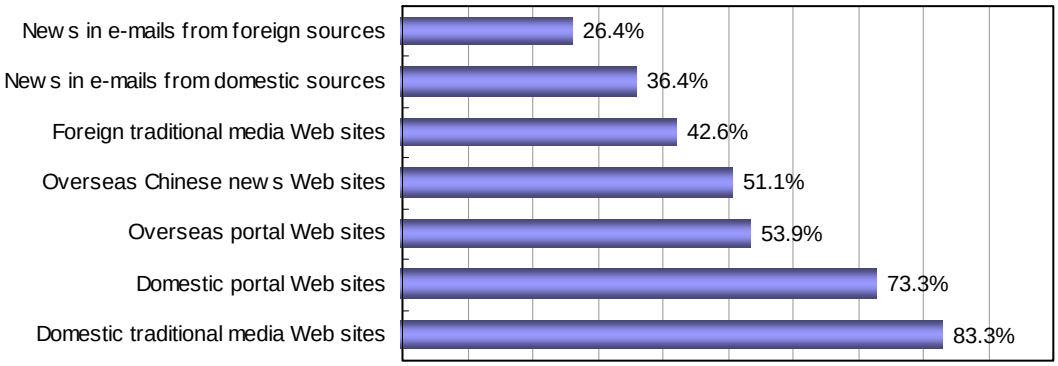
Thus, the experience of using the Internet has a positive impact on Internet users, whereas, Internet non-users with no experience in using the Internet are more inclined to be less trusting of the Internet, based on their imagined perceptions or on coverage by traditional media.

5.64 The degree of trust in various online news by Internet users

In addition to analyzing the interviewees' degree of trust in different news media, we also need to learn about the Internet users' degree of trust in the different online news, for example, the news contents presented by Web sites operated by traditional mainland media (such as www.people.com.cn) and those operated by mainland portal Web sites (such as Sina.com).

Statistical results show that Internet users most trust the news on Web sites operated by traditional mainland media. This is followed by mainland portal Web site news, which confirms the huge development potential of the Internet. Compared with mainland online media, the degrees of people's trust in overseas portal Web sites and overseas news Web sites are all less than their trust in domestic online news. Thus, although the Internet has no national borders, the Internet is still a local medium based on local languages and audiences. In comparison with the online news, Internet users have a relatively low degree of trust in e-mail news, which is related to the explosion of junk e-mail information in recent years.

Figure 5.45 Internet users' degrees of trust in different online news sources



It should be noted that over half of the Internet users trust overseas portal Web sites; this is second only to domestic traditional media Web sites and domestic portal online news. Further analysis of the age and education distribution of Internet users who trust overseas portal Web sites is as follows. In terms of age, there is a very clear trend that the younger the Internet user, the greater the possibility that he/she will trust overseas portal Web sites. As the age of Internet users increases, it can be expected that the proportion of Internet users who trust overseas Web sites will also increase.

Figure 5.46 Age differences in terms of trust in overseas portal Web sites

In terms of education, there is also a clear trend whereby the higher one's education, the greater the possibility that he/she will trust overseas portal Web sites.

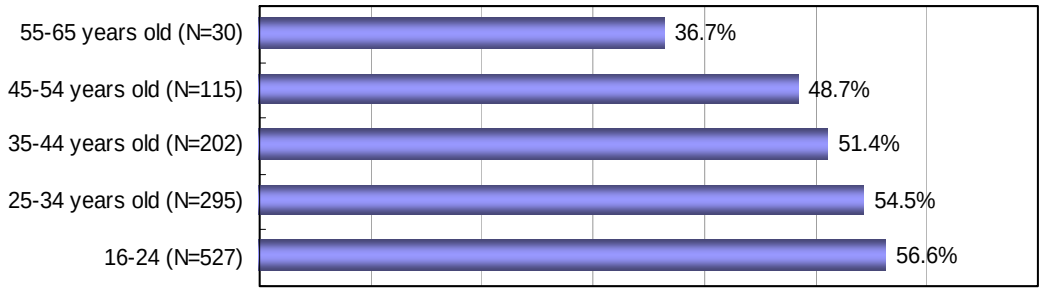
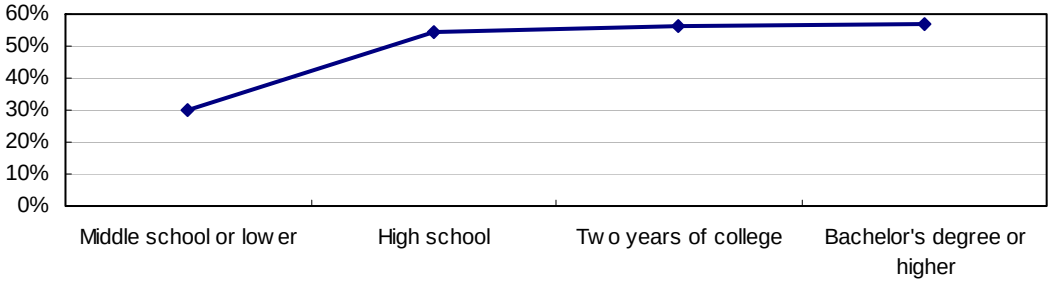


Figure 5.47 The degrees of trust in overseas portal Web sites among Internet users with different educational backgrounds



PART SIX

THE INTERNET AND COMMUNICATION

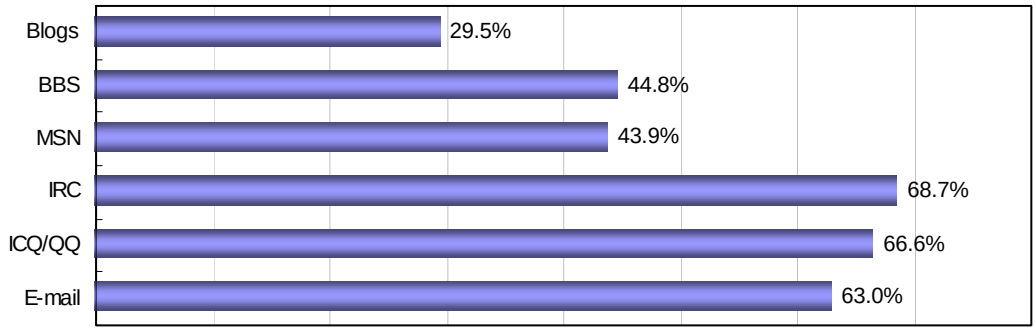
As a symbol of the globalization era, the Internet is not only changing the mode by which people transmit and deal with information, but it is also establishing a new medium for communication. Through the Internet, an instant and interactive mechanism for communication, users can easily communicate with one another over the virtual net. This communication not only includes e-mail simply for communication with relevant news groups, but also allows a virtual community with comparatively regular members to share information, views, and services, through electronic bulletin boards, BBS, blogs, and the Wikipedia maintained and composed by users, as well as through bilateral chatting tools like QQ/ICQ, MSN, and so on.

It seems that the Chinese people are more willing to take advantage of such instant and direct communications and get-togethers. Thus, there is a high rate of use of mobile instant text messaging, IRC, ICQ, and the flourishing net community represented by BBS. Blogs in other countries are usually only personal Web sites; however, Chinese bloggers prefer to be organized by a portal site. Search engine companies in other countries focus on searching tasks, whereas China's current top search engine, Baidu.com, not only provides a search engine but also has developed a "Tie Bar, " that encourages users to discuss and communicate while searching. Correspondingly, because e-mail does not allow for instant communication, there are fewer e-mail users in China than there are in the developed countries, with about one-third of the interviewed Chinese users never using e-mail.

6.1 Use of Communication Tools on the Internet

Among the communication tools, we examined e-mail, blogs, BBS, MSN, IRC, and ICQ/QQ. Users usually choose IRC or ICQ/QQ tools to communicate through the Internet, thus explaining the low rate of e-mail use. There is almost the same rate of use of MSN and BBS, while blogs, as a new tool, have the least usage, although still reaching a certain rate.

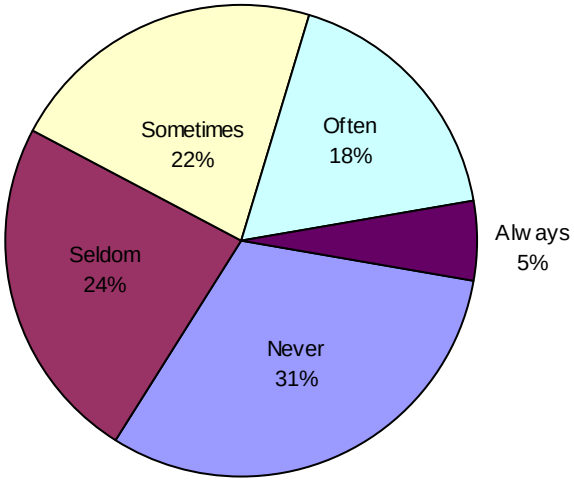
Figure 6.1 Usage of the various communication tools (by percentage)



6.11 E-mail

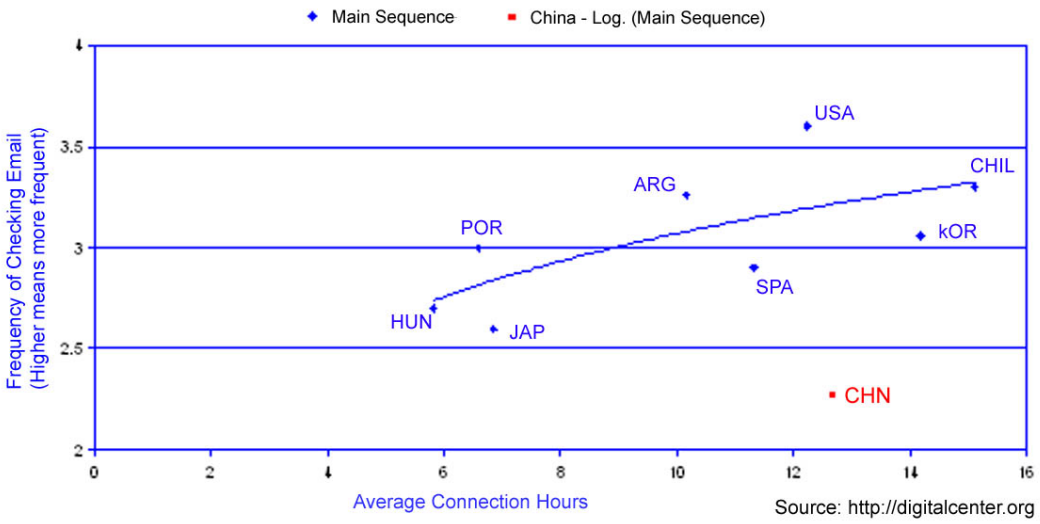
It is remarkable that one-third of the interviewed users never use e-mail, one-fifth of the interviewed users always or often use e-mail, and one-half of the users sometimes or occasionally use e-mail. Obviously, although email is one of the communication tools used by most users, it still has a low rate of usage.

Figure 6.2 The frequency of using e-mail (N=1167)



The use of broadband allows users to remain online for long periods of time, but it does not promote e-mail use. If we compare the time online and length of time for e-mail use in various countries, we see that the frequency in Asian countries (including Japan and Korea) is below the mean. The highest frequency is among American users. It is significant that the frequency of e-mail use by Chinese users has not increased as the amount of time they spend online has increased.

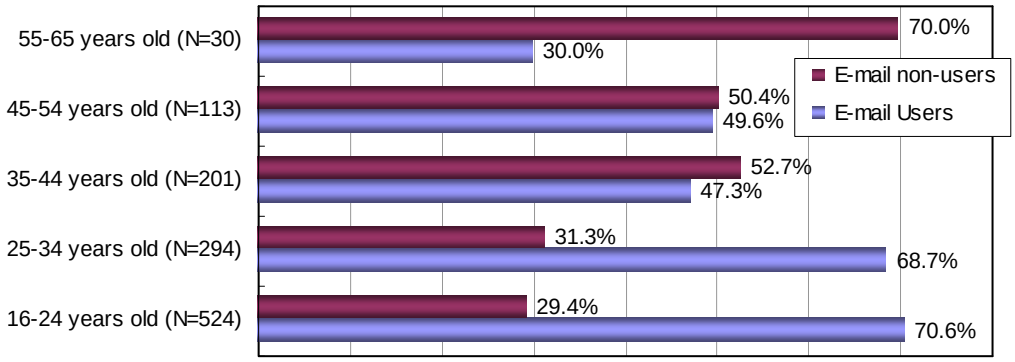
Figure 6.3 International comparison: online time and frequency of checking email (2003)



6.11a Demographic distribution of e-mail use

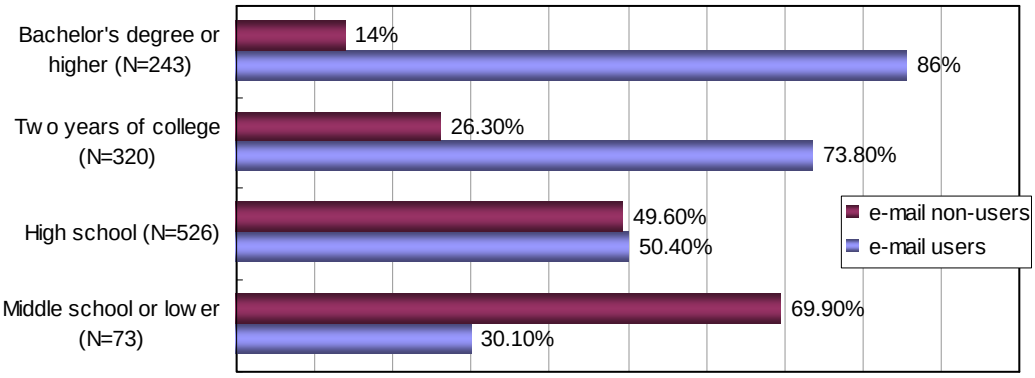
The survey showed no significant gender difference in terms of e-mail use. However, with respect to other demographics, there are significant differences. First, there is a significant difference in e-mail use among the different age groups: there is a greater likelihood of e-mail use among the younger users than among the older users. In the 16 to 24 age group, 70.6 percent of netizens use e-mail, whereas in the 55 to 66 age group, only 30 percent of netizens use e-mail.

Figure 6.4 E-mail users among the different age groups (by percentage)



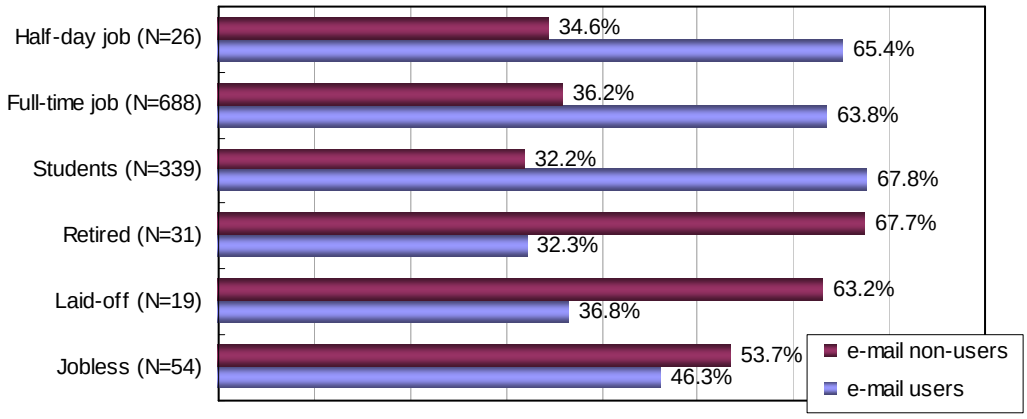
With respect to education, there are significant differences in terms of e-mail use: The higher one's educational background, the greater the likelihood that he/she will use e-mail. Among the users with a bachelor's degree or above, 86 percent use e-mail, whereas among the users with a middle-school education or below, only 30.1 percent use e-mail.

Figure 6.5 E-mail users among users with different educational backgrounds (by percentage)



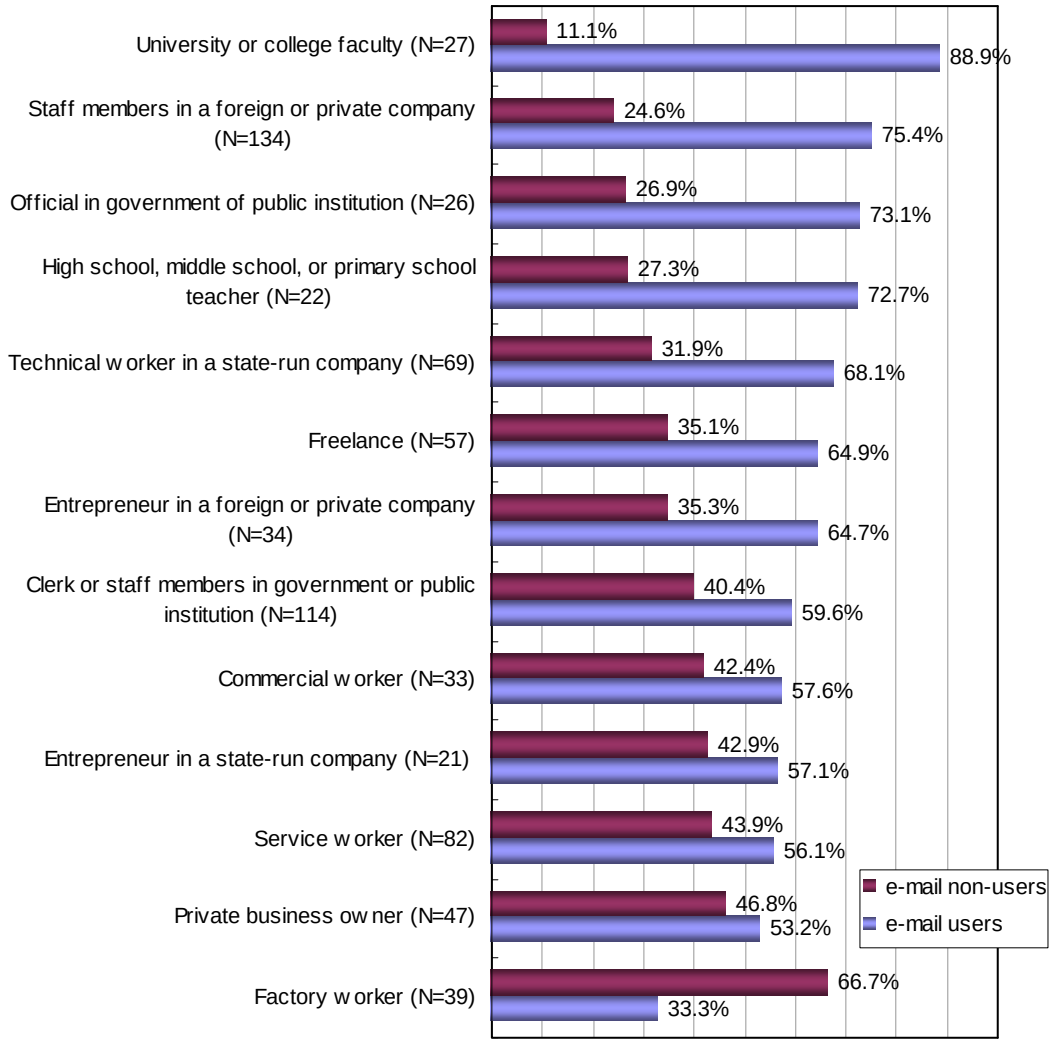
Because of the necessity of using e-mail for studying or for work, the percentage of those who use e-mail is significantly higher among those who are working than among those who are not working. Among the interviewed students, 67.8 percent use email; among the workers with full- or half-day jobs, more than 60 percent use email; among the laid-off or retired workers fewer than 40 percent use e-mail; and among the jobless, 46.3 percent use e-mail.

Figure 6.6 E-mail users among users with different employment statuses (by percentage)



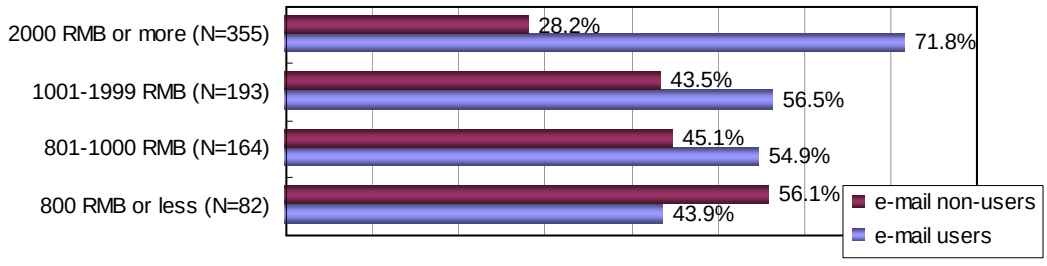
Among the different occupations, the highest percentage of e-mail users is among college teachers and researchers (88.9 percent), followed by staff members in foreign or private enterprises (75.4 percent), officials in government or public institutions (73.1 percent), and high school, middle school, or primary school teachers (72.7 percent), and the lowest percentage among factory workers (33.3 percent).

Figure 6.7 Use of e-mail among users with different occupations (by percentage)



Another factor affecting the use of e-mail is income. Internet users with higher incomes have a higher likelihood of using e-mail than those with lower incomes. Among Internet users with monthly incomes of 2000 RMB (about 250 US$) or more, 71.8 percent are using e-mail. Among users with monthly incomes of less than 800 RMB (about 100 US$), only 43.9 percent are using e-mail.

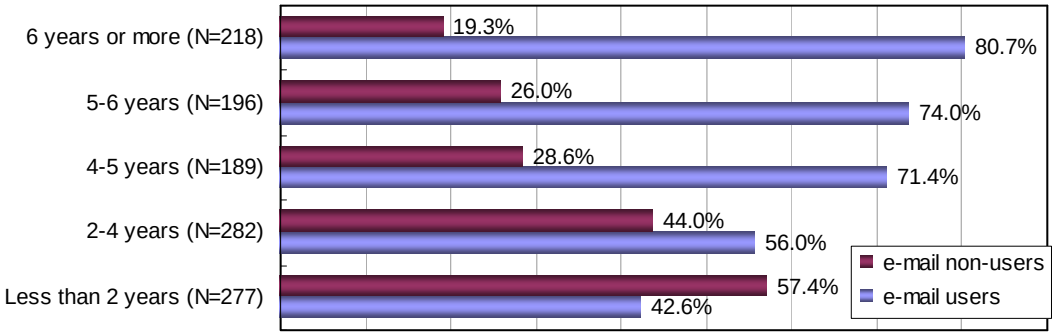
Figure 6.8 E-mail users among users with different income levels (by percentage)



Note: 1 US$ equals about 8 RMB

A user's Internet experience also has an impact on whether he/she uses e-mail. From the results of the survey, we find that the percentage of e-mail users is higher among those with long Internet experience than among those with short Internet experience. Among those with more than six years of Internet experience, 80.7 percent use e-mail; among those with less than two years of Internet experience, only 42.6 percent use e-mail.

Figure 6.9 E-mail users among users with different lengths of Internet experience (by percentage)

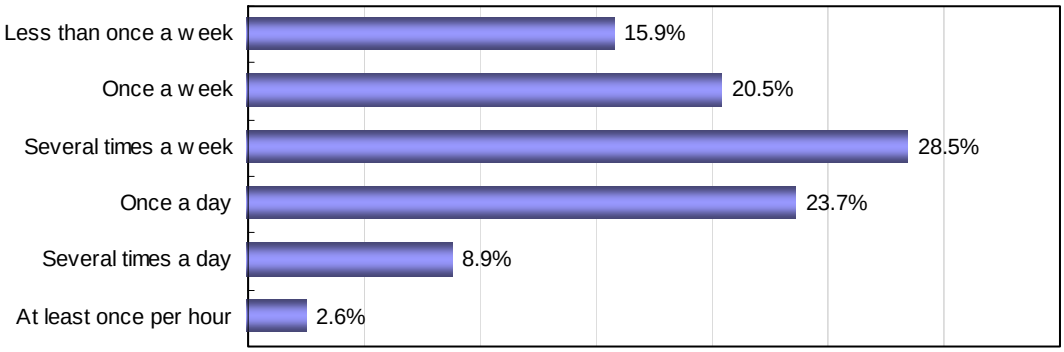


Thus it can be seen that there is a significant difference in e-mail use in terms of education, occupation, income, and Internet experience. This imbalance in the distribution of e-mail use reveals that the use of e-mail is still not common among users. In fact, the e-mail use in general is not high, and among those who do use e-mail, the percentages of those who always check and send e-mail are not high as well.

6.11b The frequency of checking e-mail and the amount of e-mails

E-mail is popular because it is convenient, speedy, and cheap. Without cost considerations, e-mail users can check their mail everyday. However, only 35 percent of e-mail users check their mail at least once a day, whereas 36.4 percent of e-mail users check their mail once a week or less.

Figure 6.10 Frequency of users checking e-mail (N=731)



E-mail users in China receive and send only eight e-mails in an average week (N=730). Among the e-mail users, 23.7 percent only send or receive one e-mail or less on an average week; more than 70 percent send or receive one e-mail or less on an average day.

6.11c E-mail accounts

The low rate of e-mail use is also reflected in the choice of e-mail accounts. Generally, paid e-mail accounts have a higher capacity and a more steady capability, with less chance of viruses, than free accounts. Nevertheless, fewer than 20 percent of the e-mail users use paid accounts (N=732).

Table 6.1 Users using paid e-mail accounts (by percentage)

Paid e-mail accounts	Percent
0	80.95%
1	14.%
2	3.1%
More than 2	1.8%

Most e-mail users prefer to use free accounts, and only 4 percent of users do not have a free account. In addition, many people use more than one free account. More than half of the e-mail users have at least two free accounts.

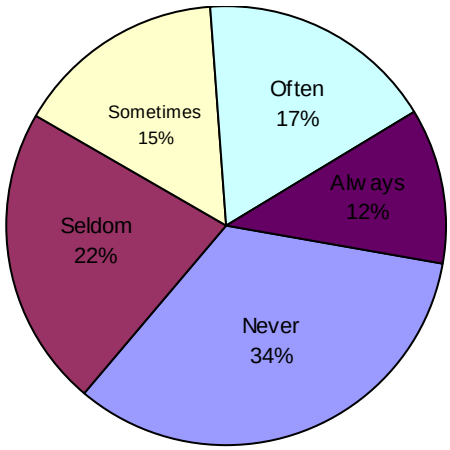
In sum, the percentage of interviewees who are e-mail users is not high, and the number who send or receive e-mail and their frequency of checking e-mail are also very low, even among the e-mail users. The majority of e-mail users do not use paid e-mail accounts. All of the above shows that most Internet users do not use e-mail as a major tool for communication.

On the other hand, the interviewed users frequently use other communication tools. In the following, we will briefly analyze the use of ICQ, IRC, MSN, BBS, and blogs. Due to space limitations, we will not provide a detailed analysis of these means of communication.

6.12 ICQ/QQ

As a communications tool, ICQ has the advantage of being able to provide an instant dialogue. Although more than one-third of the users do not use ICQ, among those who do use it, 40 percent use it frequently. Many users are accustomed to opening their ICQ once they go online and thus they are always ready to communicate with others.

Figure 6.11 The frequency of using ICQ/QQ (N=1164)

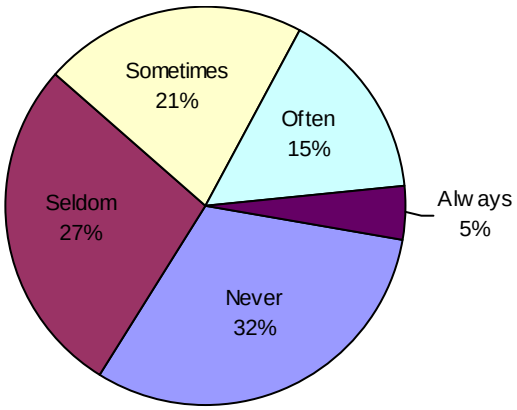


6.13 Chat Rooms

IRC was an early tool for Internet chatting. At the beginning of the Internet in China, not only InfoHighWay (IHW), but also RichWin (formerly srsnet.com and now sina.com) flourished and developed due to IRC. Although users in the same IRC do not know one another, they usually use a fixed ID when they visit the same chat rooms. Thus they have to maintain their net images.

However, the percentage of users using IRC is generally lower than the percentage of users using ICQ. One-third of the users do not use IRC, and one-fifth of the users always use IRC; most users are just passing travelers.

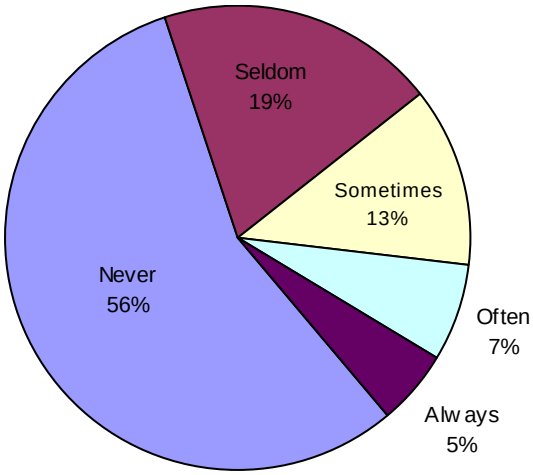
Figure 6.12 The frequency of using IRC (N=1162)



6.14 MSN

MSN is a similar means of communication for instant bilateral chatting. Although it is a good communication tool, the rate of MSN use is still very low. More than half of Internet users do not use MSN, and only about 20 percent frequently use MSN to chat.

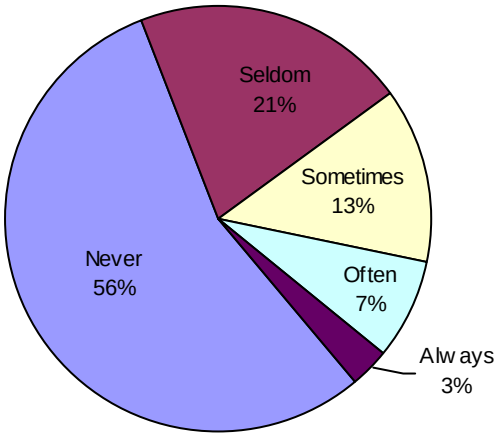
Figure 6.13 The frequency of using MSN (N=1165)



6.15 BBS

Although the rate of Bulletin Board System (BBS) use is not the highest (only half of the Internet users log on to BBS and only one-tenth frequently use BBS), because of its long-lasting content BBS has the most influence.

Figure 6.14 The frequency of using BBS (N=1167)

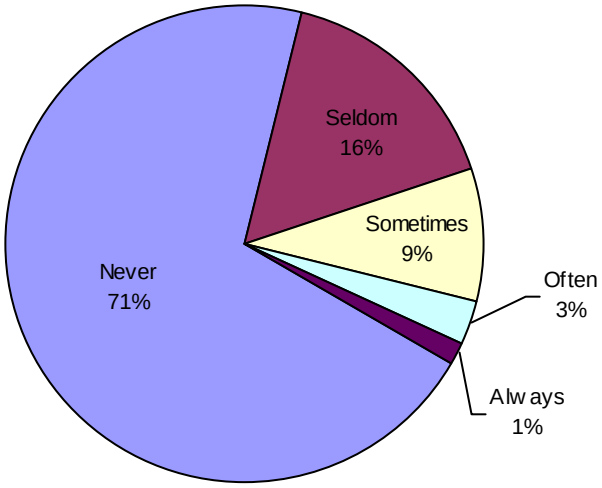


6.16 Blogs

Blogs are a newly emerging means of communication that also have a personal publishing. Users can publish whatever they want and the audience can leave whatever comments they want. The largest portal site for blogs, bokee.com, has 3.2 million bloggers.

The survey found that blogs have attracted more than one-third of Internet users: either maintain their own blogs or simply browse the blogs of others. It can be foreseen that blogs will develop greatly in China in the future, if there are no non-market interferences.

Figure 6.15 The proportion of users who use blogs (N=1164)

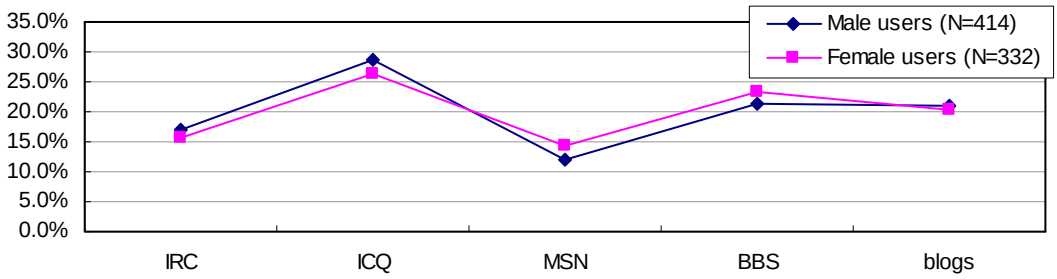


Different Internet users use different Internet communication tools. Here, because of space limitations, we will mainly focus on which users use which communication tools.

6.2 The Characteristics of Communication via the Internet

Past research shows that the mode of Internet use differs between males and females. But, as analyzed above, as in the case of e-mail use there are no significant gender differences among the Internet communities. Among males and females, the percentage of users using IRC, ICQ, and five other Internet communication tools do not differ significantly. Comparatively, the percentage of female users is somewhat higher than that of male users among those who use MSN and BBS, whereas the percentage of male users is somewhat higher among those who use ICQ and IRC.

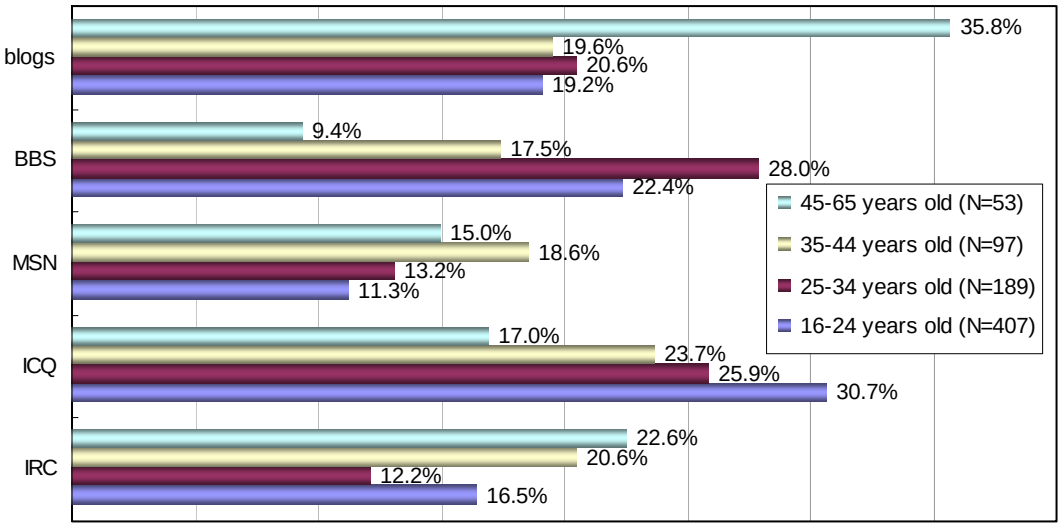
Figure 6.16 The proportion of users who use online communities by gender (Sig.=.798）



As for age, there is a significant difference among the different groups. The group under 24 years of age mostly uses ICQ, with a low percentage using MSN; the group between 25 and 34 years of age is inclined to first use BBS and then to use ICQ; the group over 45 years of age prefers blogs, and this group has the largest number of people using IRC among the

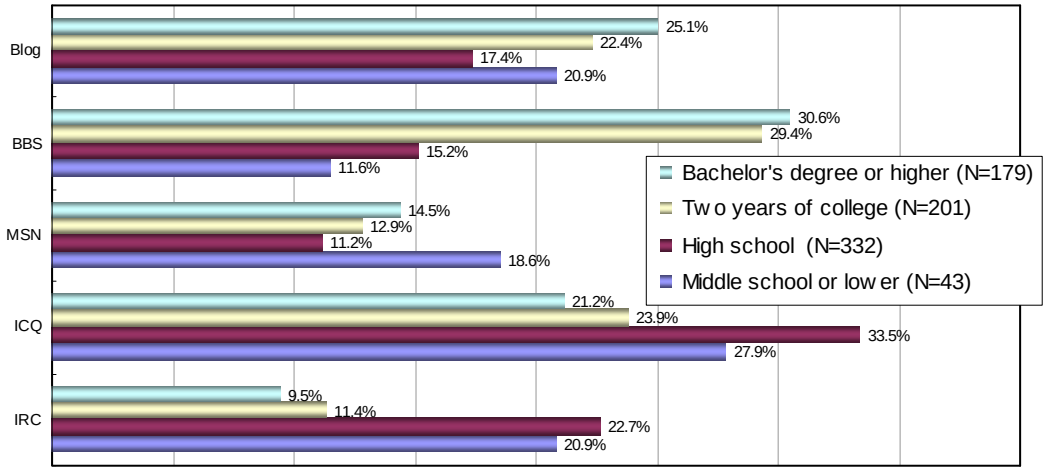
four groups. The group of middle-aged people between the ages of 35 and 44 comparatively evenly participate in the five Internet communities.

Figure 6.17 Types of online communities among the different age groups (Sig.=.023)



There is also a significant difference in the use of Internet communities among users with different educational backgrounds. A high-school degree is the dividing line, with the users with a senior high school or a middle school education being inclined to choose IRC, ICQ, or MSN, and the users with two years of college, a bachelor's degree, or above being inclined to use BBS or blogs.

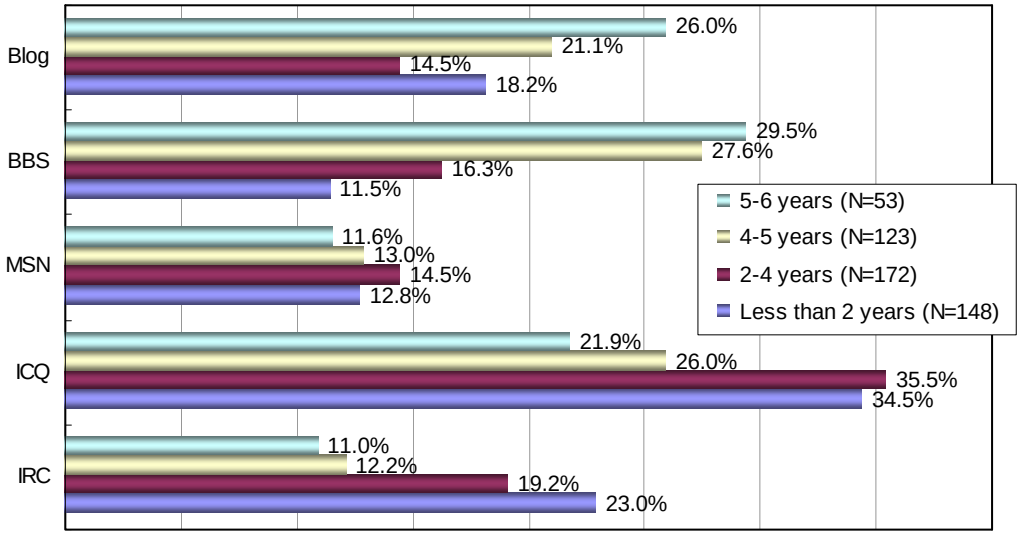
Figure 6.18 Types of online communities among groups with different educational backgrounds



Groups with similar lengths of Internet experience also display similar characteristics in terms of their use of Internet communities. Four years of Internet experience is the dividing line, with users with less than four years of Internet experience being inclined to use IRC and ICQ, and users with more than four years of Internet experience being inclined to use BBS or

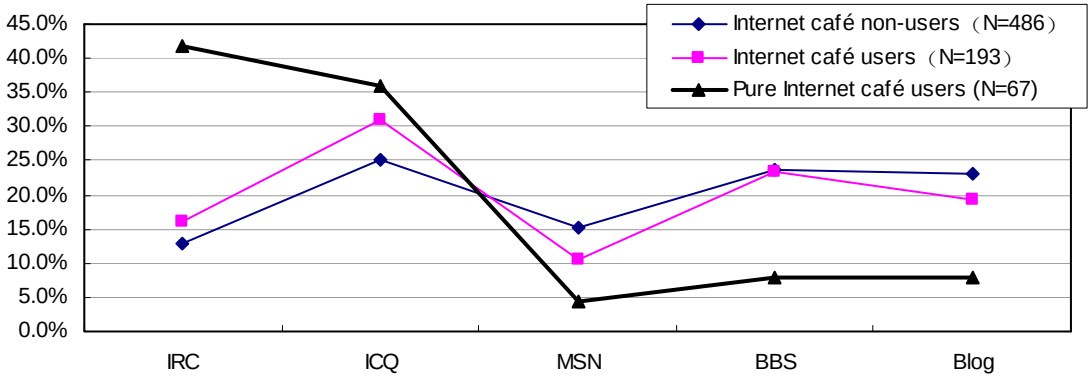
blogs. The percentages are comparatively close in terms of use of MSN among the groups with different lengths of experience. As shown above, users with long Internet experience probably have higher educational backgrounds because of their early access to the Internet.

Figure 6.19 Types of online communities among groups with different lengths of Internet experience



Internet cafés are important for promoting the use of the Internet, and there are many Chinese users who began their Internet life in an Internet café. This survey divides Internet café usage into three types: 1.) those who do not go online in Internet cafés; 2.) those who go online either in Internet cafés or in other places, and 3.) those pure users who only go online in Internet cafés. There is a significant difference among these three types of café users, especially between the pure Internet café users and the other users.

Figure 6.20 Types of online communities, by Internet café users and non-users



The percentages of those who use IRC and ICQ among those who go online in Internet cafés are much higher than the percentages of the other two types of users, whereas the percentages of those who use MSN, BBS, and blogs are much lower than the percentages of

the other two types. Furthermore, the percentage of those who use IRC and ICQ among those who go online in Internet cafés but also in other places is somewhat higher than the percentage of users not going online in Internet cafés who use IRC and ICQ. This result reflects the attraction of the Internet café as a place for instant communications.

6.3 The Influence of the Internet on Communication

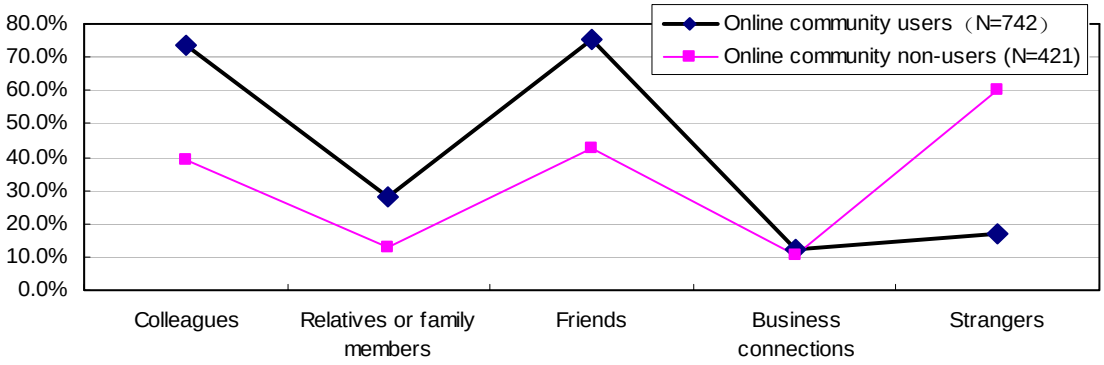
Some Internet users use the Internet only for general browsing, checking e-mail, or playing games and they seldom participate in online communities; other Internet users are very active in these virtual communities. To analyze the possible impact of the Internet on human communications, we divide the Internet users into two groups: one group of users, called online community users, who frequently use chat rooms, BBS, ICQ/QQ, or blogs; the other group of users, called online community non-users, who seldom participate in these Internet functions. By comparing the difference between the two groups, we may gain a better understanding of the impact of online communities.

The other important and direct impact of Internet use is on methods of communicating with others. This research also covers these changes.

6.31 Differences in the scope of communication between users and non-users of online communities

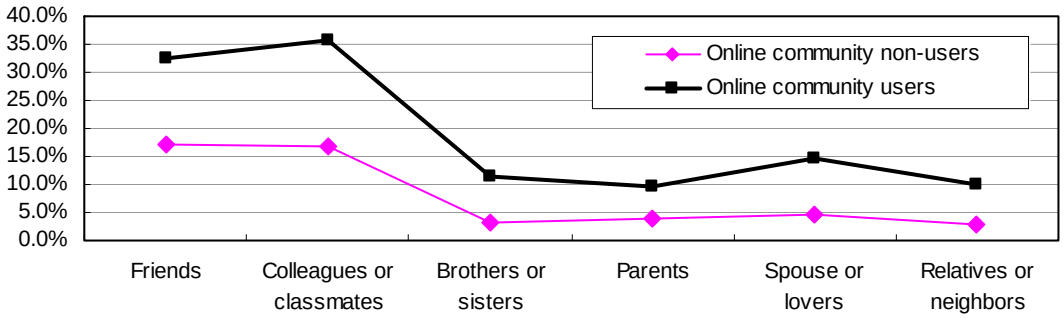
First, what different groups of people are the objects of communication for the users and non-users of the online communities in this survey? We have divided the objects of communication into five groups: colleagues, relatives and family members, friends, business and administrative connections, and strangers. The results show that the scope varies significantly between the users and non-users of the online communities; communication with friends and colleagues is much higher among users of the online communities than it is among non-users of the online communities, whereas communication with strangers is much higher among non-users than users of the online communities. Thus, the objects of communication for the users of the online communities are mainly traditional social relations, but communication in the online communities makes them much more familiar. Communication with business and administrative connections is almost the same between users and non-users of the online communities. Furthermore, not only users but also non-users of the online communities are more inclined to communicate with their friends and colleagues but not with relatives and family members and administrative connections.

Figure 6.21 The scope of online communications



In order to further explore the influence of Internet communications on users and non-users of the online communities, the survey divides traditional social relations into lovers, neighbors, brothers and sisters, parents, friends, and classmates to observe if there is any difference in communications with these types of relations. The statistical results show that the users of the online communities show higher percentages of communication with these six groups than the non-users. This indicates that the Internet communities have promoted communication between users and their traditional social relations. Furthermore, the objects of communication are friends, colleagues, and classmates. At the same time, most users of the online communities do not consider that there has been any change in communication with the six groups of relations after going online, whereas a large percentage of non-users of online communities believe that there has been a change. This shows that the influence of the online communities on communications with traditional relations exists but is limited to within a certain scope.

Figure 6.22 After using the Internet, communications with different social relations increased or strongly increased



6.32 The extent of Internet communications between users and non-users of online communities

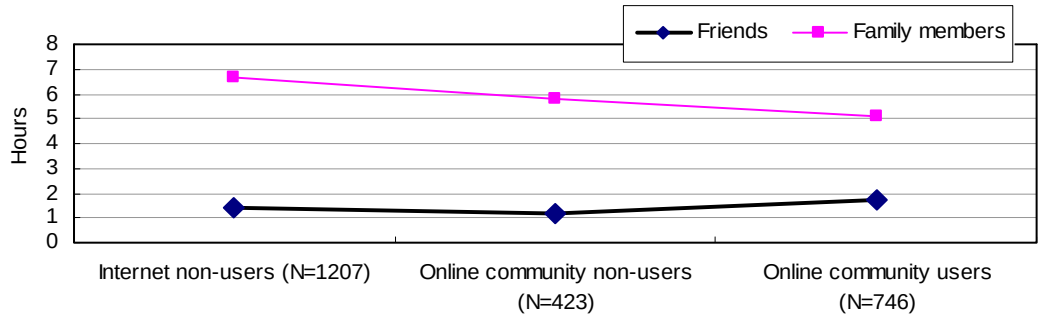
The degree of Internet communications here means the extent that users engage in Internet communications that constitute human relations; one of the guidelines is the number of net friends. The survey particularly compares users of the online communities with non-users in terms of making friends via the Internet. Net friends are those friends made by users through the Internet; they are different from the above-mentioned six traditional social relations in that the friendship is completely due to the Internet. This is an important guideline to weigh the extent of communications among users of the online communities and non-users. The data in the 2005 survey show that users of the online communities had an average of twelve more net friends than non-users of the online communities, thus indicating the powerful communicative functions of the online communities.

Table 6.2 Average number of online friends for users and non-users of online communities

Online communities users (N=744)	Online communities non-users (N=423)
17.9	5.7

Since the users of the online communities can make more net friends than the non-users, then are there any differences between the two in their daily lives? The users of the Internet communities spend more time with friends than the non-users; the non-users of the Internet communities spend more time with their families than the users. This shows that the users of the Internet communities are more willing to make friends not only online but also offline.

Figure 6.24 Average time spent with friends and/or family members

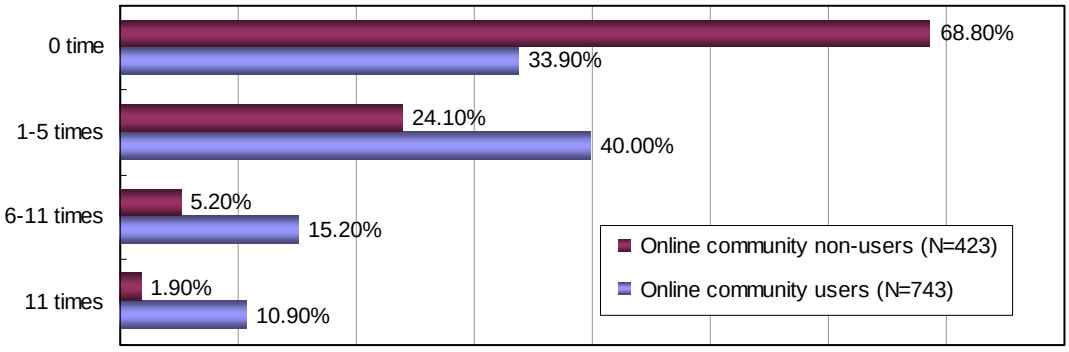


We further compare the situation of Internet community users and non-users with those non-users who never go online; whether they are users of the Internet communities or not, the time spent with their families is significantly lower than the time that Internet non-users spend with their families, indicating that non-users are more inclined to be with their families. Those

who are non-users of the Internet communities but who spend time online also spend less time with their families than Internet non-users.

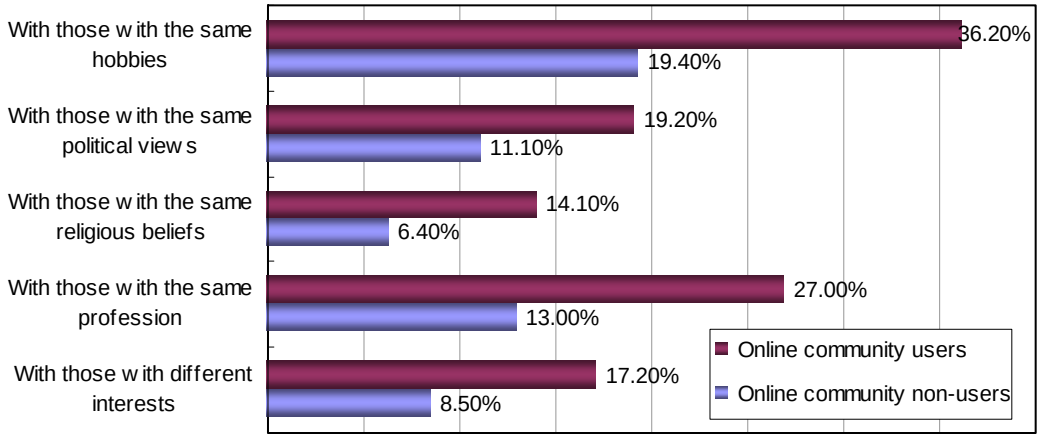
We can say that behavior in cyberspace is closely bound up with real world daily life. However, does use of online communities increase the number of friends with whom users stay in touch? Friends here refer not only to friends in real life, but also to net friends. Does the use of online communities strengthen relations among friends? The answer is yes. Users of online communities keep in touch with a larger number of friends than non-users. In contrast, whereas most non-users of the Internet communities do not think there was an increase in the number of friends they kept in contact with after they went online.

Figure 6.25 Does going online increase the frequency of contacts with friends?



In order to understand the essence of communication for users and non-users of the Internet communities, this survey observed the different characteristics of Internet communication of the users and non-users of the Internet communities in terms of the similarities and differences in their interests, professions, beliefs, and political opinions of their objects of Internet communication. The data show that the percentage was significantly higher among the users than among the non-users, and it is noteworthy that communication between users of the Internet communities and people with different interests or hobbies is also significantly higher than communication of non-users with people who have different interests or hobbies. Thus, Internet communication is breaking the structure of traditional social relations by allowing people to make friends according to one's likes and dislikes, thus broadening and deepening the space for human communication.

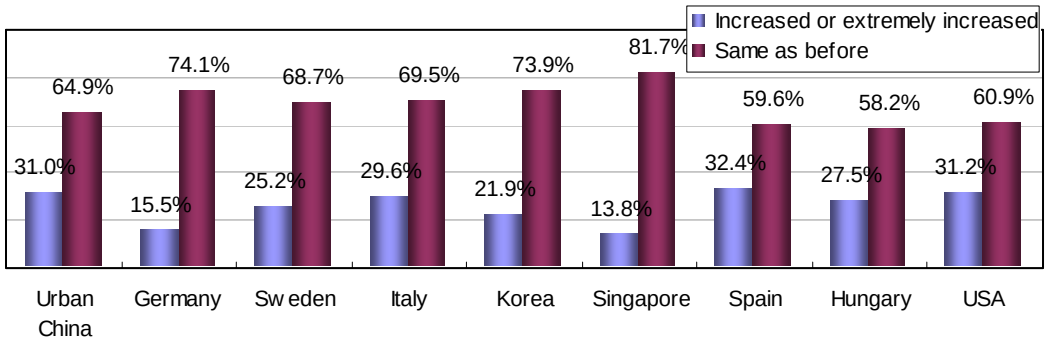
Figure 6.26 After using the Internet, the communication with different kinds of people are increased or greatly increased



From the data in 2003, we see that the amount of communication through the Internet for Chinese users is much higher than that for users in other countries.

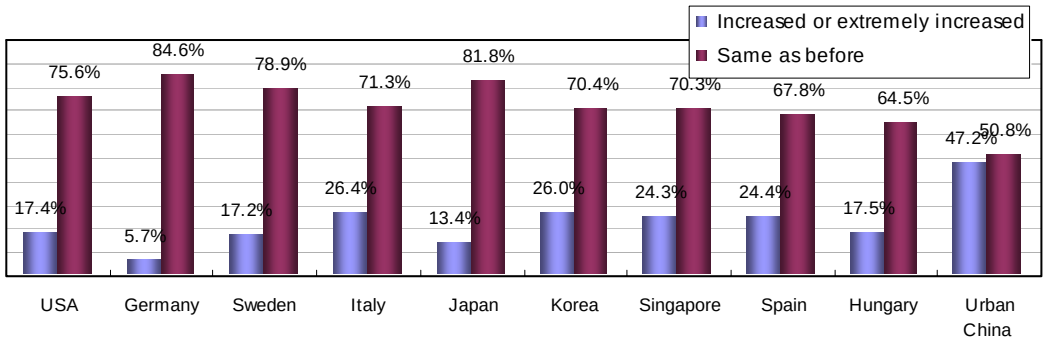
The data from the "World Internet Project" in 2003 show that there has been an increase in communication among people with similar professions after going online to different degrees in different countries, with the highest percentages in China, Spain, the United States, Italy, and Hungary. This accounts for the increase in professional communications among Internet users in many countries around the world.

Figure 6.27 Does going online increase contacts with people who share your profession (2003)?



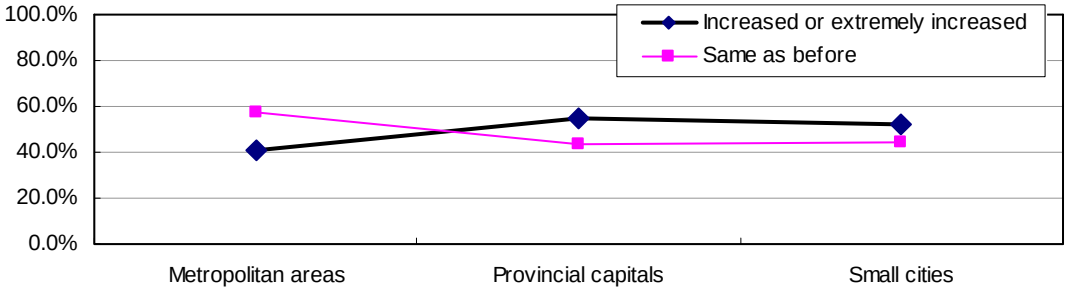
In terms of spare-time communications, most users in most countries do not alter their communications with those who share the same hobbies or interests after they go online. However, the situation in China is quite different: many users think that using the Internet increases communications with people who share the same hobbies or entertainment.

Figure 6.28 Does going online increase contacts with people who share your hobbies?



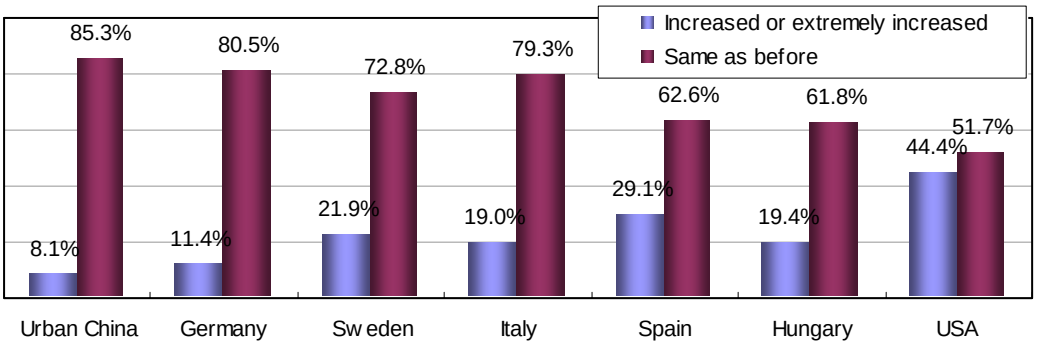
In this respect, on the one hand the significant difference between China and other countries and areas is due to the sampling methods of the survey; on the other hand, it is due to the limits of traditional Chinese means of communication. This can also apply to the differences between the developed capital cities and the small cities in China. The percentage of users who communicate with those with same hobbies in the metropolitan areas is significantly lower than the percentages in the provincial cities and small cities.

Figure 6.29 Differences in contacts with people who share the same hobbies among cities of different scales (2003)



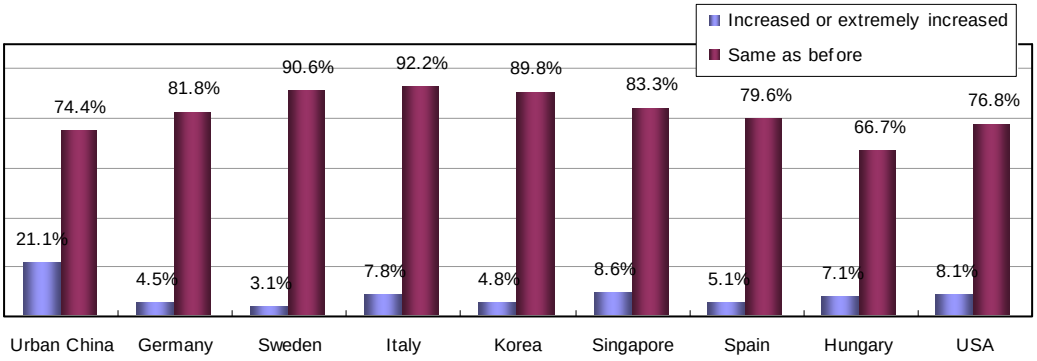
Communications among Chinese users increases after users go online but China has the lowest percentage compared to the other countries. The highest percentage of Americans increased communications with friends and families after going online, 30 percent more when compared with the Chinese users. To a certain degree this may be due to the high popularity of the Internet among Americans.

Figure 6.30 Does going online increase contacts with family or friends?



The second question is whether or not Internet communication promotes political communication. The percentage of users in China who increase communication with people who have the same political interests after going online is much higher than the percentage of users in other countries in the "World Internet Project." This will certainly exert a subtle influence on Chinese politics.

Figure 6.31 Does going online increase contacts with people who share your political interests?



In conclusion, use of the Internet communities deepens communication among users, increasing the possibility of strong human interactions. It not only promotes communication with traditional relations, but also provides a new communications tool to make new friends. At present, although this effect is limited to a certain degree, it represents a powerful force to enlarge and reconstruct traditional communication. Further usage of the Internet communities certainly will widen and deepen communication among users.

PART SEVEN

THE INTERNET AND POLITICS

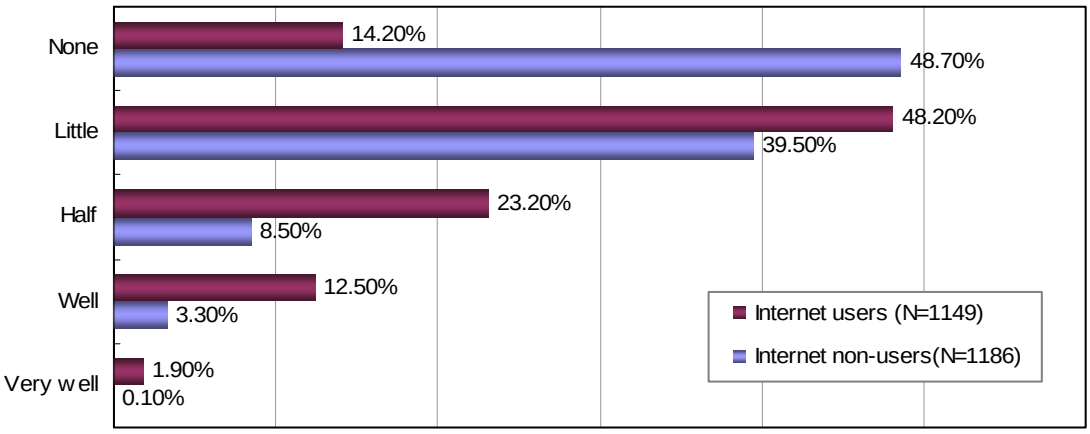
In recent years, central and local governments have paid increasing attention to e-government. According to data from CCID (http://english.ccidnet.com), in 2004 the Chinese government invested 41.2 billion RMB in e-government projects, which accounted for 10 percent of all IT spending. Analysts projected that in 2005 total spending in the IT industry would increase to 48.2 billion RMB and by 2009 the amount would reach 86 billion RMB. This translates into a 15.9 percent compound annual growth. Based on evaluations conducted by the United Nations this year on e-government in member-countries, China ranked sixty-seventh out of 191, surpassing the world average for the first time. However, China has yet to establish a widely accepted method to gauge the effect of making public services available online. This survey attempts to provide a snapshot of e-government general awareness among Chinese citizens.

Meanwhile, the Internet in China has grown into a powerful platform to form and express public opinion. A groundswell of public sentiment can easily be built up through comments on news articles, BBS forums, or other virtual communities. This phenomenon certainly has attracted attention from the government and social observers. In the following, we will examine the survey results to uncover the trends in these areas.

7.1 Public Knowledge of E-government

It appears that, despite heavy investment from governments at all levels, the public knows little about e-government: only 1 percent understand it “very well,” 7.8 percent “well,” 15.7 percent “half,” and as many as 43.8 percent “a little” and 31.7 percent “not at all” (N=2,335). Even among Internet users, more than half said they know little or nothing at all about e-government.

Figure 7.1 The public's knowledge of e-government

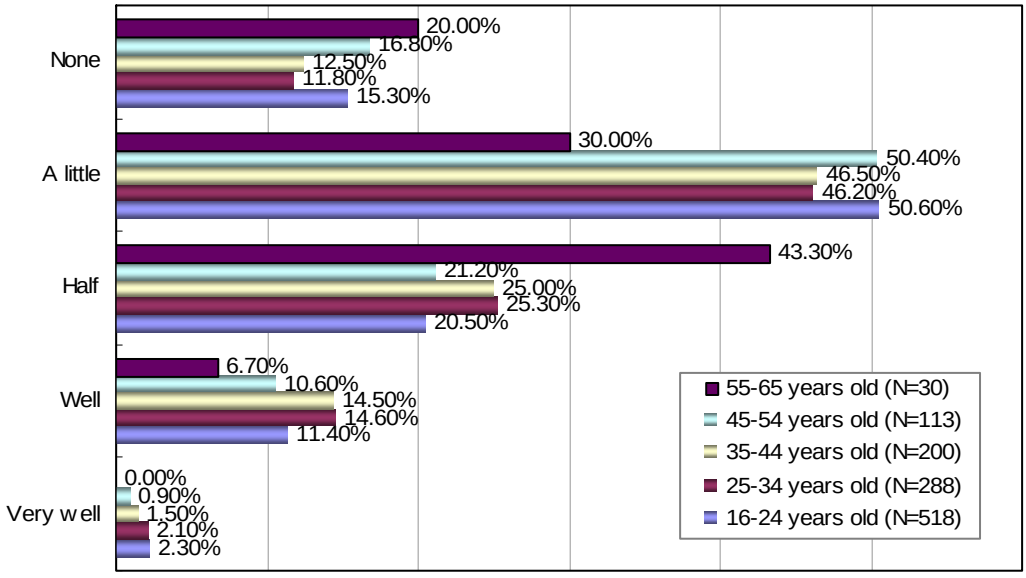


Among Internet users, there is no significant difference among the different age groups, marital statuses, or occupational groups. However, there is a discernable gap between genders, whether employed or not, and among income, education, and length of Internet experience.

Male Internet users are more likely to know about e-government than female users; 2.6 percent of male users claim to know e-government "very well," and 25 percent know e-government "well," whereas among the female users, the percentages are 1.1 percent and 9.7 percent, respectively.

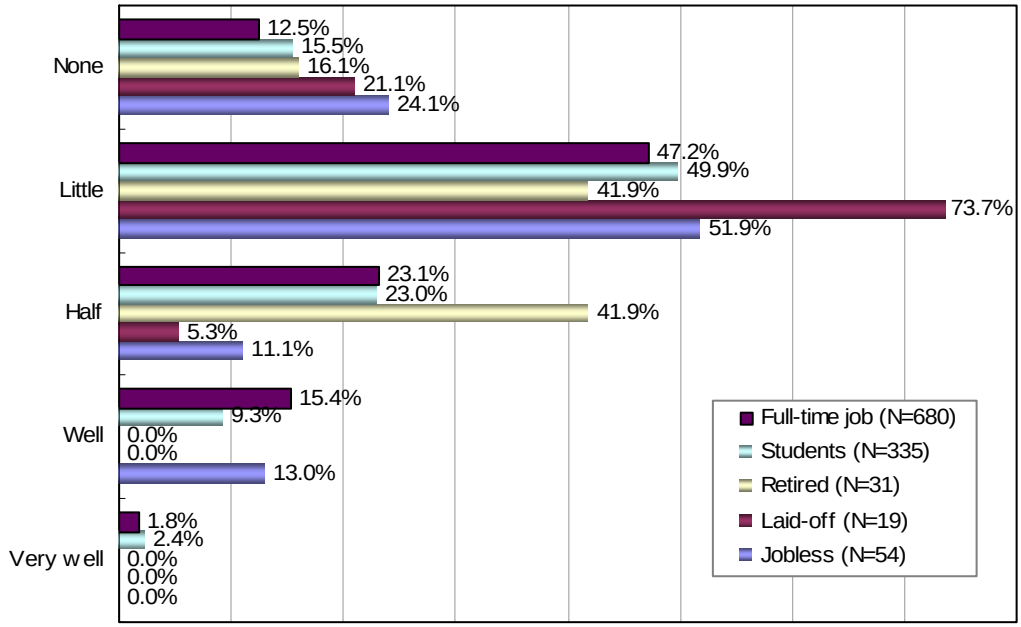
Similar discrepancies also exist among people with different educational backgrounds. Better-educated people may know more about e-government. And the survey revealed a significant age difference, whereby younger respondents are more likely to know about e-government than older respondents.

Figure 7.2 Age differences regarding knowledge of e-government



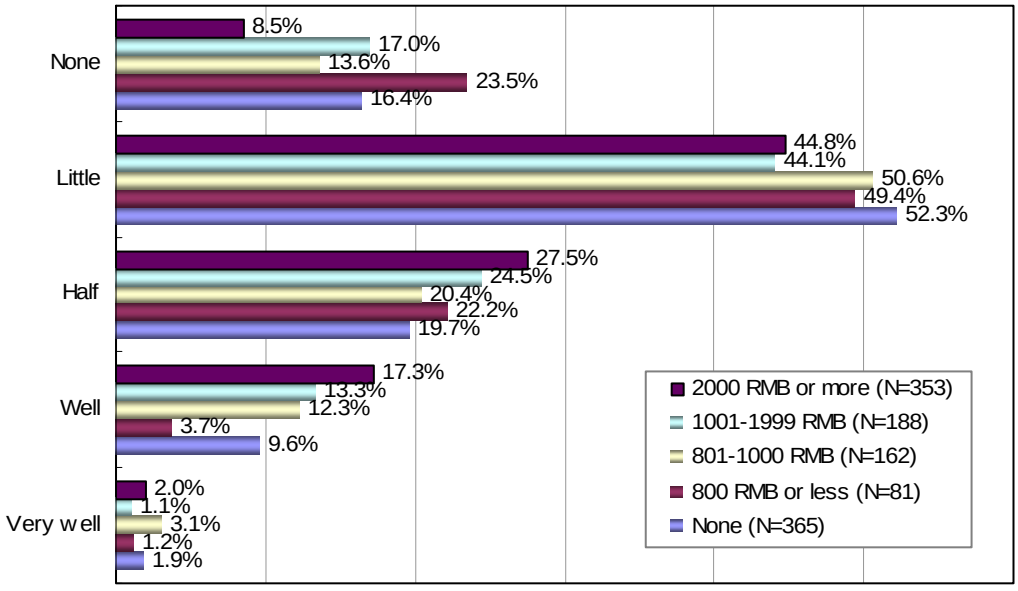
Employment status is another distinguishing factor. Among those not employed, for example, the retired and the jobless, there is little knowledge about e-government, whereas among students or people who are working knowledge about e-government is more than "well."

Figure 7.3 Employment status differences in the knowledge of e-government



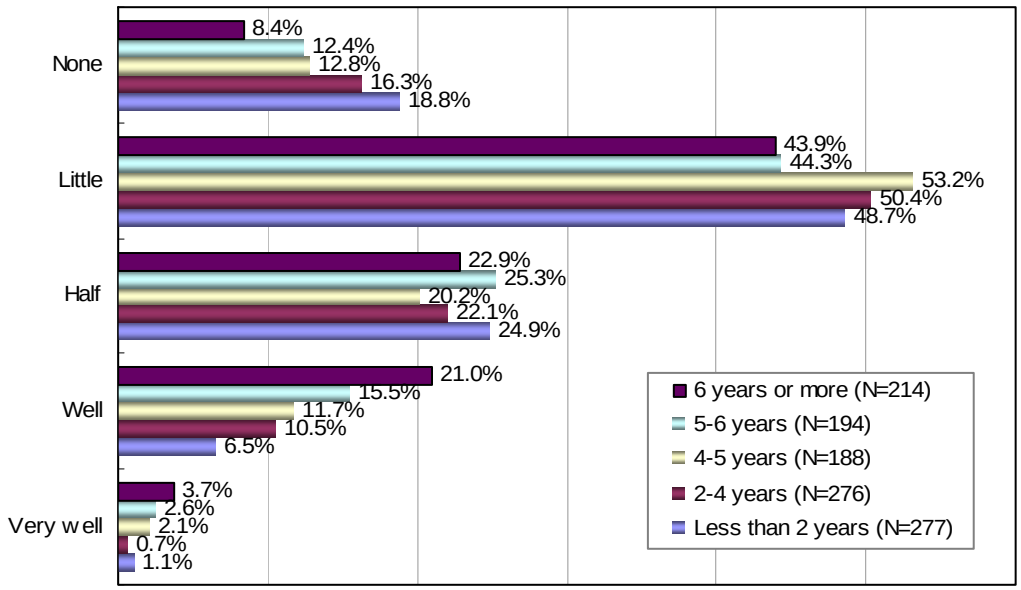
Internet users with higher incomes are more likely to have heard of e-government. Among those with monthly incomes of over 2000 RMB, 20 percent know about the concept "well" or "very well." But only 5 percent of Internet users with monthly incomes below 800 RMB can make the same claim.

Figure 7.4 Personal income differences regarding knowledge of e-government



Familiarity with e-government also rises with individual experience on the Internet. Among Internet users with six or more years of Internet usage, 24.7 percent say they know e-government "well" or "very well." This contrasts with a mere 7.6 percent of Internet users with less than two years of usage.

Figure 7.4 Internet experience differences regarding knowledge of e-government

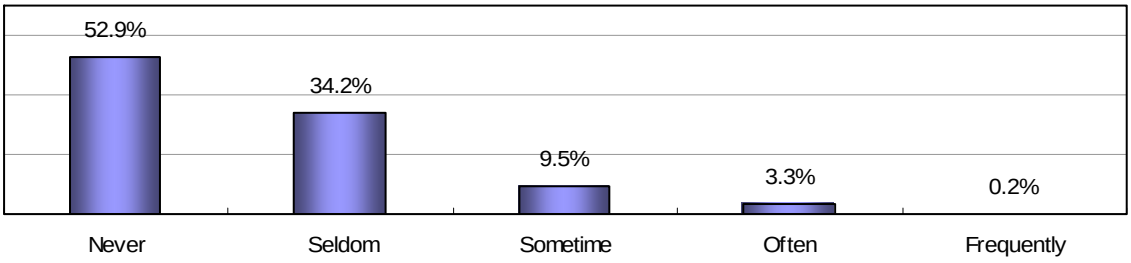


One may argue that, in addition to investing heavily in building Web sites, the governments should spend more to promote e-government. In reality, some projects were carried out more for propaganda purposes than for improved governance. As a result, public engagement did not improve. The abysmal state of public appreciation of e-government, as shown in our survey, is additional proof of this. Without sufficient understanding, citizens are not likely to take advantage of the new services. This reality is clearly demonstrated from the results of our survey, which show a very low rate of adoption of e-government among the general public.

7.2 The Use of E-government Web Sites

Our survey polled 1,169 Internet users, among whom only 3.5 percent are "frequent" or "often" e-government users, 9.5 percent "sometimes," and 34.2 percent "seldom." As many as 52.9 percent of Internet users never visited any e-government sites. This calls into question the efficiency of the huge public investments in this area.

Figure 7.5 Frequency of visiting government Web sites



When further looking into the demographic make-up of e-government usage, it appears that there are significant differences with the exception of gender among various groups. Younger Internet users are much more likely to visit e-government sites than older users; Internet users with higher education levels are much more likely to visit than the others, as are married users. Students and employed users, as a group, are much more likely to visit than those not employed (excluding students). Internet users with higher incomes are much more likely to visit such sites than those with lower incomes. Internet users with longer online experience are much more likely to visit such sites than those with less experience.

Due to the limitation of space and the small sample size of frequent e-government users, we will not further elaborate on the demographic differences.

7.3 The Political Impact of the Internet

In the WIP survey, we attempted to measure the Internet's political impact through a set of four questions. They are:

By using the Internet:

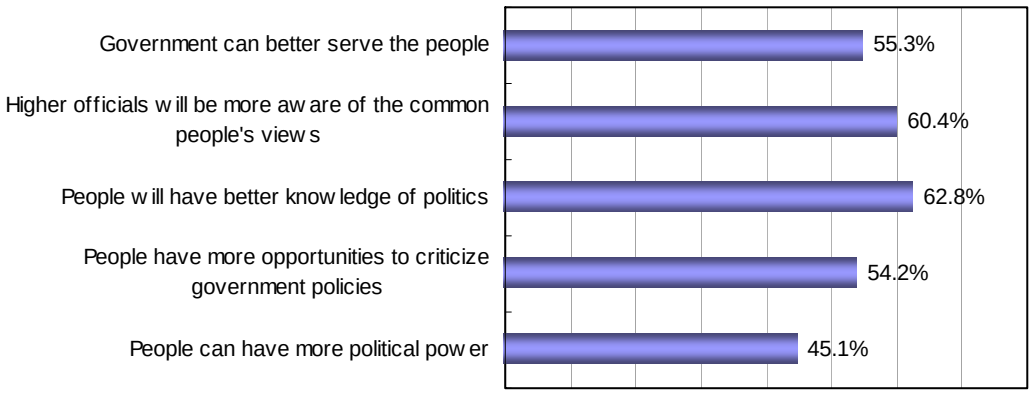
1. People can have more political power
2. People have more opportunities to criticize government policies
3. People will have better knowledge of politics
4. Higher-level officials will be more aware of the common people's views

We added another question in this year's survey: "Government can better serve the people." In summary, most interviewees viewed the political impact of the Internet positively. The consensus is overwhelming in the area of communications between the public and government officials. This demonstrates the citizens' desire for a more transparent political process, fully taking advantage of the Internet as a depot of rich content and as a conduit for rapid information. Equally important, the Internet has become a prominent forum where the public can make its opinions known to the government. It is undeniable that the Internet is building a bridge between the governing and the governed in China. Based on this

observation, more than half of the respondents believe that by going online the government can better serve its citizens, and citizens will have more outlets to critique public services. However, less than half agreed with the statement: "People can have more political power." It appears that the general expectation is that the Internet can be used as a channel for political communication.

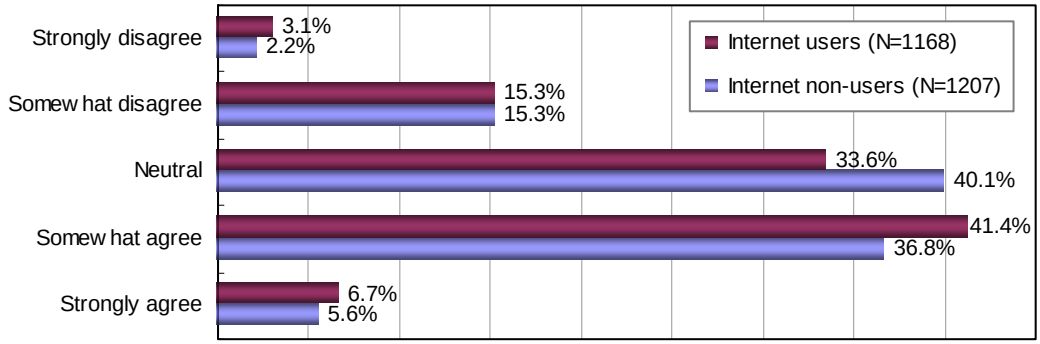
A comparison of the numbers shows that 62.8 percent of the respondents "agreed" or "strongly agreed" that by using the Internet "people have more opportunities to criticize government policies"; 60.4 percent "agreed" or "strongly agreed" that "higher officials will be more aware of the common people's views"; 55.3 percent "agreed" or "strongly agreed" that "government can better serve the people"; and 54.2 percent "agreed" or "strongly agreed" that "people have more opportunities to criticize government policies." Furthermore, 45.1 percent believed that "people can have more political power."

Figure 7.6 By using the Internet, …….



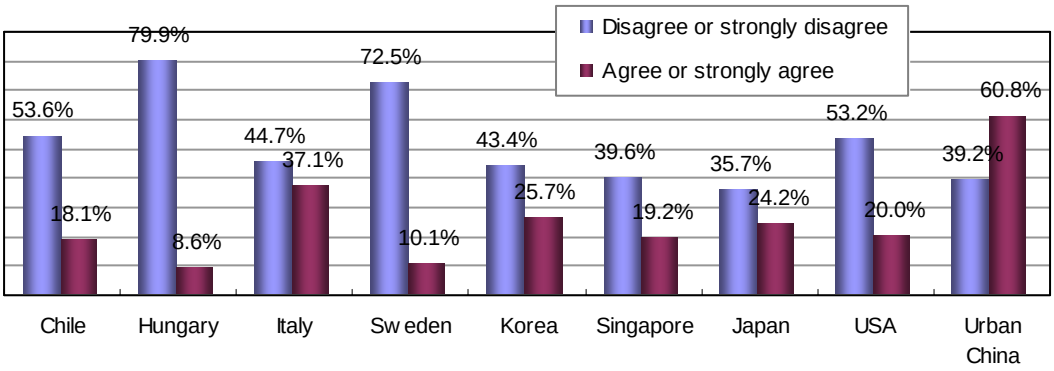
When comparing Internet users to Internet non-users, it becomes apparent that their respective experiences shape their different attitudes. Internet users are more positive than non-users about the prospects for the Internet in political life. With regard to the statements, "higher officials will be more aware of the common people's views" and "government can better serve the people," the reactions do not differ significantly. However, when it comes to the statement regarding "people will have better knowledge on politics," the reactions are significantly different.

Figure 7.7 "By using the Internet, People will have better knowledge on politics."



When comparing the trends in China with WIP survey in 2003, only the Chinese subjects responded positively about the political role of the Internet. Participants from the other countries all showed negative responses. To the question regarding whether "people will have more opportunities to criticize government policies," 79.9 percent in Hungary replied "No," and 72.5 percent in Sweden replied "No." But in China, 60 percent interviewees said "Yes."

Figure 7.8 International comparison: By using the Internet, people have more opportunities to criticize government policies



Similarly, to the statement "by using the Internet people will have better knowledge of politics," most respondents from the other countries disagreed, including over 60 percent in Spain and Sweden. Among the Chinese, however, as many as 79.2 percent agreed.

In the WIP survey, there are five answers to each question: strongly agree, agree, neutral, disagree, and strongly disagree. To produce a clearer set of answers, and to force the interviewees to express their attitudes, there were only four answers, omitting "neutral," in the questionnaire in 2003. This may have caused the percentages of agreement to be higher than in other countries. Nevertheless, the general trend still can be seen that more people agree than those disagree with the idea that the Internet will help them to obtain better knowledge of politics.

In the context of a general lack of familiarity with e-government and a low adoption rate, the survey results echo an overall anxiety about the possibility that the Internet increase

political openness in China. The Internet not only alters the dynamics between the government and its citizens, but it may also provide a new way for people of similar socioeconomic backgrounds to bind together. As stated in Part Six (page 91), although less than 10 percent of the respondents from the other countries agreed that using the Internet could increase contacts with people who share similar political interests, according to the survey results in 2003, 21.1 percent of the Chinese respondents agreed that after going online, their contacts with the people who share the same political interests had increased.

Therefore the survey results show that the political impact of the Internet is more significant in China than it is in other countries. The impact can be seen not only in the relationship between government and citizens but also among people who share similar political interests. Thus, we can predict that as Internet use becomes more popular in China, its impact on politics will be stronger.

APPENDIX I

FREQUENCY QUESTIONNAIRE

A1. Gender

	Users	Non-users	N
Male	57.2%	42.8%	1088
Female	42.5%	57.5%	1288

A2. Age:

	Users	Non-users	N
16-24	87.8%	12.2%	600
25-34	62.2%	37.8%	474
35-44	34.5%	65.5%	585
45-54	21.9%	78.1%	525
55-65	15.6%	84.4%	192

A3. Education

	Users	Non-users	N
Primary school or lower	11.3%	88.7%	53
Middle school	15.3%	84.7%	437
High school	44.2%	55.8%	1195
Two years college	78.0%	22.0%	413
Bachelor degree	88.4%	11.6%	250
Master degree or higher	92.3%	7.7%	26

A4. Marital status

	Users	Non-users	N
With spouse	33.7%	66.3%	1529
No spouse	77.2%	22.8%	847

A5. Employment status

	Users	Non-users	N
Jobless	31.8%	68.2%	170
Laid-off	19.4%	80.6%	98
Retired	12.0%	88.0%	258
Students	89.1%	10.9%	384
Full-time job	49.3%	50.7%	1402
Half-day job	48.1%	51.9%	54
Else	66.7%	33.3%	9

A6. Occupation

	Users	Non-users	N
Factory worker	20.5%	79.5%	190
University or college faculty	87.5%	12.5%	32
High school, middle school, or primary school teacher	81.5%	18.5%	27
Freelance	60.6%	39.4%	94
Private business owner	25.1%	74.9%	187
Commercial worker	36.6%	63.4%	93
Service worker	38.5%	61.5%	213
Technical worker in a state-run company	69.0%	31.0%	100
Staff in a foreign or private company	75.3%	24.7%	178
Entrepreneur in a state-run company	58.3%	41.7%	36
Entrepreneur in a foreign or private company	81.0%	19.0%	42
Clerk or staff in government or public institution	53.5%	46.5%	213
Official in government or public institution	71.1%	28.9%	38
Others	70.0%	30.0%	10

A7. Political affiliation:

	Users	Non-users	N
Communist Party member	65.1%	34.9%	186
Youth League member	83.1%	16.9%	485
Other Party member	50.0%	50.0%	14
Non-party affiliation	37.1%	62.9%	1615

A8. How many people are there in your household?

	Mean	Min	Max	Standard Deviation	N
Users	3.04	1	8	.986	1169
Non-users	3.05	1	8	.981	1207

A9. The average monthly income for each person in your household.

	Mean	Standard Deviation	N
Users	1275.30	1050.235	1157
Non-users	948.39	562.969	1202

A10. Your average monthly income is?

	Mean	Standard Deviation	N
Users	1290.01	1596.029	1162
Non-users	1045.06	819.574	1203

A11. Do you have any bank cards? (Multiple choices allowed)

	Users (N=1203)	Non-users (N=1163)
Credit card	27.3%	14.5%
Debit card	60.1%	61.2%
Other	0.2%	0.3%
None	25.5%	29.8%

A12. Do you have any relatives or friends living abroad?

Users (N=1143)	Non-users (N=1195)
28.8%	17.3%

A13. Do you have following electronic facilities at home?

(Multiple choices allowed. Users: N=1165; Non-users: N=1205)

	TV	PDA	Projector	Scanner	Mp3 or walkman
Users	98.1%	6.8%	1.3%	5.0%	40.7%
Non-users	99.1%	1.8%	0.2%	0.4%	16.3%
	VCD	DVD	VCR	Stereo equipment	Electronic game machine
Users	63.8%	54.8%	21.9%	57.4%	28.4%
Non-users	63.4%	39.2%	13.1%	42.9%	16.4%
	Digital camera	Washing machine	Telephone	Refrigerator	Digital VCR
Users	26.7%	92.7%	95.2%	95.4%	6.2%
Non-users	10.6%	89.9%	95.7%	95.9%	1.7%
	Radio	Digital recorder	Ink printer	Laser printer	Air conditioner
Users	55.8%	4.7%	24.4%	2.8%	82.6%
Non-users	51.5%	0.1%	6.6%	0.6%	74.4%

A14. During a typical day, how much time do you spend on the following activities?

	Users （N=1169）	Standard Deviation	Non-users （N=1206）	Standard Deviation
Sleep (including noon nap)	7.69	1.786	8.00	1.311
Work or study	6.86	3.072	5.24	4.014
Extracurrcular study	1.24	1.608	.46	1.110
Household work	1.03	1.373	2.31	1.831
SMS	.54	1.191	.13	.266
Personal phone calls	.52	.579	.38	.703
Being with friends	1.49	2.035	1.36	1.599

	Users （N=1169）	Standard Deviation	Non-users （N=1206）	Standard Deviation
Being with family	5.38	4.372	6.72	4.494
Exercises	.52	.729	.51	.727
Using the Internet	2.22	2.333	.05	.484
Using the computer	1.67	2.505	.15	.719

B1. I think the Internet looks like a……? (Multiple choices allowed)

	Post office	Shopping center	Library	School	Entertainment place	Meeting place	Bank	News media	Info. center
Users	69.1%	62.8%	66.6%	60.6%	55.9%	55.7%	64.5%	53.8%	52.6%
Non-users	30.9%	37.2%	33.4%	39.4%	44.1%	44.3%	35.5%	46.2%	47.4%
N	246	470	701	454	867	863	155	1309	1877

B2. Overall, Internet has made the world ……

	A better place	Neither better nor worse	A worse place	N
Users	46.8%	50. 6%	1.8%	1169
Non-users	30.2%	59.7%	8.9%	1207

B3. How much of the information on the Internet is reliable?

	All of it	Most	Half	Some	None	N
Users	.5%	10.2%	40.9%	48.0%	.4	1159
Non-users	.9%	16.2%	47.6%	35.2%	.1%	1186

B4. To what extent do you agree with the following statement: by using the Internet, one may…… **(**1= Strongly agree; 2= Somewhat agree; 3= Neutral; 4=Somewhat disagree; 5=Strongly disagree)

		1	2	3	4	5	N
Be distracted to the Net and not work/study well	Users	3.6%	29.3%	24.6%	36.5%	5.9%	1169
	Non-users	7.4%	39.4%	21.4%	30.0%	1.8%	1206
Have upper hand in social competitions	Users	9.0%	33.9%	24.9%	25.1%	7.2%	1169
	Non-users	4.3%	26.7%	32.8%	30.2%	6.0%	1205

		1	2	3	4	5	N
3. Make wrong friends	Users	1.7%	19.9%	27.0%	43.4%	8.1%	1167
	Non-users	4.9%	30.1%	29.2%	31.6%	4.2%	1204
4. Easily expose one's privacy	Users	3.0%	22.4%	29.4%	37.8%	7.5%	1167
	Non-users	5.8%	31.8%	33.2%	25.5%	3.7%	1206
5. Be easily affected by pornography	Users	4.6%	21.7%	27.4%	37.5%	8.8%	1166
	Non-users	7.2%	32.4%	29.9%	26.4%	4.1%	1204
6. Waste a lot of time	Users	5.8%	22.8%	23.8%	39.5%	8.1%	1167
	Non-users	9.9%	29.7%	27.1%	30.1%	3.2%	1205
7. Feel out of date if one has no idea about the Internet	Users	22.0%	43.3%	17.7%	13.8%	3.3%	1167
	Non-users	10.7%	34.6%	29.2%	22.0%	3.5%	1207
8. Save time	Users	11.3%	52.6%	20.8%	13.4%	1.9%	1168
	Non-users	7.4%	45.8%	27.1%	18.1%	1.7%	1206
9.Become easily addicted to the Internet	Users	9.2%	46.9%	26.5%	15.2%	2.2%	1168
	Non-users	15.7%	49.1%	24.1%	10.7%	.4%	1206
10. Make more friends of the opposite sex	Users	4.6%	34.6%	41.5%	16.8%	2.4%	1166
	Non-users	7.1%	35.4%	42.0%	13.9%	1.6%	1206
11. Buy something I need	Users	8.6%	37.6%	36.0%	16.0%	1.8%	1163
	Non-users	6.8%	32.2%	39.5%	18.0%	3.5%	1205
12. Become easily addicted to online games	Users	17.1%	48.2%	21.4%	11.9%	1.4%	1167
	Non-users	18.9%	50.5%	19.9%	10.0%	.7%	1204
13 My work and study may be more efficient	Users	16.7%	57.1%	17.9%	8.1%	.3%	1167
	Non-users	9.0%	53.4%	22.2%	14.2%	1.1%	1205
14. Much of the Internet content is not suitable for children	Users	17.2%	49.1%	20.7%	11.1%	1.9%	1166
	Non-users	19.2%	49.2%	21.5%	9.2%	.9%	1206

B5. Do you have any idea about E-government?

	A lot	Somewhat	Half	Little	None	N
Users	1.9%	12.5%	23.2%	48.2%	14.2%	1149
Non-users	.1%	3.3%	8.5%	39.5%	48.7%	1186

B6. By using the Internet ……

1= Strongly agree; 2= Somewhat agree; 3= Neutral;
4=Somewhat disagree; 5=Strongly disagree

		1	2	3	4	5	N
1 People like you can have more political power	Users	6.7%	41.4%	33.6%	15.3%	3.1%	1168
	Non-users	5.6%	36.8%	40.1%	15.3%	2.2%	1207
2 People like you will have more say about what the government does.	Users	9.0%	40.2%	39.4%	10.2%	1.2%	1207
	Non-users	10.4%	49.1%	29.5%	9.2%	1.9%	1168
3 People like you can better understand politics.	Users	12.8%	54.8%	25.0%	6.3%	1.0%	1167
	Non-users	9.6%	48.6%	32.7%	8.1%	1.0%	1207
4 Public officials will care more about what people like you think.	Users	11.6%	50.4%	25.9%	10.2%	1.9%	1169
	Non-users	9.5%	49.3%	28.5%	10.7%	2.0%	1207
5 Government can better serve the people.	Users	13.4%	43.4%	30.1%	10.4%	2.7%	1168
	Non-users	10.9%	43.1%	32.1%	11.2%	2.7%	1207

B7. The weaknesses of going online are…… (Multiple choices allowed)

	Users	Non-users
Confused by/fear of technology	7.9%	12.6%
Too slow	49.2%	12.0%
Computer is not good enough	15.8%	5.1%
No interest	8.0%	30.3%
No computer at home	5.6%	29.6%
Having no friends to Email	2.3%	2.0%
Worries about viruses	56.0%	19.1%
Privacy security concerns	17.7%	8.0%

Not good for Children	9.8%	11.1%
Too expensive	11.6%	15.3%
Too difficult to find useful information	7.4%	2.0%
Too many advertisements	37.6%	9.4%
Too difficult to get connected	6.0%	1.9%
Useless	3.1%	14.5%
Do not know how to use the Internet	3.5%	45.2%
The computer may break down	6.0%	1.4%
Hardly use it	4.2%	4.1%
It wastes too much time	12.4%	15.0%
Too busy to access the Internet	19.8%	19.7%
Not enough Chinese information on the Web	4.0%	2.0%
Too much pornography	18.0%	8.7%
After graduation or after a job transfer, the new unit will not have an Internet connection	2.7%	.8%
N	1169	1207

B8. Does Internet need to be managed or controlled?

	Very necessary	Somewhat necessary	Not very necessary	Neutral	Not necessary at all	N
Users	39.3%	43.0%	13.7%	3.3%	.8%	1168
Non-users	34.4%	48.0%	14.5%	2.6%	.4%	1205

B9. What online information needs to be managed or controlled most?
(Multiple choices allowed)

	Porno-graphy	Violence	Politics	Advertise-ments	Chatting	Gaming	Junk message	N
Users	83.6%	72.3%	7.9%	42.4%	6.9%	12.4%	63.4%	1169
Non-users	85.7%	72.8%	7.4%	24.3%	9.4%	18.6%	40.8%	1207

C1. On average, how many minutes or hours per week, if any, do you spend doing the following during your leisure time (excluding online time)?

	Users (Mean)	Standard Deviation	Non-users (Mean)	Standard Deviation
Reading books	1.08	1.716	.36	.889
Listening to the radio	.26	.673	.42	.915
Watching TV	1.61	1.307	2.51	1.646
Going to cinemas	.07	.218	.02	.128
Reading newspapers	.55	.578	.66	.617
Listening to music (cassette/CD/Mp3)	.67	1.115	.20	.470
Reading Magazines	.30	.418	.18	.351
Playing electronic games (Game machine or computer)	.78	1.229	.06	.307
Watching movies (VCR, VCD, DVD)at home	.35	.538	.27	.519
N	1163		1204	

C2. How important are the following items as sources of information to you?

1=Very important 2=Important 3=Half important 4=Not important 5=Not important at all

		Very important	Important	Half important	Not important	Not important at all	N
Internet	Users	23.1%	55.3%	16.6%	4.5%	.5%	1169
	Non-users	4.8%	25.2%	23.9%	35.2%	10.9%	1207
Books	Users	15.8%	47.6%	27.4%	8.4%	.9%	1169
	Non-users	7.9%	35.7%	33.7%	20.1%	2.6%	1207
TV	Users	22.9%	50.8%	20.4%	5.3%	.5%	1169
	Non-users	34.9%	49.5%	11.9%	3.3%	.3%	1207
Radio	Users	7.1%	30.0%	32.8%	25.2%	4.9%	1167
	Non-users	9.0%	35.5%	28.3%	22.7%	4.4%	1207
Newspapers	Users	15.7%	55.7%	20.9%	6.4%	1.4%	1169
	Non-users	17.8%	60.7%	15.3%	5.6%	.6%	1205
Magazines	Users	5.8%	33.2%	37.6%	20.2%	3.2%	1169
	Non-users	2.9%	29.4%	38.8%	24.7%	4.1%	1206

C3. How important are the following as sources of Entertainment?

		Very important	Important	Half important	Not important	Not important at all	N
Internet	Users	16.2%	49.0%	24.4%	9.5%	.9%	1169
	Non-users	2.7%	19.0%	25.4%	40.8%	12.0%	1207
Books	Users	9.2%	39.5%	36.6%	13.3%	1.5%	1169
	Non-users	4.5%	31.0%	35.4%	24.8%	4.4%	1207
TV	Users	19.9%	54.8%	18.5%	6.2%	.6%	1169
	Non-users	30.6%	52.4%	12.4%	4.1%	.5%	1207
Radio	Users	5.1%	27.4%	35.2%	25.5%	6.8%	1167
	Non-users	8.3%	35.4%	26.9%	24.6%	4.8%	1205
Newspapers	Users	6.9%	46.4%	30.4%	14.2%	2.1%	1168
	Non-users	11.4%	53.9%	23.4%	9.5%	1.7%	1206
Magazines	Users	4.0%	36.3%	37.4%	19.2%	3.2%	1169
	Non-users	3.3%	28.4%	39.7%	23.9%	4.7%	1207

C4. Which media avenue can better meet your following needs?

		TV	News-papers	Maga-zines	Internet	Books	Radio	None of the above	N
To know news	Users	81.4%	67.3%	15.0%	67.0%	8.9%	16.5%	.3%	1169
	Non-users	90.8%	76.8%	12.0%	13.4%	7.2%	22.5%	.2%	1207
To have information about personal life	Users	43.7%	46.4%	28.3%	62.4%	14.8%	7.3%	2.4%	1166
	Non-users	59.8%	60.3%	18.6%	12.5%	10.9%	14.1%	5.8%	1198
To have information for study	Users	26.6%	36.1%	21.2%	60.4%	51.7%	5.2%	1.4%	1165
	Non-users	43.9%	50.3%	20.3%	11.5%	36.7%	10.4%	8.8%	1204
For entertainment or personal hobby	Users	45.5%	19.6%	16.9%	71.7%	11.3%	14.3%	3.2%	1163
	Non-users	62.5%	28.9%	11.7%	15.3%	6.7%	18.7%	11.1%	1204
To express personal opinion, view or publish personal writings	Users	10.2%	17.7%	12.9%	63.5%	7.7%	3.2%	16.3%	1167
	Non-users	15.8%	25.7%	10.7%	15.2%	6.6%	4.9%	44.3%	1203
To exchange thoughts or information with others	Users	9.3%	13.3%	7.0%	74.6%	5.6%	3.3%	12.8%	1167
	Non-users	14.5%	20.4%	7.0%	20.2%	4.5%	5.1%	45.9%	1206

		TV	News-papers	Maga-zines	Internet	Books	Radio	None of the above	N
To participate in social activities	Users	16.1%	17.9%	8.7%	45.5%	3.9%	4.0%	32.9%	1165
	Non-users	22.6%	20.6%	5.8%	11.9%	3.5%	6.6%	50.8%	1205
To promote personal relationship	Users	8.5%	10.8%	7.9%	70.2%	6.5%	3.3%	18.1%	1167
	Non-users	13.3%	17.2%	5.9%	18.5%	4.6%	4.6%	53.9%	1207

C5. Do you trust the following source of news? (Multiple choices allowed)

		Trust all	Trust	Half trust	Not Trust	Not Trust at all	N
Domestic TV	Users	24.6%	63.4%	9.9%	1.6%	.5%	1167
	Non-users	24.9%	64.5%	9.4%	1.2%	.1%	1207
Foreign TV	Users	10.4%	49.0%	35.8%	4.1%	.7%	1164
	Non-users	9.6%	48.8%	34.6%	6.7%	.2%	1204
Domestic Radio	Users	16.1%	57.9%	21.3%	4.0%	.7%	1165
	Non-users	15.9%	59.8%	19.5%	4.1%	.7%	1205
Foreign Radio	Users	6.0%	39.4%	42.5%	11.1%	1.0%	1165
	Non-users	6.5%	38.1%	41.5%	12.5%	1.3%	1204
Domestic Newspaper	Users	20.0%	56.9%	17.8%	3.9%	1.4%	1167
	Non-users	21.7%	59.3%	15.5%	3.0%	.5%	1207
Foreign Newspaper	Users	7.3%	42.1%	40.1%	9.2%	1.4%	1165
	Non-users	8.0%	40.5%	38.7%	11.8%	1.0%	1202
Domestic online news	Users	6.8%	45.3%	37.6%	8.6%	1.7	1165
	Non-users	3.7%	32.4%	44.1%	17.6%	2.3%	1205
Foreign online news	Users	4.2%	32.4%	45.2%	15.8%	2.4%	1166
	Non-users	2.6%	20.1%	47.8%	25.0%	4.5%	1204

D1-3. Daily communication

	D1. Number of private phone calls per day	D2. Number of people in address book per day	D3. Number of friends to meet at least once a week	N
Users (Mean)	8.15	59.99	6.43	1169
Standard deviation	9.593	65.281	13.357	
Non-users (Mean)	5.46	31.16	4.49	1206
Standard deviation	5.249	34.534	11.993	

D4. Do you have a cell phone?

Users (N=1168)	Non-users (N=1207)
87.6%	65.6%

D5-6.

	D5. Average number of received messages per week	D6. Average number of sent messages per week	N
Internet Users	48.27	47.71	1020
Standard Deviation	107.441	123.333	
Internet Non-users	9.78	7.62	791
Standard Deviation	16.999	19.215	

D7. How often do you send mobile instant messages through the web?

	Often	Sometimes	Seldom	Never	N
Users	5.7%	9.0%	25.0%	60.3%	787
Non-users	.3%	2.2%	5.8%	91.7%	1018

D8. What are the subjects of the mobile instant messages that you most often receive? (Multiple choices allowed)?

	Work	Politics or News	Advertise-ments	Notice	Joke
Users	27.1%	3.8%	20.2%	17.0%	38.2%
Non-users	14.8%	2.4%	23.1%	14.9%	25.5%

	Personal Business	Holiday's Greetings	Chat	Never Received a Message
Users	61.0%	63.2%	52.3%	3.0%
Non-users	44.8%	50.9%	23.6%	17.0%

E1. Do you think the following views or behaviors are accurate descriptions of you?

1= Very Accurate 2= Moderately Accurate 3=Neither Inaccurate nor Accurate
4= Moderately Inaccurate 5= Very Inaccurate

		1	2	3	4	5	N
1. I'd like to know the idea and things of those people who are totally different from me.	Users	8.6%	46.6%	27.9%	14.6%	2.4%	1168
	Non-users	5.6%	35.0%	33.3%	22.9%	3.2%	1207
2. I like to express my opinion more than others.	Users	6.0%	37.1%	35.8%	18.9%	2.2%	1166
	Non-users	4.4%	33.6%	35.7%	23.6%	2.7%	1206
3. People always think that I do not follow convention.	Users	5.8%	29.2%	34.9%	25.5%	4.6%	1163
	Non-users	3.9%	25.5%	33.4%	32.3%	4.9%	1206
4. Although I won't color my hair, I am not against others doing so.	Users	23.6%	45.5%	19.3%	9.5%	2.1%	1163
	Non-users	17.5%	45.6%	24.8%	9.9%	2.2%	1204
5. Even if I disagree with someone, I am still interested in listening to his/her explanation.	Users	11.7%	51.1%	28.0%	8.1%	1.1%	1166
	Non-users	7.9%	49.0%	31.5%	10.6%	1.0%	1205
6. I always actively try to know or learn something new.	Users	14.8%	48.7%	29.1%	6.7%	.7%	1168
	Non-users	7.5%	38.1%	37.1%	16.1%	1.2%	1206
7. I always try to do something new.	Users	10.4%	46.1%	33.4%	9.4%	.7%	1165
	Non-users	5.7%	34.5%	38.6%	19.4%	1.7%	1207
8. I can easily get along with those who are from different social positions.	Users	11.4%	44.8%	30.3%	12.1%	1.5%	1166
	Non-users	7.7%	41.3%	36.5%	12.8%	1.7%	1206
9. I often join some social activities for collective well-being	Users	6.4%	29.1%	38.7%	21.4%	4.3%	1167
	Non-users	4.8%	29.5%	36.2%	25.5%	4.0%	1206
10. Because of my ability to get to new things, I feel very young.	Users	13.3%	42.4%	32.2%	10.8%	1.4%	1166
	Non-users	7.1%	35.2%	37.3%	18.8%	1.5%	1206

		1	2	3	4	5	N
11. I like to interact with people with different ideas.	Users	8.8%	42.8%	33.4%	13.5%	1.5%	1169
	Non-users	5.1%	35.4%	37.0%	20.3%	2.1%	1204
12. False ideas should be not spread.	Users	14.8%	32.9%	34.7%	15.9%	1.7%	1163
	Non-users	10.7%	37.1%	34.8%	15.7%	1.7%	1205
13 I usually keep silent in group discussion	Users	4.2%	20.8%	36.1%	34.1%	4.8%	1168
	Non-users	3.6%	23.3%	38.5%	31.4%	3.3%	1204
14 I do not speak when meeting those whom I dislike	Users	7.6%	30.4%	36.4%	21.8%	3.7%	1166
	Non-users	6.7%	33.7%	36.0%	21.0%	2.6%	1207
15. I tend to follow the mainstream.	Users	6.3%	42.8%	32.5%	16.0%	2.3%	1168
	Non-users	8.4%	46.5%	31.3%	12.5%	1.3%	1207
16 I tend to try new products	Users	5.3%	30.9%	36.7%	22.2%	5.0%	1169
	Non-users	2.0%	22.2%	39.8%	29.5%	6.5%	1207

F1. How many people (including yourself) in your family go online?

	Mean	N
Users	1.60	1169
Standard Deviation	.719	
Non-users	.49	1203
Standard Deviation	.664	

F2. How many working computers are there in your home?

	Mean	N
Users	.94	1169
Standard Deviation	.542	
Non-users	.43	1203
Standard Deviation	.541	

F3. Do you use a computer at home?

	Use a Desktop	Use a Laptop	Use both a Desktop and a Laptop	Don't use any	N
Users	91.5%	3.6%	4.0%	.8%	968
Non-users	56.5%	1.0%	.6%	41.9%	497

F4. Is the computer in your home connected to the Internet?

Users (N=973)	Non-users (N=495)
93.6%	69.3%

F5. Do you plan to connect your home computer the Internet?

Yes, soon	Not decided	Not for the time being	N
18.6%	35.8%	45.6%	204

F6 . Have you ever used the Internet? (N=2376)

Yes	Yes, half year ago	Never
49.2%	3.3%	47.5%

F7. Are you going to go online within the coming half a year?

1. No	2. Possible	3. Very possible	N
61.7%	32.9%	5.5%	1111

F8. The first time when you access the Internet was

1996 or before	1997	1998	1999	2000	2001	2002	2003	2004	2005	N
3.6%	3.5%	9.1%	9.3%	22.7%	10.6%	14.0%	13.8%	12.5%	1.0%	1240

G1. On average，how many times do you use the Internet per week?

Less than one time	1~3 times per week	4~6 times per week	7~9 times per week	10~12 times per week	More than 13 times	N
7.7%	31.2%	26.6%	14.9%	4.7%	14.8%	1167

G2. What type of connection do you use to access the Internet at home?
(Multiple choices allowed. N=1169）

T1 or T3 at home	DSL(or ADSL) at home	Cable Modem at home
2.3%	44.9%	2.4%
ISDN at home	Wireless at home	Phone line Modem at home
2.4%	2.0%	17.7%
LAN at home	Set-top box or WebTV at home	No home access
14.0%	0.5%	20.2%

G3. Do you use wireless (Wi-Fi802.11b/g) access?

At office or school	At home	Both at office or school and at home	Don't use	N
7.5%	13.0%	2.7%	76.8%	1166

G4. Average online time per week by wireless connection

	Cell phone	PDA
Hours per week	2.22	3.08
Standard Deviation	6.977	8.769

G5 How much do you pay for a private Internet connection?

Mean	Standard Deviation	N
83.13	66.000	1165

G6. On average, how much time do you spend on the Internet at the following places each week?

	Mean	Standard Deviation	N
Home	1.46	1.883	1156
Workplace	.63	1.430	1156
School	.14	.581	1153
Public library	.01	.084	1156
Relatives' or friends' home	.03	.160	1156

	Mean	Standard Deviation	N
Cyber Café	.30	.874	1156
Cell pone or mobile connection to the Internet	.03	.258	1156
Other	.13	1.021	1156

G7. The purpose for your going online at an Internet café is …..?

Games	Chatting	Emails	Reading news	Browsing	N
57.9%	64.1%	24.6 %	36.8%	36.6%	516

G8. In a chat room or BBS you ……

Often speak	Seldom speak	Only read, not speak	N
12.7%	48.7%	38.6	686

G9. Do you use proxy server?

Never	Seldom	Sometime	Often	Frequently	N
71.2%	19.7%	5.9%	2.5%	0.6%	1165

G10. Do you visit government Web sites?

Never	Seldom	Sometime	Often	Frequently	N
52.9%	34.2%	9.5%	3.3%	0.2%	1168

G11. Why do you launch a personal Web site or maintain a blog? (N=1169)

Hobby	19.8%
Work or study	12.7%
To sell things	2.9%
Show off myself to others	3.3%
Contact others	8.7%
Post news	1.0%
Share personal experience	5.9%
For fun	11.5%
No personal Web sites or blogs	61.8%

G12. How much time do you spend on the following content?

	Overseas Chinese Web sites	Overseas foreign-language Web sites	Mainland Chinese Websites	Mainland foreign-language Web sites
Mean	8.43	3.23	83.76	4.41
Standard Deviation	14.732	9.138	22.089	10.806
N	1169	1169	1169	1168

G14. How many IDs do you often use?

1	2	3	4	5	More than 5	N
61.4%	21.9%	9.2%	1.3%	1.8	4.4%	228

G15. How often do you use the Internet for the following purposes?

	Never	Seldom	Sometimes	Often	Always	N
Listen to or download music	14.6%	28.8%	25.0%	26.2%	5.4%	1168
Read news	7.3%	26.8%	31.6%	29.5%	4.9%	1168
Searching for medical information	45.6%	30.2%	18.4%	5.1%	.8%	1163
E-banking or e-payments	75.3%	12.5%	8.1%	3.2%	.9%	1068
Check personal bank account	78.4%	10.4%	7.3%	3.3%	.6%	1168
Stock business or searching stock information	72.0%	11.6%	9.3%	5.4%	1.8%	1167
Online professional training	69.8%	17.7%	8.4%	3.6%	.6%	1167
Online study or study for a degree	42.0%	27.5%	20.3%	9.2%	1.0%	1167
Search entertainment information	17.4%	29.9%	27.7%	20.9%	4.0%	1166
Find a new job	39.0%	20.9%	21.8%	14.6%	3.7%	1166
Search and arrange traveling	49.4%	27.2%	15.3%	7.0%	.9%	1167
Auction	82.1%	7.5%	6.3%	3.5%	.7%	1166
Checking advertisements or product information	37.0%	32.6%	20.6%	8.4%	1.4%	1166
Browse websites	13.7%	20.9%	27.5%	29.5%	8.5%	1164

	Never	Seldom	Sometimes	Often	Always	N
Online shopping	70.0%	14.4%	10.2%	3.8%	1.6%	1163
Play games	15.5%	22.0%	26.2%	26.6%	9.6%	1164
Online discussions or chat groups(IRC)	31.2%	27.4%	21.3%	15.5%	4.6%	1162
E-mail	31.0%	24.1%	21.9%	17.6%	5.5%	1167
ICQ or OICQ	33.4%	22.3%	15.4%	17.4%	11.5%	1164
Microsoft MSN	56.1%	19.5%	12.6%	6.7%	5.2%	1165
BBS	55.2%	21.0%	13.3%	7.4%	3.2%	1167
Keep a blog	70.4%	16.2%	8.8%	3.1%	1.4%	1164
Make or update web pages	69.0%	16.6%	10.3%	3.0%	1.2%	1166
Use search engine	37.1%	17.1%	20.1%	19.1%	6.6%	1166
Download tools or virus-killing software	29.7%	24.0%	25.2%	16.8%	4.4%	1168

G16. You are using QQ/ICQ or MSN to contact

strangers	acquaintances	both	Seldom or never use	N
2.9	38.1	23.3	35.7	1156

G17* Do you E-mail?

E-mail users	E-mail non-users	N
63%	37%	1162

G18. How often do you check your E-mail?

At least once per hour	2.6%
Several times a day	8.9%
Once a day	23.7%
Less than 7 times a week	28.5%
Once a week	20.5%
Less than once a week	15.9%
N	731

G19. How many emails do you receive and send on an average week?

Mean	Standard Deviation	N
8.01	15.654	730

G20. How soon do you think one should respond to personal emails?

As soon as possible	Within a day	Within 2-3 days	Within 4-5 days	Within half a month	Within a month	To respond when having time	No need to respond	N
34.3%	18.3%	22.5%	12.3%	. 2.3%	7%	5.8%	3.7%	725

G21-G22

	Number of paid e-mail accounts	Number of free e-mail accounts
Mean	.30	2.02
N	732	732
Standard Deviation	.880	1.804

G23. Do you do the following things while using the Internet? (Multiple choices allowed)

Listen to tape recorded or CD music	Listen to the radio	Watch TV	Receive and send SMS	Make phone calls	None of the above	N
46.6%	9.8%	16.5%	21.3%	17.1	30.8%	1162

G24. How satisfied are you with the following aspects of the Internet?

	Extremely satisfied	Satisfied	Neutral	Dissatisfied	Extremely dissatisfied	N
The amount of relevant information available	16.4%	63.3%	18.0%	2.1%	.3%	1154
The availability of goods and services	7.4%	41.0%	46.0%	5.5%	.3%	1155
The ease of finding information	16.4%	50.9%	28.2%	4.1%	.4%	1155
The speed of the connection	8.0%	35.3%	41.7%	13.2%	1.8%	1155
The ability to communicate with other people	10.8%	46.1%	38.9%	3.6%	.6%	1153

G25.What Web sites do you often use？(Please specify URL or Chinese name of the websites)

	First List	Second List	Third List	Fourth List
1	Sina (30.9%)	Sina (20.8%)	Sohu (15.2%)	Sohu (10.5%)
2	Sohu (13.4%)	Sohu (19.4%)	Netease (12.7%)	Yahoo (10%)
3	Netease (13.4%)	Yahoo (9%)	Sina (11.2%)	Baidu (6.9%)
4	Baidu (6.7%)	Netease (8.9%)	Yahoo (7.6%)	Netease (6.9%)
5	Yahoo (6.3%)	Baidu (5%)	Baidu (7.1%)	Sina (5.7%)

G26. Do you use search engines?

	N
58.4%	1161

G28. What information do you search by using search engines?

Work or study	Entertainment or relaxation	News	Knowledge	N
55.9%	67.8%	43.2%	43.2%	671

G29. Can you find what you want when using a search engine?

Usually	Often	Sometimes	N
14.3%	55.6%	30.1%	671

H1. Do the following things often happen to you?

	Never	Seldom	Sometimes	Often	Always	N
Use the Internet longer than planned	21.0%	43.1%	25.1%	9.4%	1.5%	1163
Would rather use the Internet than meet with friends	40.3%	34.2%	21.1%	4.0%	.4%	1163
People around complain that I spend too much time online	41.9%	29.4%	20.2%	6.6%	1.9%	1161
Spend so much time online that it disturbs my work or study	51.6%	27.3%	17.1%	3.1%	.9%	1163
Feel lost if not online	44.0%	29.3%	19.3%	5.3%	2.1%	1161
Feel annoyed if disturbed while using the Internet	30.4%	37.0%	23.6%	6.6%	2.4%	1160
The more time online, the less I sleep	39.2%	30.9%	20.7%	7.3%	1.9%	1162

	Never	Seldom	Sometimes	Often	Always	N
When not online, I often think about the Internet	28.9%	37.2%	23.2%	8.1%	2.6%	1162
When asked, tend to underestimate the time spent online	47.1%	27.6%	19.3%	4.7%	1.3%	1161
Because of going online I tend to ignore or forget other things	39.4%	35.6%	18.7%	5.4%	.9%	1163
Feel reluctant to disconnect when finish using the Internet	42.0%	32.0%	18.4%	6.7%	.9%	1161
The relationships with my family or with the people around me become tense due to my use of the Internet	66.5%	16.6%	12.8%	3.2%	.9%	1162
Enjoy going online but feel down when offline.	51.3%	27.8%	15.0%	4.4%	1.5%	1159

H2. You think your time online is …..

Too short	Not enough	Enough	More than enough	Too much	N
5.8%	24.4%	54.1%	13.6%	2.1%	1168

H3. Suppose you can not use the Internet for a week，you will feel ……

Intolerable	Somewhat Intolerable	Uncomfortable but it is OK	It doesn't matter at all	N
3.4%	11.5%	31.4%	53.6%	1168

I1. What types of online news do you mainly read?

	Domestic news	International news	Social life	Entertainment
	55.0%	39.8%	48.4%	65.5%
N	1161	1159	1160	1161
	IT news	Financial and economic information	Sports	Don't read online news
	17.8%	13.7%	30.1%	5.5%
N	1158	1157	1158	1157

I2. After using the Internet, has there been any change in the amount of time you spend with the following media? (N=1169)

(1=Much more than before 2=More than before 3=Same as before
4=Less than before 5= Much less than before)

	1	2	3	4	5
TV	2.7%	9.6%	54.6%	26.3%	6.2%
Radio	1%	5.4%	50%	24.3%	18.9%
Newspapers	1.5%	6.9%	61.2%	23%	6.8%
Magazines	1.4%	6%	52.8%	30.7%	8.6%
Books	2%	6.7%	56.3%	28.1%	6.5%

I3. How much do you trust the following news providers on the Web?

1= Trust a lot 2= Trust 3= Half trust 4= Not Trust 5= Not Trust at all 6= Not sure

	1	2	3	4	5	N
Domestic traditional media websites(People.com, etc)	15.4%	67.9%	13.9%	2.6%	.3%	1169
Overseas Chinese news websites	4.2%	46.9%	43.0%	5.6%	.3%	1169
Foreign traditional media websites	4.1%	38.5%	48.5%	8.2%	.7%	1165
Domestic portal websites (Sina, etc)	9.6%	63.7%	22.6%	3.6%	.5%	1168
Foreign portal websites (Yahoo!, etc)	6.7%	47.2%	38.9%	6.6%	.6%	1169
News in e-mail from domestic sources	2.6%	39.8%	42.0%	13.2%	2.5%	1167
News in e-mail from foreign sources	1.8%	24.6%	51.7%	18.1%	3.8%	1166

I4. How much of the following Internet information resources are reliable?

	All	Most	Half	Small portion	None	N
BBS	2.7%	25.7%	50.3%	19.3%	2.1%	1168
Chat room	2.6%	21.0%	46.4%	25.9%	4.1%	1168
E-mail	3.2%	32.3%	42.7%	17.9%	3.9%	1168
Advertisement or commodity information	1.1%	20.2%	48.5%	26.4%	3.9%	1165
Traditional mass media news	4.6%	47.4%	36.6%	9.8%	1.5%	1168
Portal news	3.8%	44.0%	41.2%	8.9%	2.1%	1168
Personal website or blog	1.5%	21.6%	49.1%	22.6%	5.2%	1166
Government website information	12.3%	51.2%	27.3%	7.2%	2.0%	1168

J1. How many friends you have met on the Web?

Mean	N	Standard Deviation
13.48	1167	37.333

J2. Among those friends known originally from the Web, the number of those who……

	Mean	Standard Deviation	N
keep regular touch with you	6.79	20.216	1162
have met you face-to-face	1.32	3.799	1162
have never met you face-to-face	5.45	18.320	1162
are local residents	4.53	13.549	1162
are from a different place	2.60	9.847	1162
are overseas Chinese	.13	.965	1162
are foreigners	.10	.770	1162

J3. What kind of people do you mainly communicate with on the Web?

		N
Those with the similar point of views	48.3%	1162
Those with the similar interest	70.4%	1164
Those with the same gender	21.5%	1160
Those with the different point of views	11.7%	1160
Those with the different interest	9.2%	1161
Those with the different gender	20.7%	1161
Don't communicate with others on the web	18.7%	1158

J4.Your communication on the Web mainly ranges within ……

Colleagues or classmates	Relatives or family members	Friends	Business or administrative connections	Strangers	Other	Browsing websites only, very little communication with others	N
61.0%	22.3%	63.5%	11.5%	19.0%	0.3%	16.5%	1163

J5. By using the Internet, have you changed your time on other forms of daily communication (i.e. by letter, telephone etc.) with……?

1= Much more than before 2= More than before 3=Same as before
4=Less than before 5= Much less than before

	1	2	3	4	5	N
Colleagues or classmates	5.5%	23.5%	62.9%	7.7%	.4%	1168
Friends (not including those known from the Web)	2.7%	24.2%	65.8%	6.9%	0.3%	1167
Parents	1.5%	6.0%	83.2%	8.7%	.6%	1167
Brothers and sisters	1.5%	6.9%	81.0%	10.0%	.6%	1168
Relatives or neighbors	1.7%	5.7%	73.8%	16.7%	2.1%	1166
Spouse or lover	2.2%	8.7%	80.1%	6.7%	2.3%	1165
Those with the same hobbies	2.1%	28%	59.6%	9.2%	1.1%	1168
Those with the same political views	1.1%	15.2%	71.3%	11.0%	1.4%	1168
Those with the same religious belief	1.7%	9.6%	73.3%	12.8%	2.7%	1168
Those with the same major	2.4%	19.5%	69.0%	7.8%	1.3%	1168
Those with totally different interest and hobbies	1.7%	12.3%	64.4%	16.5%	5.1%	1166

J6. Has communication on the Web increased the number of friends whom you contacted frequently?

Increased for more than 11 friends	Increased for 6-10 friends	Increased for 1-5 friends	No	N
7.6%	11.6%	34.2%	46.6%	1163

J7. Have you ever experienced falling in love on the Web?

Yes	N
4.7%	1163

Times of falling in love on the Web

1	2	3	4	5	N
63.6%	21.8%	5.5%	5.5%	3.6	1163

J8. In general, how do you think of the price of internet purchases compared with that of your purchases of similar products and services from local retail stores? ……

Much cheaper	A little cheaper	Same	A little more expensive	Much more expensive	N
3.6%	15.0%	21.5%	50.4%	9.4%	1166

J9. Suppose you purchase products or services over the Internet, to what extent are you concerned about the following problems:

1=Not at all concerned 2=Not concerned 3= Somewhat concerned 4= Concerned a little 5=Concerned a lot

	1	2	3	4	5	N
Waiting too long before getting the products or services	3.6%	15.0%	21.5%	50.4%	9.4%	1166
Exposing privacy or credit card number	2.7%	13.6%	26.4%	43.4%	13.7%	1165
Difficulty in getting information about goods	2.0%	7.5%	15.9%	50.6%	24.1%	1166
Difficulty in returning or changing goods	2.1%	7.4%	15.2%	50.7%	24.6%	1165
Expensive delivery cost	2.2%	12.3%	29.2%	43.3%	13.0%	1165
Not being able to directly communicate with the salesperson	2.0%	10.2%	27.3%	46.0%	14.6%	1166
Products being damaged or failure delivery	2.1%	8.0%	17.0%	51.4%	21.5%	1164
Having no idea about how to purchase over the Internet	9.4%	26.2%	29.2%	26.5%	8.7%	1166

J10. Do you often purchase products or services over the Internet?

At least 10 times a month	5~10 times a month	1~5 times a month	Less than once a month	Never buy things online	N
.5%	.5%	6.1%	16.7%	76.2%	1163

J11. To what extent does your online purchase influence your previous purchasing mode?

Not at all	A little	A lot	N
72.9%	26.0%	1.1%	273

J12. Do you worry about the security of bank cards or credit cards when purchasing online?

Not at all	A little	A lot	Extremely	Don't have cards	N
16.6%	48.7%	14.8%	10.8%	9.0	277

J13. How much have you spent on Internet purchases, excluding the Internet connection fee, on an average month?

Mean	N	Standard Deviation
95.80	268	136.407

J14. What kind of goods or services have you obtained from the Internet companies?

	Never	Seldom	Sometimes	Often	Usually	N
Books,magazines, newspapers	46.2%	32.9%	14.1%	5.4%	1.4%	277
Travel (airplane, hotel, etc.)	65.9%	15.9%	14.1%	3.3%	.7%	276
Entertainment(Movie, Opera, show, CD, etc)	38.3%	30.7%	20.6%	7.6%	2.9%	277
Food	75.1%	13.4%	8.7%	2.9%	0%	277
Apparel	64.9%	19.6%	10.5%	4.0%	1.1%	276
Home electricity (cell phone, etc)	62.8%	19.1%	11.9%	4.3%	1.8%	277
Computer (hard/soft ware)	61.7%	15.5%	13.4%	6.1%	3.2%	277
Family arts and crafts	70.4%	15.9%	9.7%	3.6%	.4%	277
Medical treatment	76.2%	15.5%	5.4%	2.5%	.4%	277
Payment or buy pre-paid card	66.3%	12.7%	13.8%	5.1%	2.2%	276
Online learning, online degree education	61.7%	16.6%	12.3%	7.2%	2.2%	277
Order housekeeping	83.4%	9.7%	4.0%	2.5%	.4%	277

J15. Do you buy more than expected or planned when purchasing online?

Never	Seldom	Sometimes	Often	Usually	N
40.6%	28.6%	23.9%	5.8%	1.1%	276

Surveying Internet Usage and Impact in Five Chinese Cities

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Funded by
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