Center for Social Development
Chinese Academy of Social Sciences

Surveying Internet Usage and its Impact in Seven Chinese Cities

November, 2007

Directed by Guo Liang

Funded by

MARKLE FOUNDATION

China Internet Project Survey Report, 2007

Surveying Internet Usage and its Impact in Seven Chinese Cities

DIRECTOR AND AUTHOR

Guo Liang, Center for Social Development, Chinese Academy of Social Sciences

PROJECT ADVISOR

Stefaan Verhulst, The Markle Foundation

PROJECT ASSISTANCE

Chang Huili, Center for Social Development, Chinese Academy of Social Sciences

Gai Bo, School of Journalism and Communication, Peking University

ENGLISH PROOFREADING AND EDITING

Deb Fallows, Senior Research Fellow, Pew Internet & American Life Project

Nancy Hearst, the Fairbank Center at Harvard University

Surveying Internet Usage and its Impact in Seven Chinese Cities

THIS REPORT IS NOT AN OFFICIAL REPORT OF THE CHINESE ACADEMY OF SOCIAL SCIENCES AND ONLY REPRESENTS THE AUTHOR'S RESEARCH FINDINGS

CONTACTS

E-mail: guoliang@cass.org.cn

Regular Mail:

Guo Liang
Center for Social Development
9th floor, Chinese Academy of Social Sciences
No. 5, Jian Guo Men Nei Da Jie
Beijing, 100732
P.R. China

FAX: +86(10) 8777-1872

WEB: http://www.wipchina.org/en/

Table of Contents

I **ACKNOWLEDGEMENTS**

III **HIGH LIGHTS**

1 **PART ONE: Background and Methodology**
1 1.1 Context
2 1.2 Background
4 1.3 Focus
5 1.4 Methodology

9 **PART TWO: Perceptions and Attitudes toward the Internet**
9 2.1 Is the Internet Reliable?
10 2.2 Perceptions of the Internet
12 2.3 Should the Internet be Managed or Controlled?
13 2.4 What Types of Internet Content should be Managed or Controlled?
14 2.5 Who Should Play Important Role in Internet Management or Control?

17 **PART THREE: Internet Adoption**
17 3.1 Internet Penetration Rates of the Seven Cities
17 3.2 Demographic Distribution in Internet Adoption
21 3.3 Internet Experience
22 3.4 Who is not online?

25 **PART FOUR: Internet Usage**
25 4.1 Location
29 4.2 Connection Mode at Home
30 4.3 Duration
31 4.4 Frequency
31 4.5 Online activities
45 4.6 Frequently visited Web sites
45 4.7 Search engines

51 **PART FIVE: The Internet and Other Media**
51 5.1 Media use
53 5.2 The functions of the media
55 5.3 The influence of the Internet on media use
56 5.4 Media Trust

57 **PART SIX: The Internet and Interpersonal Communication**
58 6.1 Communications tools on the Internet and on the mobile phone
73 6.2 Communications with different groups of people
82 6.3 The impact of the Internet on interpersonal communication

85 **PART SEVEN: The Internet and Politics**
85 7.1 The Internet and Political Participation
87 7.2 E-government

89 **APPENDIX I Demographic Distribution of the Sample after Weighting**

91 **APPENDIX II Frequency Questionnaire**

ACKNOWLEDGEMENTS

It has been seven years since the China Internet survey project first began in 2000. Three reports have been released since. Such a project could not have been completed without contributions from many. 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 would not have been feasible. It is very fortunate that the Chinese Academy of Social Sciences (CASS) 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. Attending the annual meeting of WIP, I learned a lot from all the partners in this project. So I would like to take this opportunity to thank all of the WIP members for sharing their resources, insights, and methodologies as well as their survey results over the past seven years.

Compared to the former three surveys, many changes have been made this year, both to the questionnaire and to the methodology. Thanks to Professor Jonathan Aronson, Executive Director at USC Annenberg Center for Communication at the time, for inviting me to be Senior Visiting Fellow in the Fall semester of 2006. The major changes and design to this survey were prepared at the Center.

Mr. Zhao Xiaofan, deputy director of the Department of Informatization Application Promotion at the China State Council Informatization Office; Director and Professor Li Jingyuan, Deputy Director Xie Dikun of the CASS Institute of Philosophy, Director and Professor Wu Yuanliang of the CASS Center for Social Development, and Professor Huang Ping, former chief of the CASS International Cooperation Bureau have all provided administrative and academic support and have shared their research

experience. 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. Thanks to all the board members who gave suggestions and comments on the research.

Professor Ke Huixin, Communication University of China, read the original Chinese report word by word and provided comments of immense value. Professor Berry Wellman, S.D. Clark Professor of Sociology at University of Toronto, and his assistant and doctoral student Wenhong Chen, have shared their findings and insights on conducting survey research. 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. Li Hongmei and Wang Hua, doctoral students at USC Annenberg School of Communication, provided valuable suggestions and comments to the research.

Thanks also to the entire research team. Special thanks to project assistance Chang Huili, who was not only dedicated to the hard and boring work of quality control of the field work, which is becoming more and more challenging in China, but also helped to draft and translate many parts of the report. Gai Bo, doctoral student in the School of Journalism and Communication at Peking University, who participated in the complete process of the research and helped to draft and translate Part Six. Lu Yang, doctoral student at RAND Cooperation, who helped to polish the draft report.

One of the major obstacles for Chinese scholars to complete such a report for wider distribution is the English language. Thanks so much for all of the hard and timely work by Deb Fallows, Senior Research Fellow from Pew Internet and American Life Project, who helped to edit and polish the English version of the report and provided many comments and insights. Great thanks to Nancy Hearst, from the Fairbank Center at Harvard University, who contributed to proof read the English version of the frequency questionnaire.

Finally, this project could not have taken place this year had it not been for the Markle Foundation who provided financial support for the research. Thanks to Zoë Baird, president of the Markle Foundation, and the Board of Directors for constantly supporting the research. James Steinberg, former senior advisor to the Markle Foundation, 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, not only constantly provided advice and other resources, but also helped to finalize the report.

HIGHLIGHTS

Background and Methodology:

- This is the fourth survey on Internet use and its impact in China, conducted by Professor Guo Liang at the Center for Social Development of the Chinese Academy of Social Sciences (CASS). The previous surveys were conducted in 2001, 2003 and 2005. As such, the current findings allow for longitudinal analysis covering urban areas in China.
- The CASS survey is part of the World Internet Project, founded and organized by Professor Jeff Cole, at the University of South California (USC) Center for the Digital Future, comprising more than 25 countries or regions.

- According to the China Internet Network Information Center (CNNIC), the number of Chinese Internet users had reached 162 million in June 2007, the second largest number after America (211 million). This represents only 12.3 percent of the Chinese population, suggesting scope for considerable more growth.
- The CASS survey focuses on how the Internet is being used and its impact in seven Chinese cities. In order to compare with earlier results, five cities were chosen that were covered in the last three surveys: Beijing, Shanghai, Guangzhou, Chengdu and Changsha. Xi'an and Shenyang were added this year to increase geographic diversity (in particular, to include the North).
- A weighted sample of 2001 urban residents between the ages of 15 and 59 years were included in the telephone survey, comprising 1,315 Internet users and 686 non-users.

Key Findings:

Perception and attitudes toward the internet

- Chinese Internet users perceive the Internet significantly more positively than do non-users. On only one statement ("Much of the Internet content is not suitable for children") was there consensus between users and non-users. In general, Internet users agreed more to the positive portrayals of the Internet, whereas non-users agreed more with negative characterizations.
- Users and non-users also differ regarding the reliability of online information, with users having greater trust in online content than non-users. However, trust among Internet users in the reliability of online content has decreased significantly over the five years.
- The percentage of respondents who find that the Internet should be controlled or managed has also increased. More than 80 percent of all those surveyed believe that it is necessary or very necessary to have certain types of Internet content controlled. Porn, violence and junk mail remain of highest concern. In addition, there was a steep increase in the percentage of respondents who felt that political content should be controlled--from 8 percent in 2005 to 41 percent in 2007. There was also an increase in the proportion of respondents who advocated greater control of chatting (from 8 percent to 28 percent), gaming (from 16 percent to 49 percent), and online advertising (from 33 percent to 60 percent).
- 84.8 percent of all respondents feel that government should be responsible for Internet management and control, while private actors including companies, schools and parents also should bear some responsibility.

Internet Adoption

- As in the previous surveys, the Internet remains mainly used by young, well educated and urban males.
- Despite the differences in economic development across the cities surveyed, all had a penetration rate of about 50 percent.
- Among non-users, more than 60 percent had some online experience (drop-out users), while 37 percent had asked Internet users to help them connect (proxy users). The main reasons given for not using the Internet were not financial. Rather, they were related to a lack of time, Internet literacy, and a lack of interest or perceived need.

Internet Usage

- The establishment of inexpensive monthly broadband fees means that the home has become the most popular location for going online in China. 81 percent of Internet users go online from home using a broadband connection (80 percent). The proportion accessing the Internet from work or school has also increased substantially.
- Only 32 percent are going online at an Internet café (often in addition to their home, work or school connections). Internet café users are mainly young males with low incomes. Despite the common belief that Internet cafes are mainly used for entertainment purposes, the survey found that information seeking and chatting are the most frequent online activities at cafes.
- A significant increase in duration and frequency of use was observed, probably due to the establishment of inexpensive monthly access fees. Heavy users (those who spend more 4 hours online every day) are predominantly based in the main metropolitan cities of Beijing, Shanghai and Guangzhou. Furthermore, a strong correlation is seen between Internet experience and time spent online.
- The Internet in China is mainly used for reading news (mainly infotainment), seeking entertainment (music, movies and games) and communicating with others (via instant messaging or email). This confirms the previous conclusion, reached in earlier surveys, that the Internet in China is mainly a medium for entertainment.
- However, search engine use has increased significantly from 43 percent in 2003 to 79 percent in 2007, suggesting that the Internet is increasingly being used as an information and study tool.

The impact on other mass media

- A correlation can be observed between an increase in Internet use and a decrease in both use and duration of watching TV and reading newspapers.
- Overall, the Internet is more considered as a source of entertainment than TV or any other traditional media, while the Internet is considered of equal value with TV as an information source.
- As in previous surveys, this year’s respondents trust domestic media news more than foreign media news. However, they do trust non-Internet foreign media news more than online news (both domestic and foreign).

Interpersonal communication

- The mobile phone is widely used form of interpersonal communications in China, both for voice calls and for text messages. The rates for personal use are 90.3

percent and 90.9 percent respectively. Email and QQ (ICQ) are also widely adopted among netizens. The adoption rates are 80.2 percent and 73.0 percent respectively. While MSN is quickly becoming widely popular. Over one third of Internet users, 37.4 percent, now use MSN services. Despite the fact that more people have an email account, email is significantly less frequently used than QQ and MSN These data demonstrate that various communication tools, both offline and online, are being internalized into the daily interactions of large numbers of people in Chinese urban areas.

- There are major differences in how social relations are being developed or sustained depending on the interpersonal ties (family, friends, or colleagues). Children mainly communicate with their parents face to face. Mobile phone voice call is more frequently used to communicate among four kinds of social relationships: spouse, romantic relationships, close friends, and peers. Email is only used among friends and colleagues, seldom to communicate with family. QQ is heavily used among online and close friends, while MSN is used by peers and close friends, albeit much less frequently.
- Interestingly, the time used for face to face communications hasn't been affected much by an increased use of the Internet.
- Overall, the Internet has significantly changed the way Chinese can make new friends. Especially QQ has expanded the universe of "potential" friends.

Political participation and government services

- Compared with earlier surveys, people are still convinced that the Internet is a positive force for increased political participation and communication with government. Although the overall perception has been declining slightly, especially their view whether they can have more political power has been decreasing.
- While there is widely accepted view that government can serve people better by using the Internet, there is limited knowledge and use of e-government websites.

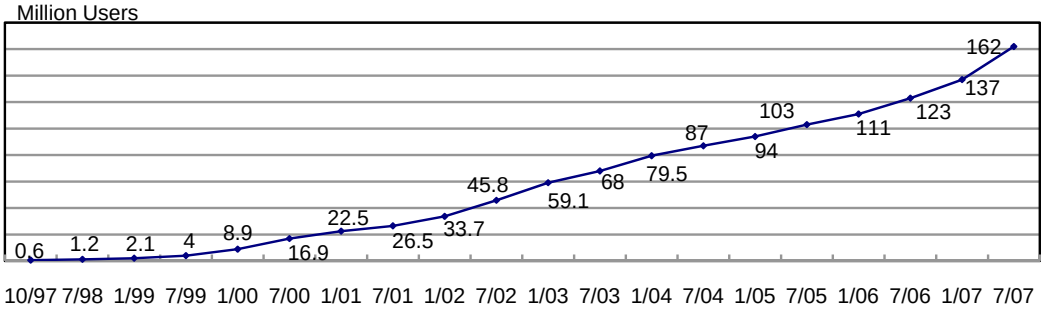
PART ONE

BACKGROUND AND METHODOLOGY

1.1 Context

It has been 20 years since the first e-mail was sent from Beijing to Germany in September, 1987. In 1995, the first commercial Internet service was provided in China, and the Chinese people have experienced the Internet's rapid growth and strong influence ever since. According to the 2007 report from the China Internet Network Information Center (CNNIC): "By June 2007, the total number of Chinese Internet users had reached 162 million, second only to the scale of American Internet users (211 million) in the world. Compared with the number at the end of 2006, new Internet users had reached 25 million."[1]

Figure 1-1 Internet growth in China over the past ten years (1997 – 2007)



The number of broadband users (including leased line users) has reached 122 million, or 75.3 percent of the total number of users, while the number of wireless network users has reached 55.64 million, including 44.3 million mobile phone users. There are 31.6 million dial-up users in China.

1. Source: http://www.cnnic.net.cn

Table 1-1 Numbers of Chinese Internet users using different types of Internet Access Service[1]

Broadband users (including leased line users)	Dial-up users	Wireless network users (including mobile phone users)
122.44 million	31.6 million	55.64 million

Nonetheless, compared with the 60-70 percent penetration rates in developed countries, the Internet penetration rate in China remains low, at only 12.3 percent. Even in the seven big cities we surveyed this year, the Internet penetration rates were only 50-60 percent (Please refer to Part Two). China sits in the company of other countries in the world with "medium" levels of Internet access, according to the Digital Access Index (DAI) measures. China ranks at number 83, just behind Peru, and China has a DAI of 0.43[2], along with countries such as Fiji and Botswana.

Table 1-2 The top ten countries in terms of the number of Internet users[3]

#	Country or Region	Latest No. of Internet Users	Penetration (% Population)	% of World Users	Broadband Subscribers	Broadband Penetration
1	US	210,575,287	69.70%	18.00%	58,136,577	19.30%
2	China	162,000,000	12.30%	13.80%	35,300,000	2.70%
3	Japan	86,300,000	67.10%	7.40%	25,755,080	20.00%
4	Germany	50,426,117	61.10%	4.30%	14,085,232	17.10%
5	India	42,000,000	3.70%	3.60%	2,100,000	0.20%
6	Brazil	39,140,000	21.00%	3.30%	5,846,000	3.10%
7	UK	37,600,000	62.30%	3.20%	12,993,354	21.50%
8	S. Korea	34,120,000	66.50%	2.90%	14,042,728	27.40%
9	France	32,925,953	53.70%	2.80%	12,699,000	20.70%
10	Italy	31,481,928	52.90%	2.70%	8,638,873	14.50%

Globally and within China, the Internet, directly or indirectly, influences people's ideas and behaviors. The Internet has come to play an essential part in people's life, work and study. It is changing the use of traditional media, daily communication among people, economic behaviors, and participation in politics. Therefore, to fully understand the impact of the Internet, we intend to focus not only on technology and the number of Internet users, but also on the social impact of Internet use.

1. Source: http://www.cnnic.net.cn

2. Source: http://www.internetworldstats.com

3. Ibid

1.2 Background

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. 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 the cooperation on research on the worldwide development and impact of the Internet. The Center has now moved to the Annenberg School for Communication at the University of South California and is called the Center for Digital Future. There are currently more than twenty countries or regions (including the United States, Britain, France, Germany, Italy, Sweden, Chile, China, Taiwan, Hong Kong, Macau, Singapore and Japan) that are using similar methodologies to conduct Internet surveys on Internet usage and its impact. Participating scholars from different countries discuss and share 30 core questions, conduct an annual conference every summer, analyze the survey data, discuss the research results and promote the development of this project[1].

The 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, after careful reasoning and considerable investigation, CASS conducted a questionnaire survey of Internet usage and impact in China.

As a cooperative project with the WIP, the CASS Internet survey is designed to take into account the specific situation in China, while also sharing about 30 common questions of WIP. The goals is to assess the development and social impact of Internet use in China through questionnaire surveys, to comparing China with other countries and regions, and to provide empirical data and analysis on Internet development in China for academic research, policy making by the government, as well as market research by industries. The purposes of the survey include:

- Understanding the distribution of Internet usage and online activities in urban China.
- Determining the effect of the Internet on the mass media, communication, and politics.
- Making policy proposals and suggestions.

So far, CASS Center for Social Development has conducted four surveys on Internet usage and impact in China. From the end of 2000 to early 2001, we distributed the first

1. http://www.worldinternetproject.net

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

Internet survey in Beijing, Shanghai, Guangzhou, Chengdu and Changsha, and released its findings in May 2001[1].

The original intention of this research was to examine the impact of the Internet through the annual follow-up surveys of the same group of interviewees. However, due to a shortage of funding, the annual follow-up surveys were not implemented. In 2003, the second survey was conducted 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 surveys, we adopted a multi-stage sampling method 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 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; subsequently, the Chinese version of the international comparison report was released at CASS in January 2004.

With the continued support of the Markle Foundation, the third survey covered five cities, including Beijing, Shanghai, Guangzhou, Chengdu and Changsha, and the total sample number was 2,376. In July 2005, the Chinese version of the survey report was issued at CASS, and the English version[2] was released at the Markle Foundation in New York and the Brookings Institution in Washington, DC.

In the summer of 2006, CASS hosted the 7th WIP Annual Conference, which shared the research results, discussed the survey methodology, and also introduced to the public of China the research development on the social impact of Internet use in different countries. The whole conference was broadcast live on news.sina.com.cn.[3]

1. Guo Liang, Surveying Internet Usage and Impact in Twelve Chinese Cities, Beijing: Center for Social Development of the Chinese Academy of Social Sciences, September 2003
2. Guo Liang, Surveying Internet Usage and Impact in Five Chinese Cities, Beijing: Center for Social Development of the Chinese Academy of Social Sciences, October 2005
3. http://tech.sina.com.cn/focus/WIP_2006/index.shtml

1.3. Focus

While including the common questionnaire of WIP, all of our Internet surveys also focused on the following issues:

- Perceptions and attitudes toward the Internet: Compare the differences in perceptions toward the Internet between users and non-users, and understand the possible effects of such different perceptions. Monitor public opinion, between users and non-users, on Internet management.
- Internet adoption: Analyze Internet adoption patterns of different groups (according to gender, age, education levels, marital status, occupation and

income, etc.). Examine the existence of a digital divide in Chinese urban areas.

- Internet usage: Understand the different variables of Internet use, including amount of time users spend online, locations where they go online, number of times users go online, modes for accessing the Internet and the possible correlations between these variables and online behaviors of different groups. Analyze users' possible dependence on the Internet and Internet addiction of different groups. Discover users' most frequently used websites, search engines, and e-business applications.
- The Internet and the media: Analyze the effects of the Internet on media penetration (including TV, newspapers, magazines, radio, books, video cassette/VCD/DVD, and tape/CD/MP3, etc.) among different groups of users. Examine users' sense of the reliability of different media and the importance of different media for obtaining information or entertainment.
- The Internet and communication: Analyze the different communication means (face to face, fixed telephone line, mobile phone, instant message, E-mail, QQ, MSN, etc.) for interpersonal relationships (kinship, work relationships and other social relationships). Examine the effects of new media on traditional means of communication.
- The Internet and politics: Understand the public's perceptions (including Internet users and non-users) of opportunities for political participation via the Internet. Measure e-government participation among Internet users.
- The Internet and openness: Examine the possible scales of openness among Internet users and Internet non-users. Exploring if the Internet, as an open technology, can change people's attitude and behavior, and make people more open minded, under the relatively closed cultural and political system in China.

1.4 Methodology

The earlier CASS surveys selected larger cities for investigation. Local residential communities for each city were randomly chosen through a Probability Proportional to Size (PPS) sampling method, based on fixed samples. In each local residential community, ten qualified households were chosen isometrically, and one family member was randomly chosen from each household to be interviewed. In recent years, due to growing security concerns among urban residents, and in particular the growing use of access control systems, it has become much more difficult to carry out door-to-door surveys in China. Therefore, taking advantage of the growth in household fixed telephone line, we decided to initiate telephone surveys for the first time in 2007.

1.4.1 Sampling

In order to compare the 2007 survey results with earlier survey results, we chose the same

five cities covered in the last three surveys: Beijing, Shanghai, Guangzhou, Chengdu and Changsha. In order to take account of certain geographic and economic parameters in the 2003 samples, we added the two cities of Xi'an and Shenyang this year. We limited our sample to urban residents who had lived more than half a year in the surveyed city and were between the ages of 15 and 59 years old.

The sampling method of telephone numbers: We used Random Digital Dial (RDD) to randomly choose interviewees. First, all the 4-digit non-office numbers of the seven cities were chosen from the telephone number database. Next, a non-office number was randomly chosen. The last 4-digit number was also randomly created to form a telephone number. Later, the telephone numbers would be tested to delete the null numbers. Finally, non-eliminated numbers were dialed through the Computer Assisted Telephone Interviewing (CATI) system.

The table below lists the sampling methods of all the Chinese Internet surveys:

Table 1-3 Comparison in the sampling methods of all the Chinese Internet surveys[1]

Year	No. of Cities	Sample Size	Sample Weighted	Sampling Method	Survey Method	Completing the Questionnaire	Age Range
2001	5	2,134	Yes	PPS + over sampled Internet users	Door-to-door interview	Interviewee self completed	17-60
2003	12	3,941	No	PPS + over sampled Internet users	Door-to-door interview	Interviewee self completed	17-60
2005	5	2,376	No	PPS+KISH	Door-to-door interview	Interviewee self completed	16-65
2007	7	2,001	Yes	RDD	CATI	Telephone interview	15-59

Due to contextual differences, sampling scopes and methods, each of the surveys is somewhat different. In order to make effective comparisons, this report will only select the five cities covered by all the surveys (Beijing, Shanghai, Guangzhou, Chengdu and Changsha), and use the same method to weigh samples. Limited by the sample size and the sampling method, the dataset is more appropriate for a comparative study of the different characteristics of users and non-users than for predicting the ratio of Internet users in the total population.

1.4.2 Training, Conducting, and Supervision

We prepared detailed training materials for the interviewers, each of whom was required to carefully read them. We also trained each interviewer and conducted a moot interview. Only qualified interviewers were chosen to administer the surveys.

1. Among the seven cities, only the telephone number of Changsha is 7-digit, and a 3-digit number is needed, while that of the other cities is 8-digit, and a 4-digit number is required.

2. Because the proportion of Internet users in China was still very low even in large cities in 2001 and 2003, while the purpose of this survey was mainly about Internet usage and impact, we randomly chose local residential communities through a PPS sampling method, isometrically chose households in each local residential community, selected only one person from each household, and we gave priority to Internet users to answer the questionnaire. Whereas in 2005, taking into considerations the prevalence of the Internet in big cities, after successfully entering the household, we used a KISH form to randomly choose one person among the family members. For the sampling methods, please refer to the past survey reports available at http://www.wipchina.org/

When overseeing the survey administration, the supervisors listened to the first three interviews of every interviewer, and also randomly monitored the ongoing interviews.

Once all the surveys were finished, the quality control staff listened to 81 random survey tapes and verified interviewees' demographic information.

The initial interviews were conducted from March 21 to April 14, 2007, while supplementary interviews were carried out after deleting the unqualified questionnaires in the quality control process. Previously used telephone numbers were not used in supplementary interviewing.

1.4.3 Quota and Weighting

Considering both the high refusal rate for random telephone surveys, and the likelihood of deviation of sample distribution from that of the population, we used gender and age group quotas based on the national population census data in 2005, and the fixed sample size of 2,000 participants. First, we calculated the sample size for each city according to the ratio of that city's population to the seven cities' total population. Then, based on the gender ratio of each city, we computed the male and female sample size. According to the statistical data, we then divided the age range of 15 to 59 years old into five age groups: 15 to 19 years old, 20 to 29 years old, 30 to 39 years old, 40 to 49 years old, and 50 to 59 years old. Based on the proportion of every age group in each city, we calculated the appropriate sample size for every age group in each city. Finally, during the implementation, we ensured that the sample structure of each city satisfied the gender and age group requirements described above.

In the end, there were 2,035 final valid cases, and the weighted sample size was 2,001, including 1,315 Internet users and 686 Internet non-users. The detailed distribution of weighted samples can be found in Appendix 1.

Picture 1-1: locations of surveyed cities in China

PART TWO

PERCEPTIONS AND ATTITUDES TOWARD THE INTERNET

Earlier CASS surveys have suggested that negative perceptions of the Internet, fuelled in part by such media reports, discourages and reduces Internet use. Over the five years we have been conducting CASS surveys, media reports about negative aspects of the Internet have increased both in scope and number. Concerns have focused on a variety of issues, including Internet addiction among youth, security of personal information online, use of the Internet for false speculation, advertising or promotions, and Internet crimes.

The intention of this survey is to explore evolving public attitudes and perceptions toward the Internet and to examine the effects of these attitudes and perceptions on Internet adoption and use. We will also explore public opinions about where responsibility lies to monitor Internet contents, to supervise Internet use, and to address other troubling issues regarding the Internet.

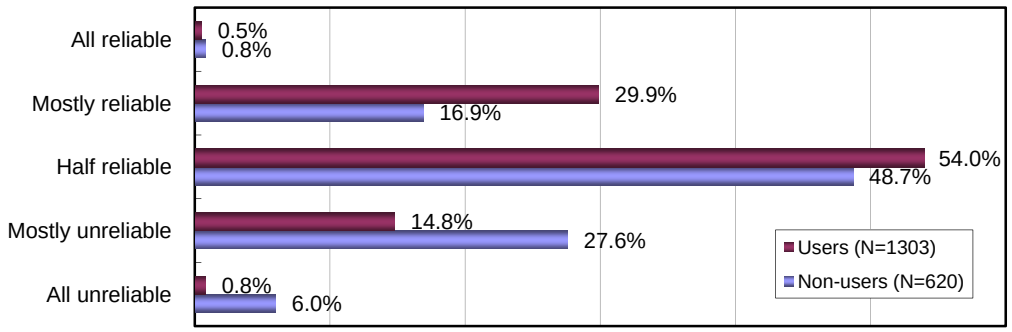
2.1 Is the Internet Reliable?

To get a sense of people's overall trust in the Internet, we asked them about their impressions on the information provided on the Internet. We posed the question: "How much of the overall information on the World Wide Web is generally reliable?" While few people were enthusiastic about the reliability of the Internet contents, Internet users were significantly more positive than non-users. More than 31 percent of Internet users said they thought the information online was "entirely or mostly reliable," significantly more than the 17.7 percent of the non-users.

One reason for this difference between Internet users and non-users might be due to how people form their impressions. While Internet users are in direct contact with information they see or read online, non-users must have formed their impressions second-hand from

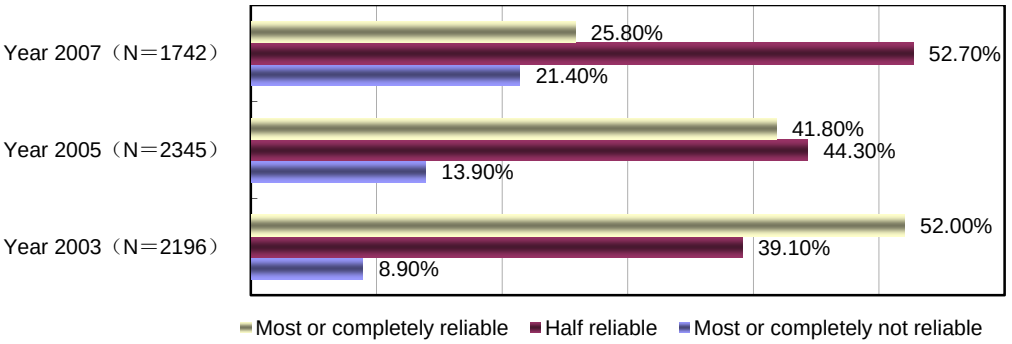
what they see and hear from others, including their friends, colleagues, and the public media.

Figure 2-1 Differences between users and non-users regarding the reliability of Internet content.



If we compare the survey data[1] collected in 2003, 2005 and 2007, we find that people's faith in the reliability of Internet contents has been decreasing. From 2003 to 2007, the number of respondents who considered Internet contents "reliable" declined from 52 percent to 26 percent. In that same time period, the number of respondents who considered Internet contents "unreliable" more than doubled, from 8.9 percent to 21.8 percent.

Figure 2-2 Attitudes toward the reliability of Internet contents over the past years



The statistical results also show that certain demographic factors correlate with people's perceptions of the reliability of Internet contents. Younger respondents are significantly[2] more likely to trust Internet contents than older respondents. Similarly, those with higher levels of education are significantly more likely to trust Internet contents than those with lower levels of education. And finally, males are more likely to trust Internet contents than females (Sig. =.044).

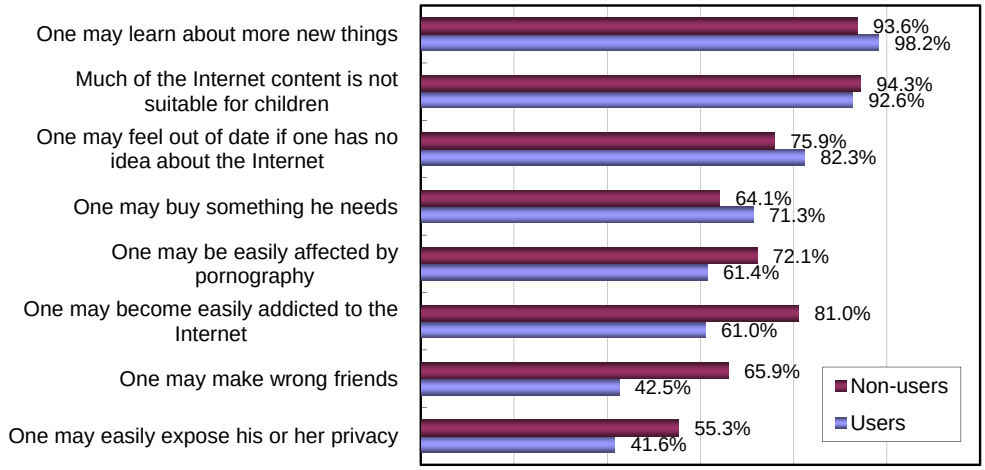
2.2 Perceptions of the Internet

We tried to further understand people's perceptions of the Internet through the following eight questions. Overall, responses from both Internet users and non-users were positive.

1. Since only five cities (including Beijing, Shanghai, Guangzhou, Chengdu and Changsha) were surveyed in 2005, when we make a longitudinal comparative analysis, comparison will be made only among the five cities.
2. Unless otherwise specified, the statistical significance level in this report is smaller than 0.05

However, users and non-users differed significantly in their perceptions of the Internet. On only one statement ("Much of the Internet contents is not suitable for children") was there consensus between users and non-users. In general, Internet users agreed more to the positive portrayals of the Internet, whereas non-users agreed more with negative portrayals.

Figure 2-3 Different perceptions of the Internet held by Internet users and non-users



Internet users and non-users both overwhelmingly agreed with one positive and one negative statement about the Internet: Over 90 percent of the respondents agreed that "by using the Internet, one might learn more about something new". However, the Internet is also widely recognized as inappropriate for children: over 90 percent of Internet users and non-users agreed with the statement that "much of the information of the Internet is not suitable for children."

Two negative statements about the Internet were largely dismissed by Internet users: more than 40 percent of users agreed with the statements that "by using the Internet, one may make wrong friends" and that "by using the Internet, one's privacy might be easily exposed." Non-users were more concerned about these negative statements: 55.3 percent of non-users agreed that the Internet might expose one's privacy, and 65.9 percent of non-users agreed Internet use might make for wrong friends.

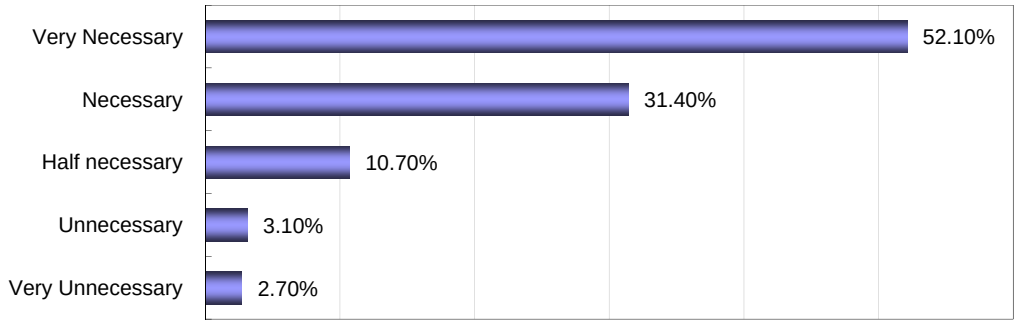
According to our survey reports in 2003 and 2005, we concluded that people's negative attitudes toward the Internet could be one of the reasons non-users avoid using the Internet. Negative attitudes could also strengthen people's demand for oversight and management of the Internet - a topic we explore further below.

2.3 Should the Internet be Managed or Controlled?

We sought to explore a number of questions about Internet management and control. To what extent is it appropriate to manage or control the Internet? Who should manage or control the Internet? What kind of Internet contents should be controlled?

Consistent with results from previous surveys, current results show that as many as 83.5 percent of respondents agreed that Internet management and control was very or somewhat necessary.

Figure 2-4 Should the Internet be managed or controlled? (N=1992)

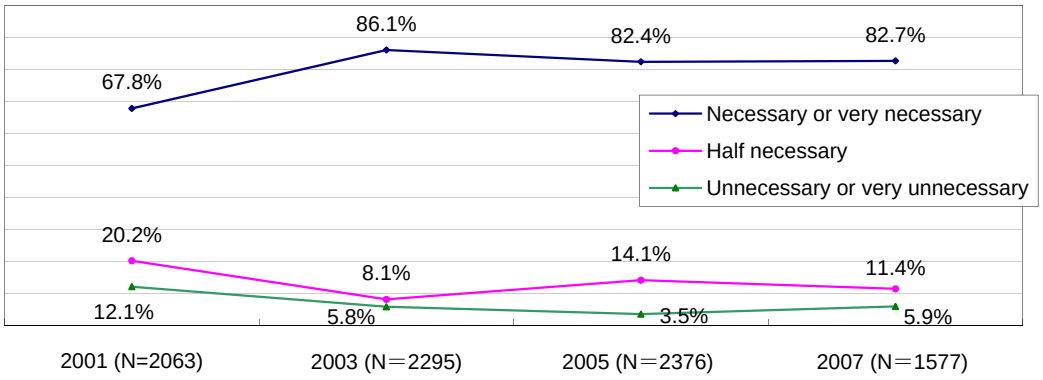


Barring gender, demographics does not seem to play a major role in people's opinions about Internet management and control. While women are more likely than men to agree that the Internet should be managed or controlled, age, occupation, income, and education level do not seem to matter.

Further, Internet use does not seem to play a role in people's opinions about the need for control over the Internet. There are no differences of opinion between users and non-users. Nor are there differences between heavy users (more than 4 hours per day) and light users (less than one hour per day).

Longitudinally, we can see that an overwhelming majority of people have always agreed that the Internet should be managed or controlled. In 2003, 86.1 percent of the respondents agreed it was necessary to manage or control the Internet; in 2005, 82.4 percent of people agreed; and in 2007, the percentage remained almost the same. These findings demonstrate the ongoing consensus that in China most people believe the Internet should be managed or controlled.

Figure 2-5 Attitudes toward Internet management or control over the past years are consistent

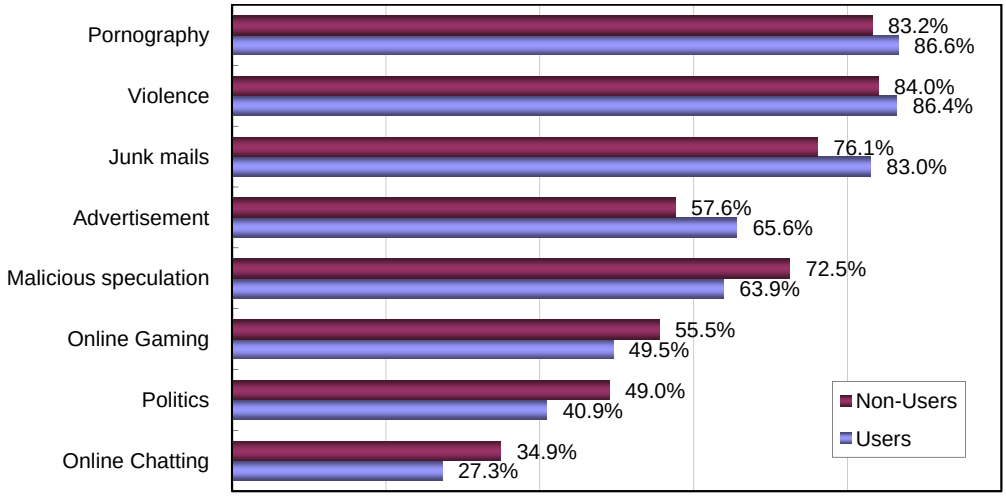


2.4 What Types of Internet contents should be Managed or Controlled?

In this longitudinal research, we probed some new, negative phenomena associated with the Internet. In 2005, we added two new questions about adolescent Internet addiction and chatting to the original list of questions. In 2007, we further added questions about "malicious speculation[1]."

According to the survey results, more than 80 percent of respondents believed that pornography, violence and junk emails should be managed or controlled. More than 60 percent of the respondents agreed that advertisements and malicious speculation should be managed or controlled. Some 44 percent agreed that politics contents should be controlled. And some 30 percents said chatting should be controlled.

Figure 2-6 What types of Internet contents should be managed or controlled?



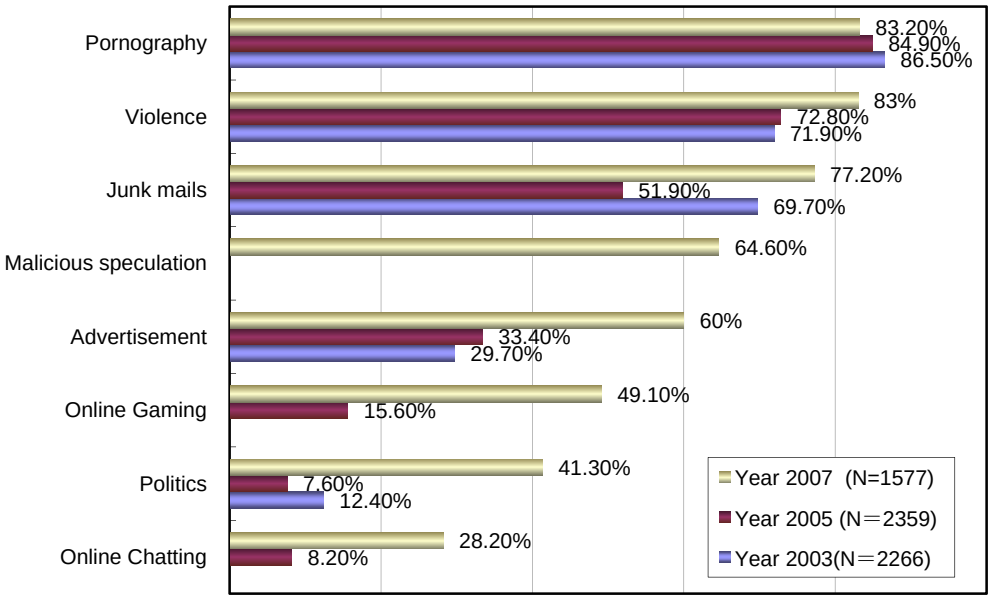
1. Some netizens make jokes about others to make their own voice heard.

The proportion of respondents who believe that different types of Internet contents should be managed or controlled has increased during the past four years. In several cases, the increases have been quite significant.

Pornography and violence have consistently been on the top of the list of issues that people feel should be controlled. Some 83 percent of the respondents agree that pornography and violence should be controlled. Controlling junk e-mails comes in a close third, with 77 percent of respondents agreeing it should be controlled. Malicious speculation is next, with 65 percent of people feeling it should also be controlled.

In this year's survey, we noticed surges in the number of respondents who felt control was necessary for several reasons. The percentage of the respondents who thought content about politics should be controlled online increased from about 8 percent in 2005 to 41 percent in 2007. Numbers also increased sharply for chatting, from 8 percent to 28 percent; for gaming, from 16 percent to 49 percent; and for online advertising, from 33 percent to 60 percent. Having experienced chaos, especially pornography and violence content on the Internet, more and more people call for order on the Internet.

Figure 2-7 Internet contents that should be managed or controlled



2.5 Who Should Play the Most Important Role in Internet Management or Control?

In the 2007 questionnaire, we probed the issue of who should bear responsibility for the control and management of information provided on the Internet. We asked "Who should play the most important role in Internet management or control," and provided six

answers: Internet companies, Internet cafés, parents, schools, government agencies and other persons or organizations.

Overall, most people believed the Internet should be managed or controlled by administrative or technological organizations. The percentage of people who thought government agencies should play the most important role was the largest (84.8 percent), the second was Internet companies (78.8 percent). Subsequently, respondents looked for control from parents (67.5 percent), schools (64.1 percent) and Internet cafés (59.2 percent). Only a few respondents (2.1 percent) felt users themselves, or laws, or the society should control and monitor Internet content.

Figure 2-8 Who should play the most important role in Internet management or control (N=2001, multiple choices allowed)

PART THREE

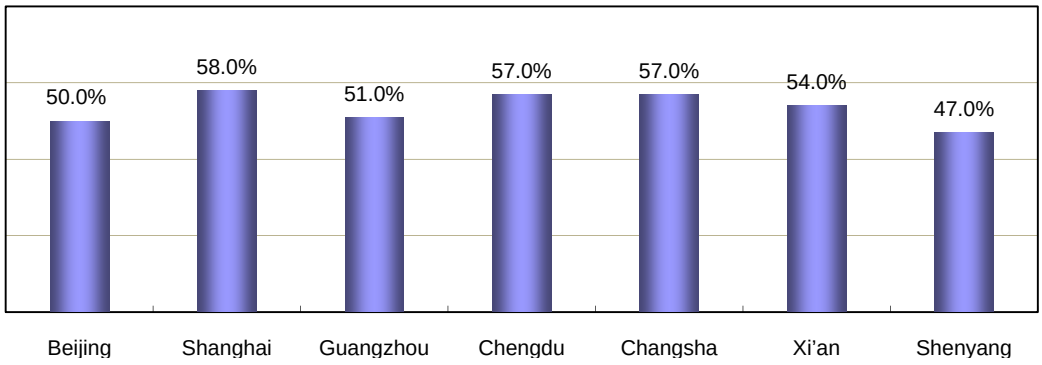
INTERNET ADOPTION

Who uses the Internet in China, and who does not? In this section, we explore demographic factors as well as people's attitudes and perceptions toward the Internet that impact Internet use and adoption. We also look at those who access the Internet through others, as well as those who have no desire to go online.

3.1 Internet Penetration Rates of the Seven Cities

Six of the seven cities that we surveyed show Internet penetration rates of over 50 percent. There were no significant differences in Internet penetration rate between metropolitan cities, like Beijing, Shanghai and Guangzhou, and provincial capitals, like Chengdu, Changsha, Xi'an and Shenyang. Internet penetration in provincial capitals is 54 percent, virtually even with that in metropolitan cities, at 53 percent.

Figure 3-1 Internet Penetration Rate in each surveyed city



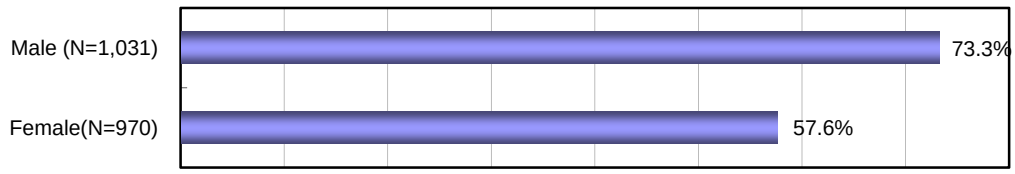
3.2 Demographic Distribution in Internet Adoption

To profile "the current (and most likely) Internet users" in China we looked at differences in gender, age, education, marital status, occupation and personal income in order to discover who is likely to be a current Internet user.

3.2.1 Gender

The "gender divide" in Internet adoption is an important aspect of the digital divide in China. According to the survey results in 2007, which illustrated in the figure below, 73.3 percent of the male respondents had adopted the Internet, far exceeding that of the female respondents (57.6 percent).

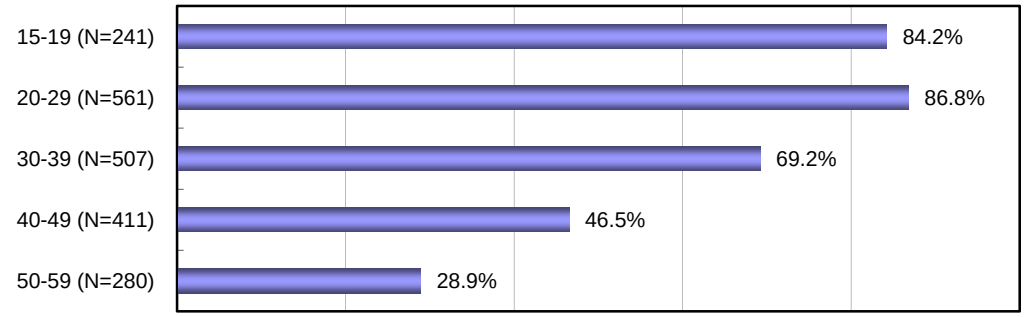
Figure 3-2 Gender difference in Internet adoption (N=2001, Sig. =.000)



3.2.2 Age

As shown in Figure 3-3, Internet penetration rates decreased significantly with age. Well over 80 percent of those under 30 years old used the Internet, while only 28.9 percent of people between the ages of 50 and 59 were Internet users.

Figure 3-3 Age difference in Internet adoption (N=2000, Sig.=.000)



3.2.3 Education

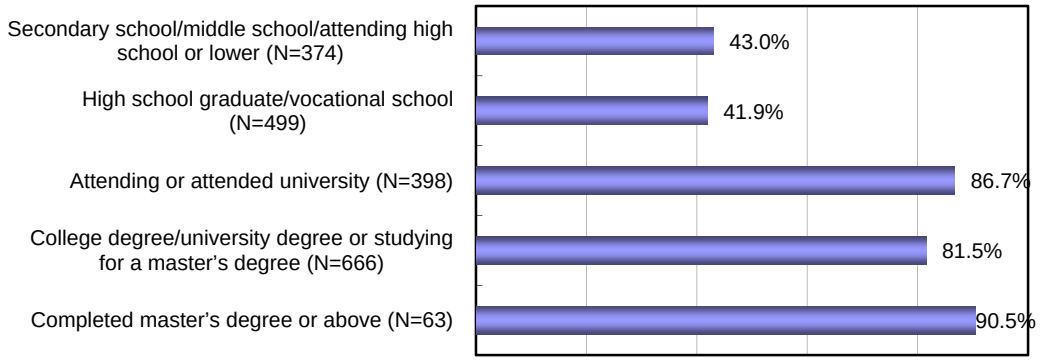
Levels of education correlate with the likelihood of going online. In general, people with at least some college education are about twice as likely to go online as those with a high

school diploma or less.

A number of different reasons could play a role. For example, those with higher levels of education could be more likely to demand more high-quality information available on the Internet. Or, those with less education might not have enough facility and experience with computers to access the Internet.

Among the student population, those preparing for college entrance exams might have little time available for using the Internet. While university students might have a greater demand for the contents they find online that are relevant to their studies.

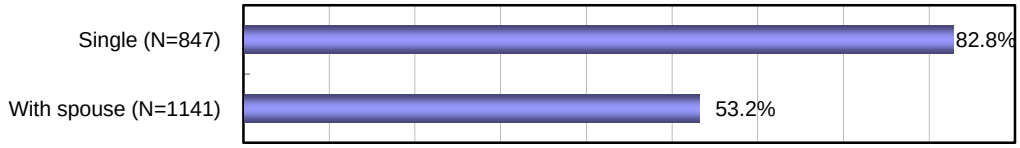
Figure 3-4 Internet adoption among different education groups (N=2000, Sig.=.000)



3.2.4 Marital Status

Those respondents who are single (which for the purposes of this survey refers to anyone who is not currently married or does not have a cohabitant partner) are much more likely to use the Internet than those who are currently married. Some 83 percent of the single respondents go online, as compared to 53 percent of the married respondents.

Figure 3-5 Different marital statuses going online (N=1998, Sig.=.000)

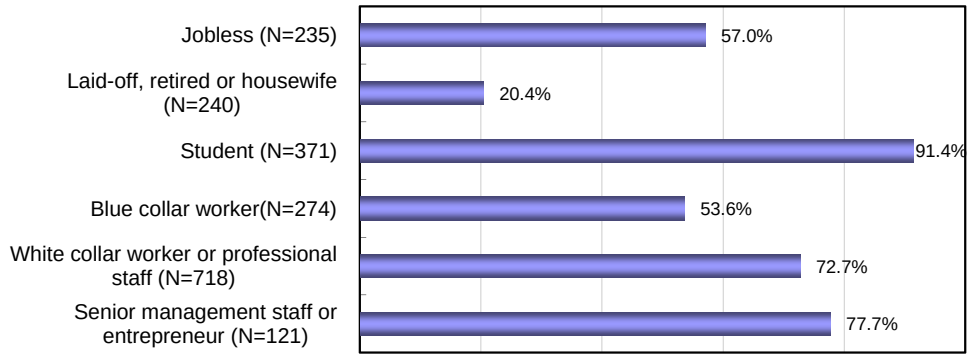


3.2.5 Employment Status or Occupation

The 6 categories of occupation in these findings are derived from a more detailed list of 13 occupations from the *National Standard GB6565-86 of the People's Republic of China*, and the inclusion of a new category, "housewife". To be concise, we combined the occupations belonging to the same category, in addition to employment statuses (such as retired, laid-off, etc.) and students. As such, we analyzed Internet adoption of the jobless,

laid-off, the retired, housewives, students, manual workers, white collar workers and senior management or entrepreneurs. We found that 77.7 percent of senior management had adopted the Internet, which was higher than that of white collar workers (72.7 percent), while the probability for white collar workers to adopt the Internet was far larger than that for manual workers (53.6 percent). 91.4 percent of students had accessed the Internet, which is related to the fact that current schooling education generally requires the use of a computer or the Internet. The proportion of the laid-off, the retired or housewives in adopting the Internet was the lowest, only 20.4 percent, whereas the proportion of the jobless, among whom 50.2 percent were younger than 30 years old, was relatively high (57 percent).

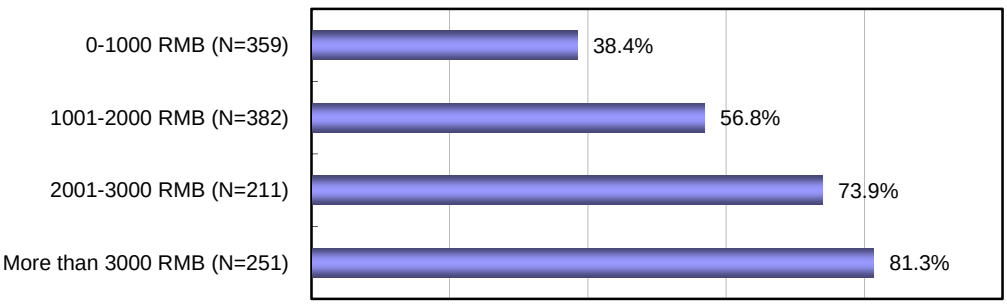
Figure 3-6 Different occupations accessing the Internet (N=1959, Sig.=.000)



3.2.6 Personal Income

Because students make up such a high percentage of Internet users (91.4 percent) and because students generally have no income, we are not including students in the report on the variable of income. Excluding the students, we find a positive relationship between personal income and Internet adoption: the higher the personal monthly income is, the more likely a person is to use the Internet.

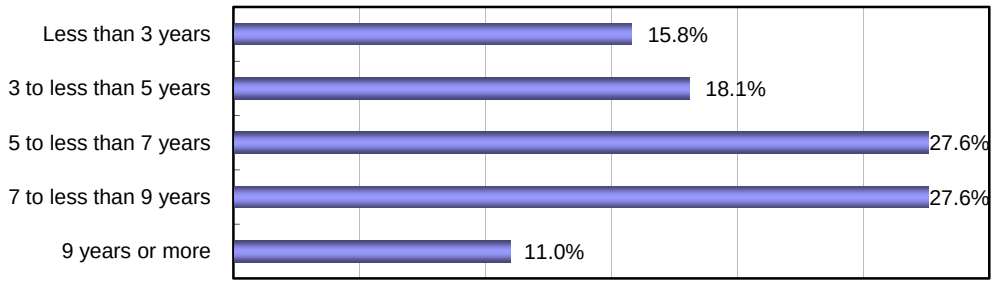
Figure 3-7 Users distribution within income groups (N=1203, Sig.=.000)



3.3 Internet Experience

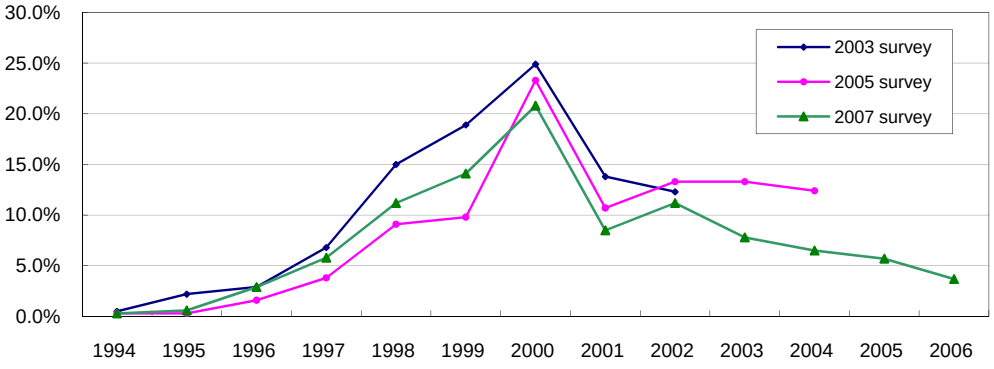
Internet experience, or the number of years using the Internet, can to some extent affect online behaviors. The data below shows one-third of surveyed Internet users had used the Internet for less than five years.

Figure 3-8 Distribution of Internet experience



The largest group of Internet users, 20.8 percent, has seven years of Internet experience (see Figure 3-9). Those users began to use the Internet in 2000. There are a few reasons why this might have happened: from 2001 to 2002, negative media reports about the Internet, especially negative reports about Internet cafés, were on the rise. In June 2002, for instance, the burning of an Internet café in Beijing dominated. At the same time, authorities were strengthening the supervision of the Internet. We can assume that these events might have discouraged Internet adoption within China. The following figure lists the percentages of Internet users who accessed the Internet for the first time in each year gathered by the 2003, 2005 and 2007 surveys.

Figure 3-9 The year Internet users accessed the Internet for the first time



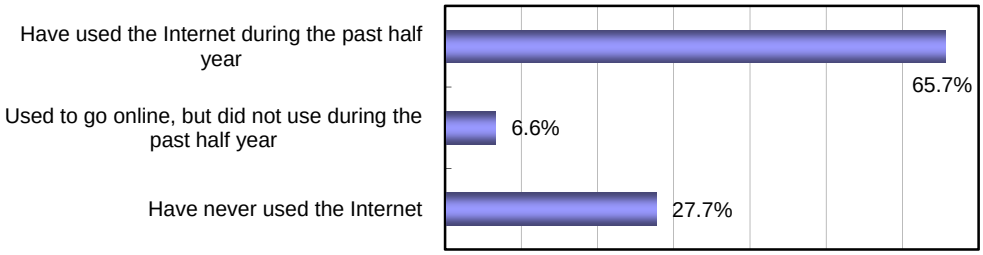
3.4 Who is Not Online?

Although Internet penetration in China is rising, particularly in the big cities, there are over a billion people who still do not use the Internet. Who are they, and what can be done to bring them online?

3.4.1 Non-users and Drop-out users

In the 2007 survey, 27.7 percent of the interviewees (all big-city residents) have never used the Internet, and about 6.6 percent have dropped out, discontinued to use the Internet, which is defined as, they formerly used the Internet, but have not gone online during the past half year.

Figure 3-10 Internet users, drop-out users and non-users (N=2001)

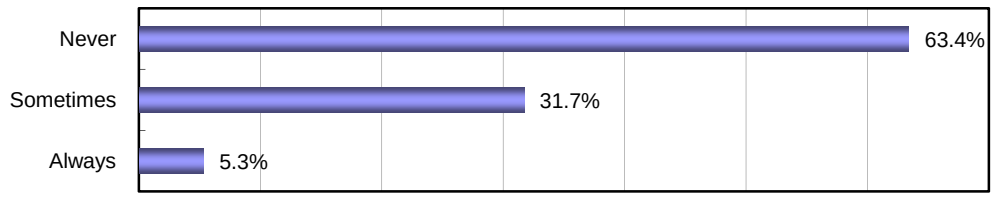


Demographically, the Internet non-users are more likely to be older, female, manual laborers, earn lower income, and to have attained lower levels of education.

3.4.2 Proxy Internet Users

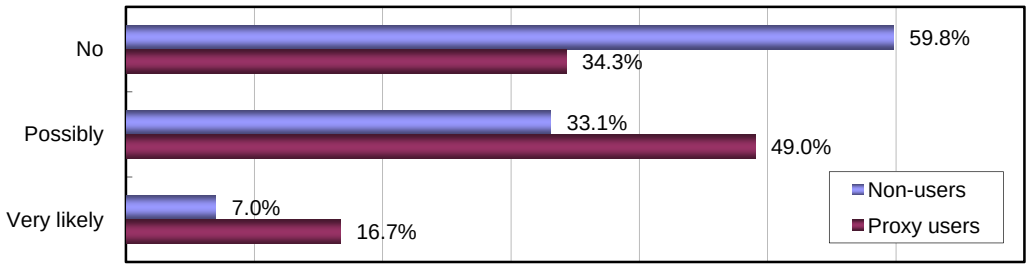
We pursued the idea that Internet non-users may seek to access Internet contents through others who do it on their behalf. In this survey, we found that 37 percent of Internet non-user respondents had once asked Internet users to help them either to receive or send emails, or to search the Internet for information. We call these who are not online but connect indirectly proxy Internet users.

Figure 3-11 Percentages of non-users who seek proxy users. (N=552)



Do non-users have plans for going online in the future? Among non-users who had never used the Internet, 51.5 percent did not intend to go online in the next 6 months, and only 9.7 percent would be very likely to go online. A significantly higher percentage of non-users who use proxy users said they were likely to go online in the next 6 months

Figure 3-12 Likelihood of non-users to go online in the future (Sig. =.000)

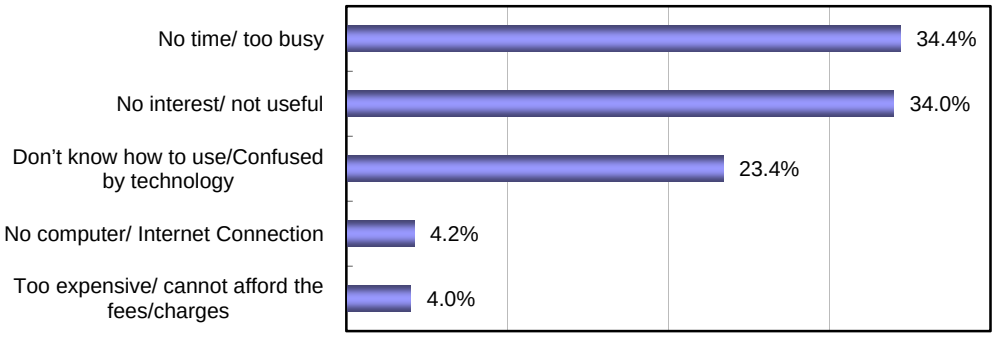


3.4.3 Reasons why some do not use the Internet

Many non-users do have the Internet available to them. Findings from this survey show that 74.5 percent of non-users had family members who go online; 73.8 percent of non-users had computers at home, among which 24.6 percent were connected to the Internet; and 32 percent of non-users used the computers themselves, although they did not use the computer to access the Internet. Why do not these non-users go online themselves?

About a third of non-users said they had no interest or the Internet is of no use to them, and another third said they have no time or are too busy. This suggests that the vast majority of non-users are choosing or deciding by themselves not to use the Internet. The remaining third of the non-users voice economic concerns or technological reasons for not using the Internet. Nearly a quarter of non-users said "I do not know how to use the Internet or are confused by technology". The remaining 8 percent said they had no computer, no Internet connections, or could not afford access.

Figure 3-13 Reasons that non-users do not use the Internet (N=521)



In fact, various factors affect non-users' adoption of the Internet. According to our definitions, there are Internet users, drop-out users and proxy users. After ten years' development, the Internet has comprehensive and tremendous impacts in China. In big cities, it is very difficult to find some person who has absolutely never interacted with the Internet. Among the interviewees we surveyed this year, the proportion of people with no Internet experience, either direct or indirect, was only 17.4 percent.

PART FOUR

INTERNET USAGE

The topic of Internet usage encompasses how and where people access the Internet, and what they do online. In this section, we will consider certain variables, such as connection modes, duration of time spent online, locations from which the Internet is accessed, and the frequency of Internet usage. These variables will be analyzed for their possible effects on users' online activities. We will also address some emerging problems such as Internet dependence and addiction, which have drawn attention during the last two years.

During the past two years, broadband access has brought revolutionary change to online activities and connection modes. Statistics released by China Netcom in May 2007 showed that the number of broadband users reached 16.8 million, while the number of China Telecom's broadband users increased to 31.6 million, the sum of the two being 48.4 million.

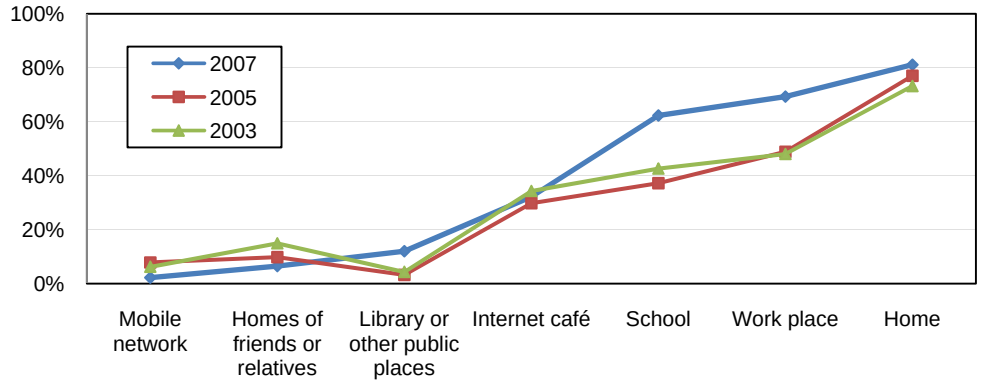
Widespread broadband access has changed the profile of China's Internet use in many ways. It has allowed users to access more content more quickly, and has expanded the use of the Internet for recreational activities like games, chatting, watching movies, and reading. The availability of home broadband access means that the home is now the number one access location for most users.

4.1 Location

The establishment of inexpensive monthly broadband fees means that the home has become the most popular location for going online in China. According to the survey results, 81 percent of Internet users go online from home. At the same time, cheap Internet cafés still offer an important alternative location for those who can't afford home broadband fees, and the proportion of Internet users who go online at Internet cafés is

now about one third of the total. Compared to 2003 and 2005, the proportion of employed users using the Internet at work places has significantly increased from 48 percent to 69 percent, the proportion of student users logging online has increased from 43 percent to 62 percent, and the proportion of users using the Internet at home has increased from 73 percent to 81 percent. But the proportion using the Internet at homes of friends or relatives has dropped from 15 percent to 7 percent. This is probably because most schools, work places and homes are equipped with online devices, and most people do not have to use the Internet at homes of friends of relatives.

Figure 4-1 Distribution of online locations in 5 cities since 2003 (multiple choices allowed):
(2003: Internet users: N=1754, employed users: N=831, student users: N=631;
2005: Internet users: N=1169, employed users: N=711, student users: N=336;
2007: Internet users: N=1314, employed users: N=791, student users: N=339)



In this survey, the percentage of Internet users accessing the Internet through a mobile network was very low, only 2.2 percent (this includes access via mobile phone, PDA and wireless modem). The demographic characteristics of mobile network users did not show any significant differences to mobile network non-users.

Home access varied significantly according to age. Some 91.5 percent of interviewed Internet users between 50 and 59 years old went online at home, while only 70.9 percent of Internet users aged between 15 and 19 years old did.

Figure 4-2 Percentage of Internet users going online at home among different age groups (N=1315)

Likewise, Internet users were more likely to go online at home if they were better educated, married, or earned higher incomes. The percentage of student Internet users

who went online at home was the lowest, only 67 percent; while the percentage of Internet users in the laid-off, retired or housewife group who went online at home was the largest, at 98 percent. Further, those with long Internet experience and higher average daily use time were significantly more likely to go online at home.

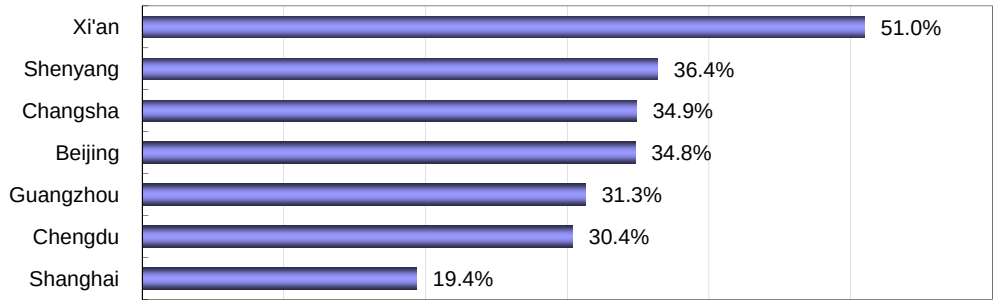
The percentage of Internet users holding a job who went online at the work place was 69.3 percent. According to job type, entrepreneurs, at 79.8 percent, were most likely to use the Internet at the work place, followed by white-collar workers, at 72.4 percent, and blue-collar workers at 53.4 percent. Users who have been online for more years and who spend more time online were also significantly more likely to use the Internet at work.

In China, very few public places (e.g., libraries) provide Internet access. As a result, only 12 percent of respondents went online in public places. Users in public places tended to be younger people with low incomes and education levels.

Younger people with low income and education levels and students were the two most likely demographic groups to go online at the homes of friends or relatives. With the rise of home Internet access, few people now access the Internet exclusively at their place of employment, at school, or in public places. Employed staff who used the Internet only at the work place accounted for just 6.6 percent of employed Internet users (N=791), and the percentage of student Internet users who used the Internet only at school was just 7.7 percent (N=339). The percentage of Internet users who used the Internet only at one other place (including public places, the homes of friends or relatives and Internet cafés) was lower than 2 percent.

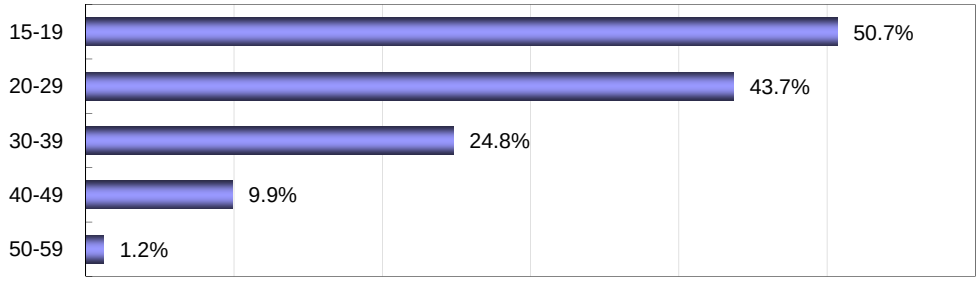
In China, Internet cafés are an important location for going online. Compared with other countries or regions covered by WIP, the percentage of Chinese Internet users who went online at Internet cafés was very high, reaching 32.2 percent (For instance, there are only 9 percent of Internet users have experience of going online at Internet cafés, reported by Oxford Internet Institute). Some 27.6 percent of users in metropolitan cities went online at Internet cafés, significantly lower than the 37.5 percent in provincial cities. Specifically, in the seven surveyed cities, percentages of use in Internet cafés in all the cities except Shanghai exceeded 30 percent. Shanghai was lowest at below 20 percent, and Xi'an was highest at over 50 percent. The percentage of Internet café users in each city is showed in the following figure.

Figure 4-3 Percentage of Internet café users in each city (N=1315, Sig. =.000)



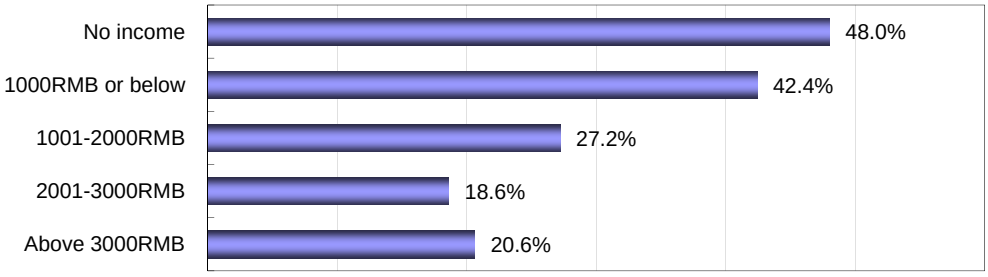
Internet cafés are overwhelmingly frequented by young people. Among Internet users aged between 15 and 19 years old, over 50 percent went online at a Internet café, while only 1.2 percent of Internet users aged between 50 and 59 years old did so. Other significant differences in age were found among Internet café users, as shown in the figure below.

Figure 4-4 Age difference among Internet café users (N=1313, Sig. =.000)



Gender also played a significant role in determining Internet café use. Among male Internet users, 36.5 percent went online at an Internet café, while only 26.6 percent of female Internet users did. Further, Internet users with lower levels of education were more likely to go online at an Internet café than those with high education levels. Approximately one half of single Internet users (46 percent) went online at an Internet café, while only 16.4 percent of married Internet users did. A significant income difference was also found among Internet café users: about a half of Internet users with no income (48 percent) went online at an Internet café, while only 20 percent of those with a monthly income of over 2,000 RMB did. The following figure shows the income differences among Internet café users.

Figure 4-5 Income difference among Internet café users (N=1045，Sig.=.000)

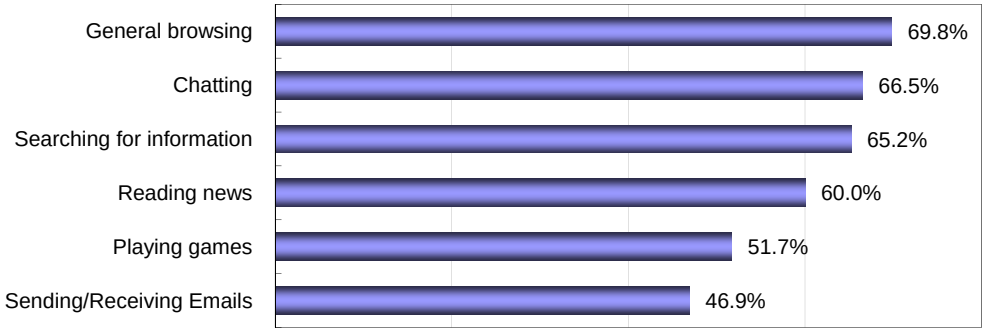


It is interesting that Internet café use does not drop off with experience online. As many as 40 percent of Internet users with seven to less than nine years of Internet experience still went online at an Internet café, while only 26.8 percent of Internet users with one to less than three years of Internet experience did. Overall, Internet café users are likely to be male, single and young with a low income and education level.

What do users do at an Internet café? Some 70 percent of the interviewees reported that their primary purpose for going online at an Internet café was general browsing (69.8

percent); the second most frequent purpose was chatting (66.5 percent). The percentage of users who went online at an Internet café to search for information was as high as 65.2 percent. For reading the news, it was 60 percent, and for playing games it was only 51.7 percent. Only the purpose of going online at an Internet café was surveyed. Time spent on each of these activities was not surveyed.

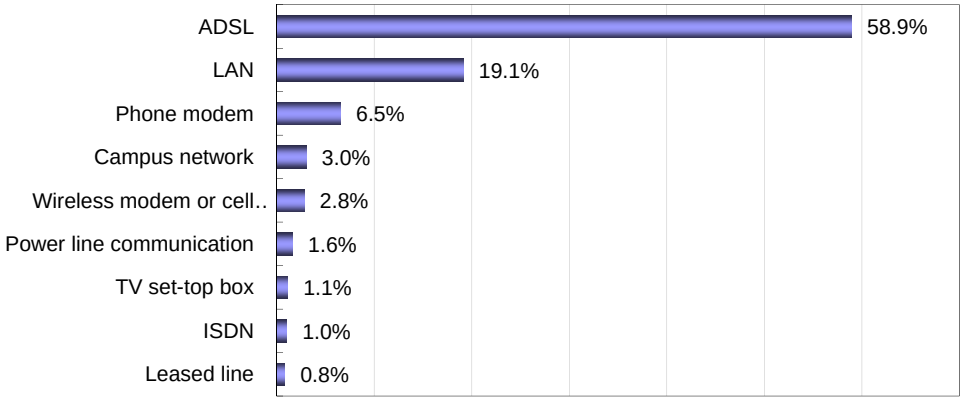
Figure 4-6 Purpose for going online at Internet cafés (N=424, multiple choices allowed)



4.2 Connection Mode at Home

Home has become the primary location for going online, and broadband access has become the most popular way of doing so. In this year's survey, 58.9 percent of home Internet users used ADSL, 19.1 percent used the local area network, and 3 percent used the campus network, another form of local area network. In all, over 80 percent of Internet users used broadband at home, while only 6.5 percent of Internet users used a phone modem to access the Internet. The once-popular ISDN has withdrawn from the stage of history, with only 1 percent using it to access the Internet.

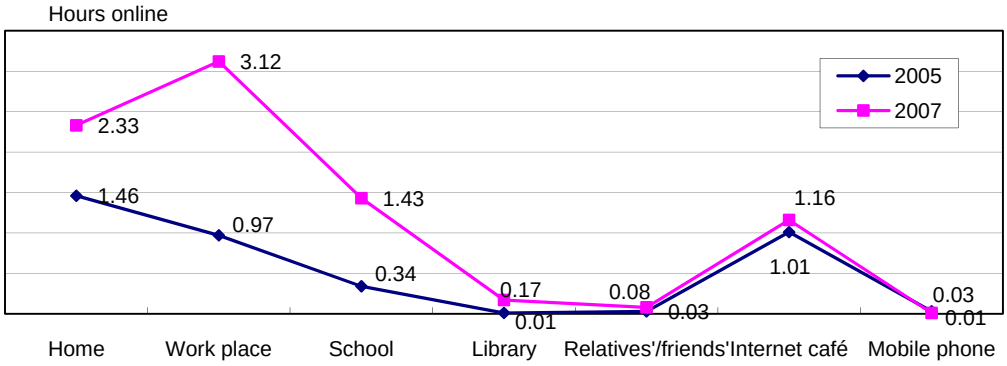
Figure 4-7 Connection modes at home (N=1186)



4.3 Duration

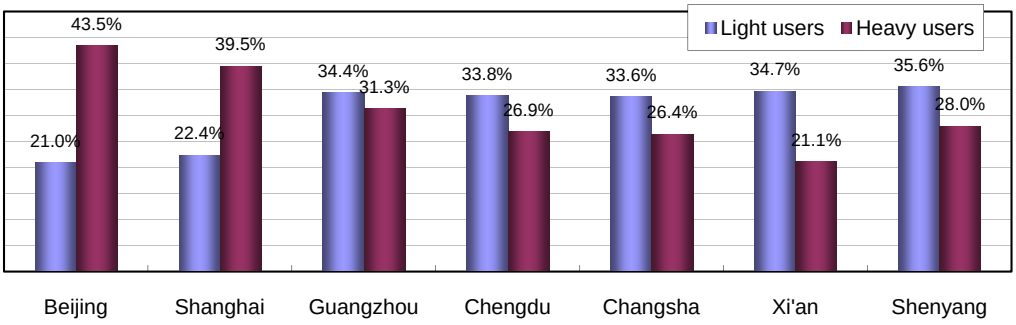
Inexpensive monthly access fees translate into more time spent online. Internet users' average daily time spent on the Internet was 5.43 hours, compared with 2.73 hours in 2005 (five cities), an increase of 2.7 hours. The average time spent online at different locations also increased, the largest change being at the work place, where time online increased from less than 1 hour in 2005 to 3.12 hours in 2007. (Workplace access has also largely switched from phone modem to broadband).

Figure 4-8 Time spent on the Internet at different locations (2005: N=1156, employed: N=711, students: N=336; 2007: N=1030, employed: N=635, students: N=263)



Internet users in bigger cities spend more time online than those in smaller cities. Some 39 percent of Internet users in metropolitan cities spent more than 4 hours online, while only 25.5 percent of Internet users in provincial cities did. Of all the surveyed cities, only Beijing and Shanghai had more heavy users (over 4 hours per day) than light users who use the Internet less than one hour per day.

Figure 4-9 Heavy users and light users by city (N=1295)

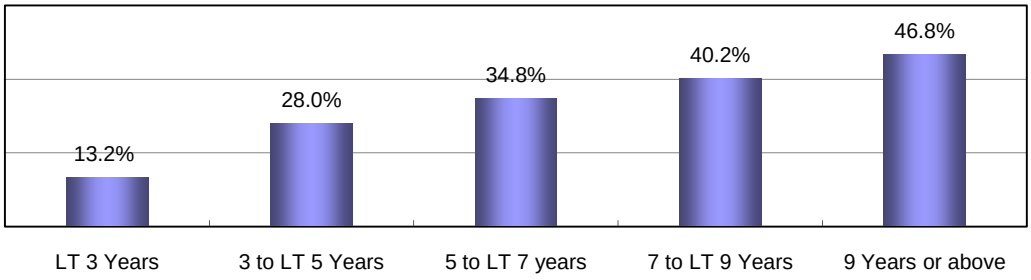


The data also shows that the time spent online by student Internet users and young, single users with high education levels, income, and social status is significantly longer than the time spent by senior, married Internet users with low education levels, income and social status.

Gender does not play a significant role (Sig. =.163) in the time spent online. However,

years on the Internet does: only 13.2 percent of Internet users with less than three years of Internet experience spent an average daily time of over four hours online, while about half of Internet users with nine years or more of Internet experience did.

Figure 4-10 Internet experience and time spent online (N=1122)

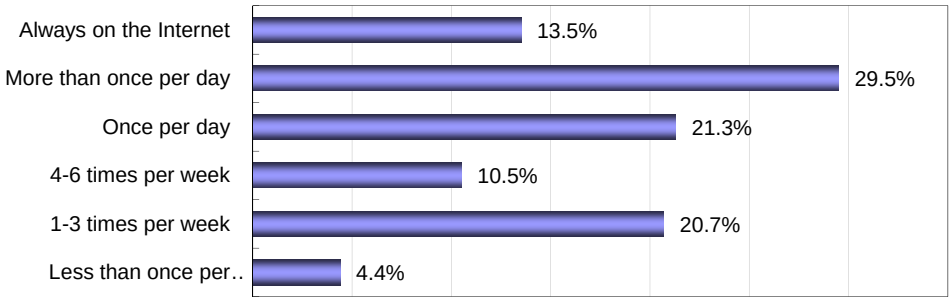


4.4 Frequency

With the emergence of cheap monthly paid broadband and always-on access, questions about frequency of Internet use have become less relevant. Internet users no longer worry about how much time they spend online. But because of the large number of Chinese students who still usually pay school Internet fees on a per hour basis, the topic remains worth discussing.

Some 64 percent of the interviewees used the Internet more than once per day, and only 4.4 percent used the Internet less than once per week. This shows the Chinese Internet users spend quite long time online.

Figure 4-11 Frequency of Internet use (N=1308)



4.5 Online Activities

We have classified online activities into five categories: interpersonal communication, searching for information, entertainment, online transaction, and learning.

4.5.1 Interpersonal Communication

Interpersonal communication is a basic function of the Internet. In our questionnaire, we focused on the use of email, QQ/ICQ, MSN, chatting room, network phone, blog and BBS by Internet users in urban areas.

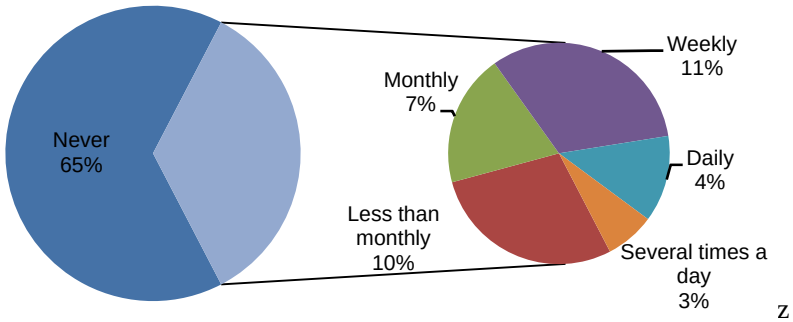
Email in China is far from being as prevalent as in the west. Our survey in 2005 showed that only 69 percent of Internet users used email, a proportion that increased to 80 percent this year. This The lesser use of email in China than in the West probably has an explanation in Chinese cultural traditions and communication habits: Chinese prefer instantaneous, confirmable communication, as demonstrated by high use of instant messaging in China as well as low use of answering or message-leaving machines in general.

QQ/ICQ and Microsoft MSN are typical tools for instantaneous communication, and QQ is widely used among Chinese Internet users. Although 27.2 percent of Internet users never used QQ/ICQ, among those who used QQ, as many as 37.7 percent used it to communicate with others more than once per day. The percentage of Internet users who used MSN was relatively low: only 37.1 percent used MSN to communicate with other users, and among those who used MSN, 35.2 percent used it more than once per day.

Considering the important roles in online communication of email, QQ and MSN, we will introduce the use and impact of these new ICTs in details in Part Six of this report.

The Chat room is another tool for instantaneous communication. However, the percentage of Internet users who actually used a chat room was only 34.7 percent, and only approximately 7 percent of Internet users used a chat room more than once per day.

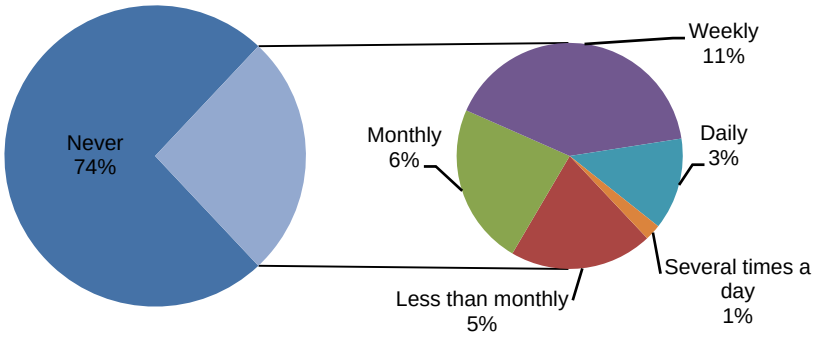
Figure 4-12 Proportion and frequency of using a chat room



Blogging has become popular recently. According to *Baidu 2006 Report of Blogs*, there were 1460 Blog Service Providers (BSP) in mainland China, and 19.87 million bloggers maintained 52.3 million blogs. One of the largest BSP, blog.sina.com.cn, has had about 40 million registered bloggers and 300 million daily page views at the end of 2007. The top 10 bloggers used to have from 100,000 to 500,000 daily visits, and some single blogs

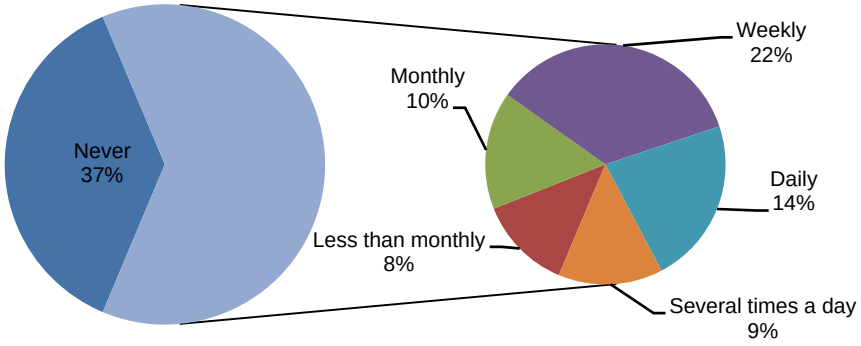
could have more than one million visitors in a day. Online blogging has been playing great roles in providing news and public opinion.[1] According to our survey results, some 15 percent of Internet users update their blogs at least weekly.

Figure 4-13 Proportion and frequency of maintaining a blog (Internet users N=1315)



Bulletin Board System (BBS) used to be one of the most popular online forums/services to attract users' attention and participation. Although many users are now choose blogs other than BBS as their way to express opinion, the number of BBS users is still larger than blogs. More than 40 percent Internet users visit BBS weekly.

Figure 4-14 Proportion and frequency of using Bulletin Board System (Internet users N=1315)



4.5.2 Searching for Information

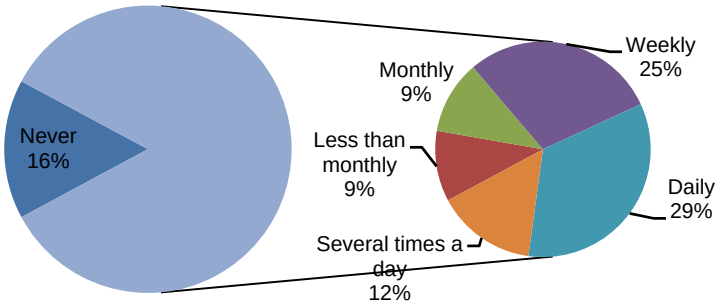
How do Chinese Internet users searching for information online?

Searching for news: The Internet not only provides a fast channel to obtain news, but also expands the sources of news, making searching for news online an important activity of Chinese Internet users. In this survey, we classified online news into local, national and international news. Overall, the percentage and frequency of users searching for news are very high, and people pay more attention to local and national news than to international news. Only 15.7 percent of Internet users never looked for local news, while the proportion of Internet users who looked for local news more than once per day was 41.3

1. Data provided by Mr. Chen Tong, Executive Vice President and Editor-in- chief of sina.com and by Mr. Hou Xiaoqiang, Deputy Editor-in-Chief of sina.com.

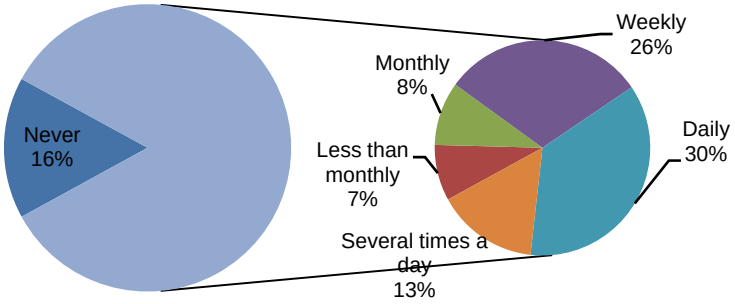
percent.

Figure 4-15 Proportion and frequency of searching for local news (N=1314)



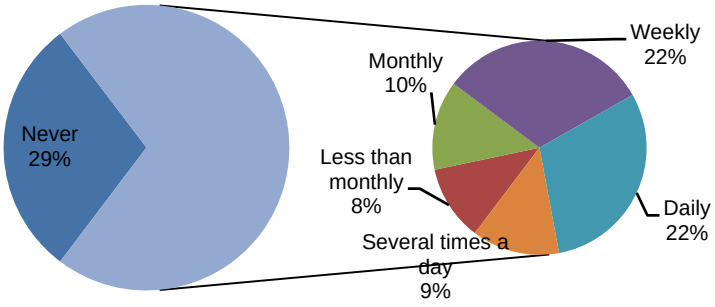
The percentage and frequency of those searching for national news are a little higher than those of searching for local news. Only 15.9 percent of Internet users never looked for national news, while one third looked for national news more than once per day.

Figure 4-16 Proportion and frequency of searching for national news (N=1314)



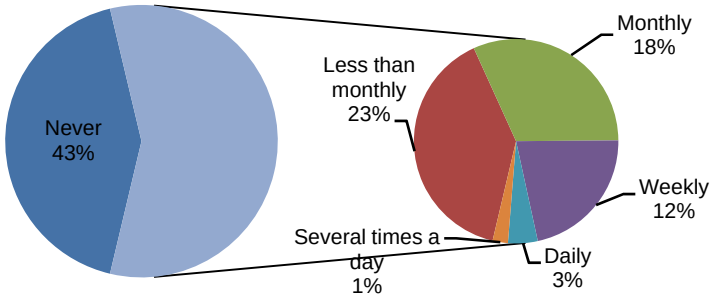
The percentage and frequency of those searching for international news are significantly lower than those searching for local and national news. Approximately 30 percent of Internet users never looked for international news, while 30.6 percent looked for international news more than once per day.

Figure 4-17 Proportion and frequency of searching for international news (N=1314)



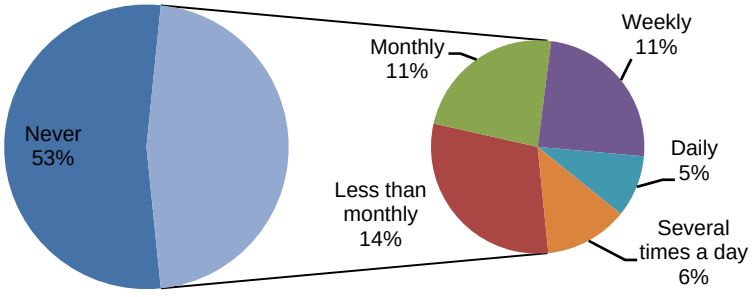
Travel information: Not too many Chinese have the money and leisure to go travelling, and even fewer people will look for travel information online. Among interviewed users, 42.5 percent never looked for travel information on the Internet. Since travel information is not demanded for daily life, the searching frequency is relatively low. However, over 30 percent of Internet users looked for travel information at least monthly, which suggests that this activity is paying off for those who do it.

Figure 4-18 Proportion and frequency of searching for travel information (N=1314)



Job information: Those who might need to search for job information are current white collar workers who go online and Internet users who are jobless. Among Internet users surveyed, 47.9 percent are online white collar workers, 10.4 percent are jobless Internet users. White collar workers may use the Internet to find a new opportunity, while those Internet users who are jobless may use the Internet to find a new Job. In our survey results, nearly half of Internet users were looking for job information on the Internet. The percentage of Internet users who looked for job information at least once a day was 10.4 percent.

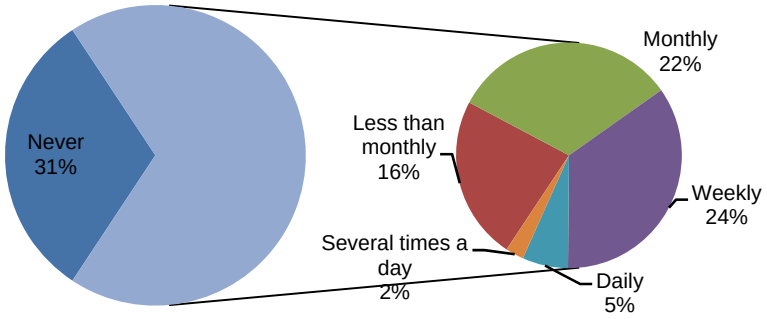
Figure 4-19 Proportion and frequency of searching for job information (N=750)



Health information: Abundant information online and convenient searching methods make the Internet an ideal platform to look for health information. Since it is not necessary to look for health information every day, and considering the fact that young Internet users may not need to pay much attention to this kind of information, it is not surprising that 31.4 percent of Internet users never looked for health information.

However, 30.2 percent looked for this kind of information at least weekly.

Figure 4-20 Proportion and frequency of searching for health information (N=1314)

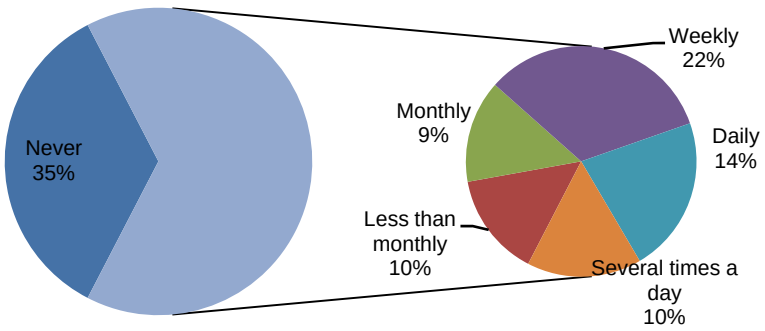


4.5.3 Entertainment

The Internet also provides an entertainment platform. According to our 2005 survey, the Internet played the role of "entertainment highway" more strongly than that of "information highway" in China. This year's survey results also showed that although the percentage of Internet users who used the Internet to look for information had increased, the most fully used function of the Internet was still its entertainment function.

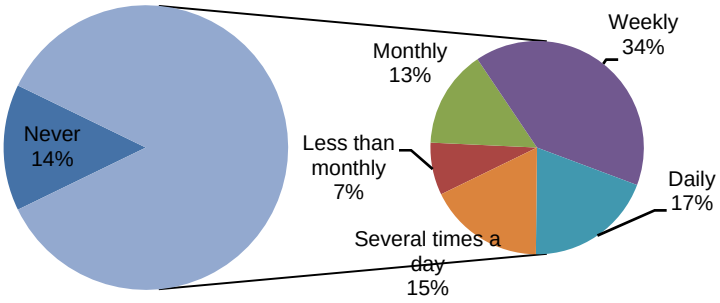
Games: Playing games online has become a major online activity for many Internet users, especially users at Internet cafés. Considering that this survey involved people of different ages, different education levels and different occupations, the 65.2 percent of Internet users who played games online was a relatively high proportion. Moreover, it is worth noting that the frequency of playing games online is very high. Among Internet users, one fourth played games online every day, and another 21.6 percent did at least weekly. Excluding Internet users who did not play games online, we can find that 38 percent of Internet game players played games online every day, and another 33.1 percent did at least weekly, both of which are very high proportions.

Figure 4-21 Proportion and frequency of playing games online (N=1314)



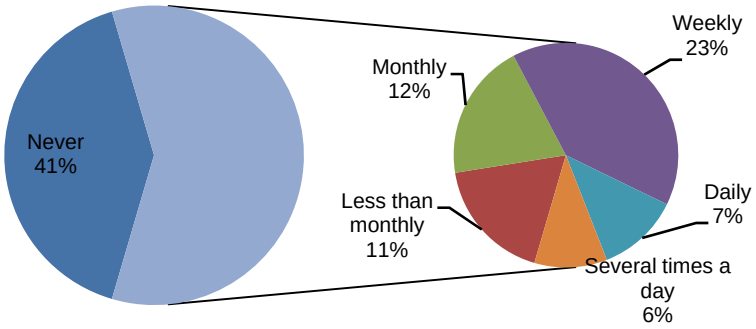
Downloading or listening to music online: The Internet is also a platform to share all kinds of materials, especially when Internet users' sense of intellectual property is not strong enough. According to the survey results, only 14.4 percent of Internet users have never downloaded or listened to music online, while as many as 66.2 percent downloaded or listened to music online at least weekly.

Figure 4-22 Proportion and frequency of downloading or listening to music online (N=1314)



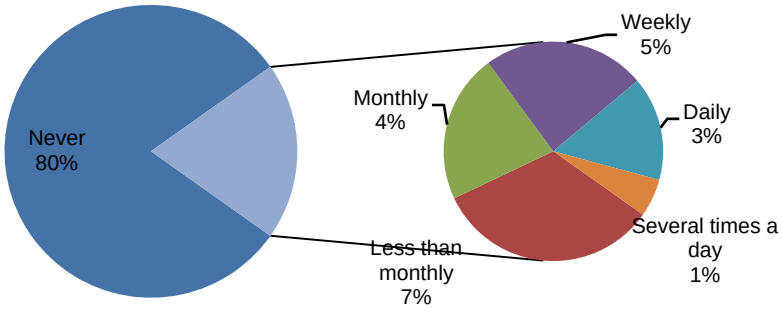
Downloading or watching movies online: Downloading or watching movies online has become fashionable in China. For Internet service providers, P2P downloading uses a large amount of bandwidth. Intellectual property rights have also become an issue. The survey results showed that, although 40.9 percent of Internet users never downloaded or watched movies online, as many as 36.8 percent downloaded movies from the Internet at least weekly.

Figure 4-23 Proportion and frequency of downloading or watching movies online (N=1314)



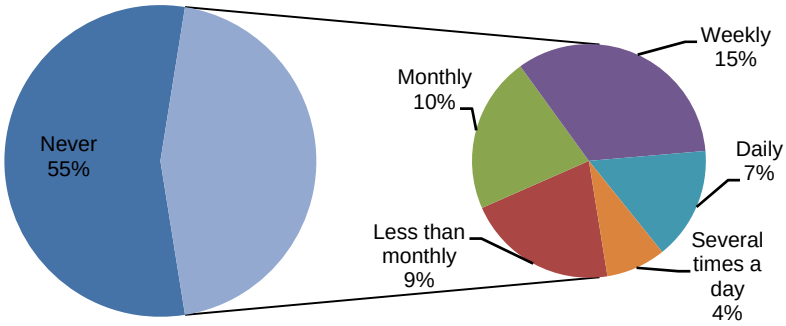
Listening to a radio station online: The Internet is very convenient for listening to radio stations, an activity that can be multi-tasked with other activities, like browsing. However, the survey data showed that over 80 percent of the interviewed users never listened to a radio station online, and only 4 percent did at least once per day. This may because the radio is not in general a popular source of news or entertainment in China, ranking below other media like television, print media, and the Internet itself.

Figure **4-24** Proportion and frequency of listening to a radio station online (N=1314)



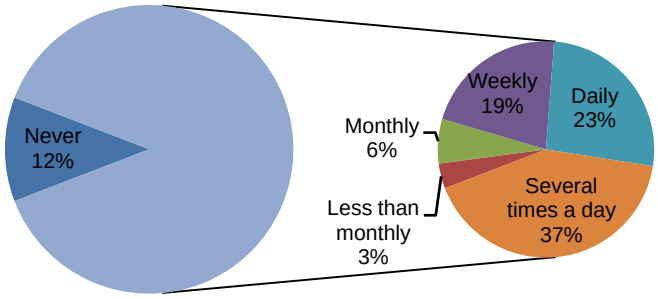
Watching TV online: In fact, watching TV online is less convenient and comfortable than watching a TV set. However, due to the development of P2P technology, it is popular to watch TV online. Generally speaking, there are mainly three reasons for watching TV online. First, it is an alternative choice when there is no TV set or when the family members choose other programs. Second, some programs not accessible through TV are indeed accessible through the Internet. For instance, some Internet users watch the entertainment channels broadcast from Taiwan on the Internet, others watch the basketball games played by Yao Ming on the Internet, while others watch news programs broadcast by CNN. Third, people watch TV online where it is inconvenient to watch a TV set (such as in the work place), but they do not want to miss the chance of watching some programs. Overall, about 45 percent of Internet users watched TV online, and over one fourth did at least weekly, which shows that the percentage and frequency of watching TV online are quite high.

Figure 4-25 Proportion and frequency of watching TV online (N=1314)



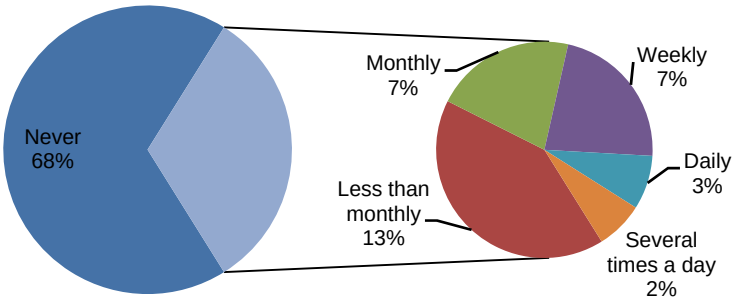
General browsing: The open structure of the Internet makes aimless browsing possible. Browsing continues to be a popular activity. An overwhelming majority of Internet users (88.3 percent) browsed the Web, and as many as 70 percent did at least daily.

Figure 4-26 Proportion and frequency of browsing the Web (N=1314)



Looking at sites with sexual content: For cultural reasons, the Chinese are usually somewhat shy when talking about sex, especially with strangers. Results here, indicating that 32.3 percent of the interviewed users visited sites with sexual content, and 12.1 percent did at least weekly. Considering that some respondents may be too shy to admit looking at sites with sexual content, the frequency is relatively high.

Figure 4-27 Proportion and frequency of looking at sites with sexual content (N=1314)



4.5.4 Online Transaction

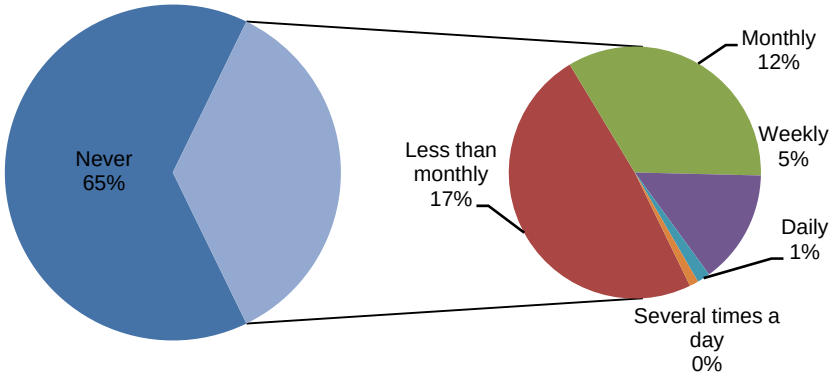
Several years ago, when online transactions were rare in China, three major reasons were usually given. First, online product information was scarce, random and out of date. Second, lacking an extensive credit card system in China, payments were difficult to make. Third, efficient delivery channels or logistics systems were absent. Today, online product information is abundant; each city has fast and inexpensive express delivery services; and bank card are also much more common. In this survey, some 70.5 percent of Internet users had a bank card. Cash on Delivery (COD) payment is also in use. All these changes have made for growth in online transactions and online purchases. The following table compares the percentages of online purchases in 2003, 2005 and 2007.

Table 4-1 Proportions of online purchase (Five cities)

2003	2005	2007
26%	25.8%	35%

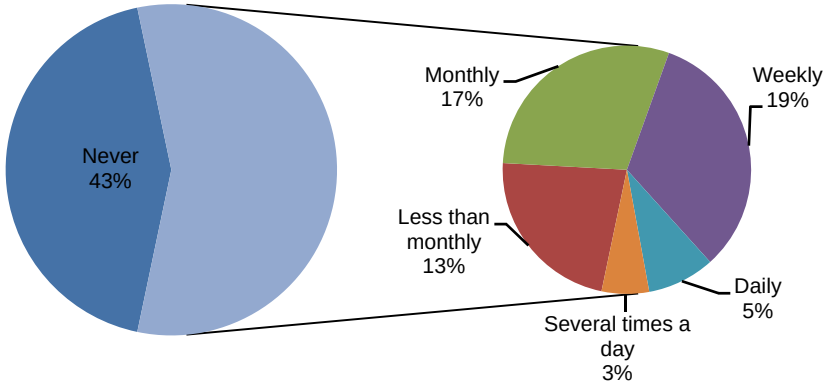
Online purchase and online sales: Generally speaking, 35 percent of Internet users have made online purchases, and 18 percent have purchased online at least weekly. But fewer people, only 13 percent, have sold things online.

Figure 4-28 Proportion and frequency of online purchase (N=1314)



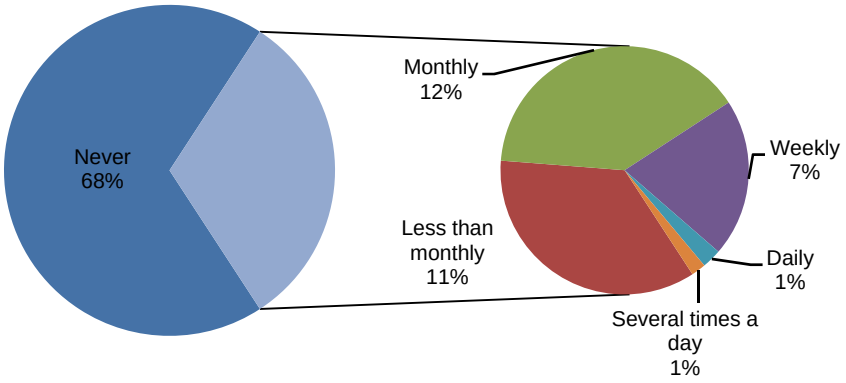
Getting information about a product: Online shopping is becoming popular in China. The percentage of Internet users who searched for online product information at least weekly (27 percent) was about equal to the number who purchased online. The percentage of Internet users who never got information about a product online was relatively low (43.5 percent).

Figure 4-29 Proportion and frequency of getting information about a product online (N=1314)



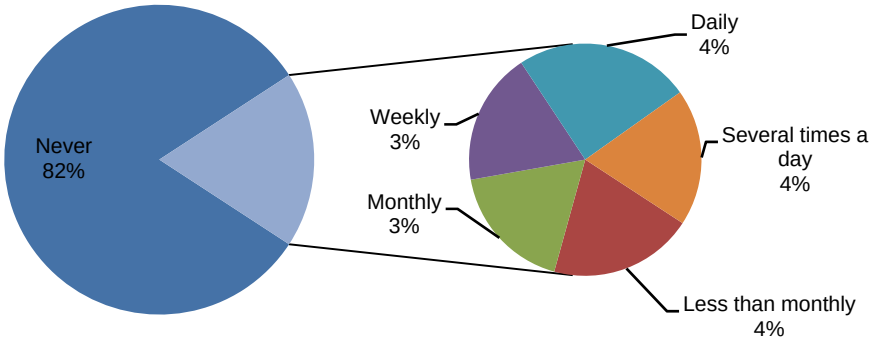
Online banking services: Concerns about the security of the Internet may keep the proportion and frequency of online bill paying and Internet banking usage low. Some 79.4 percent of Internet users never paid bills online. For those 31.6 percent of Internet users who have used online banking services, the frequency of use was very low: only 7.9 percent of users accessed online banking services at least weekly.

Figure 4-30 Proportion and frequency of using bank's online services (N=1314)



Investing in stocks/funds/bonds through the Internet: China's stock market has quadrupled within one year, and this has raised Internet users' enthusiasm for investing in stocks/funds/bonds through the Internet. Compared to the total number of Internet users, the percentage of users who invested in stocks/funds/bonds through the Internet was low--only 18.4 percent. However, considering that a small minority of Chinese people has ever invested in stocks/funds/bonds even offline, this percentage was not that low.

Figure 4-31 Proportion and frequency of invested in stocks/funds/bonds through the Internet (N=1314)

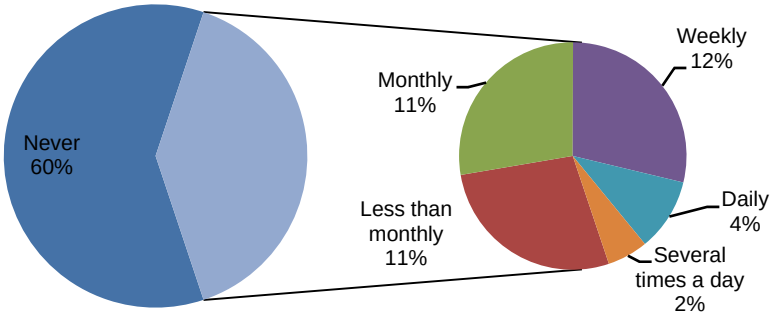


4.5.5 Online Learning

The Internet also provides a very good platform for study.

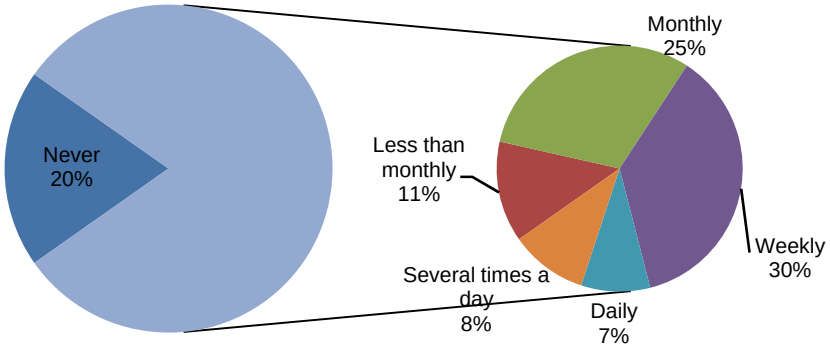
Online translation: About 40 percent of Internet users used translating tools, and 17.8 percent did so at least weekly. This demonstrates that many Internet users study foreign languages or access non-Chinese language online content.

Figure 4-32 Proportion and frequency of doing online translation (N=1314)



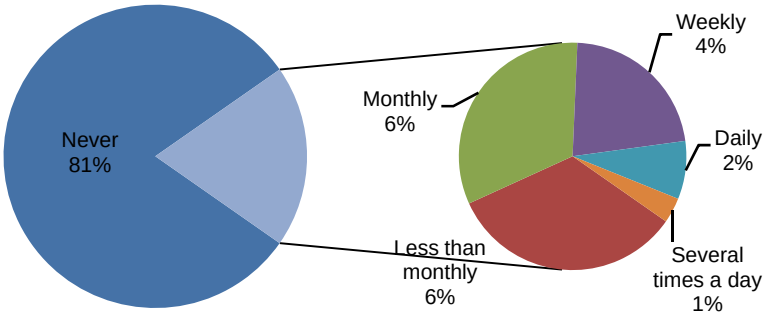
Getting information for school related work online: Among interviewed users, 25.8 percent were students. The percentage of student Internet users who got information for school related work through the Internet was very high, more than 80 percent. Over 35 percent of student Internet users did so at least weekly. In China, especially in colleges or universities, some teachers require students to "hand in" their homework via the Internet. So the students have to search online to get information for school-related work.

Figure 4-33 Proportion and frequency for student Internet users to get information for school related work online (N=339)



Participating in distance learning for an academic degree or job training online: Approximately 20 percent of Internet users participated in distance learning for an academic degree or job training online. On the one hand, this percentage may appear quite low, particularly when compared with students who get information for school related work online; on the other hand, there are not many services online for distance learning and job training, and this, rather than lack of user interest, may account for the low proportion.

Figure 34 Proportion and frequency of participation in distance learning for an academic degree or job training online (N=1314)

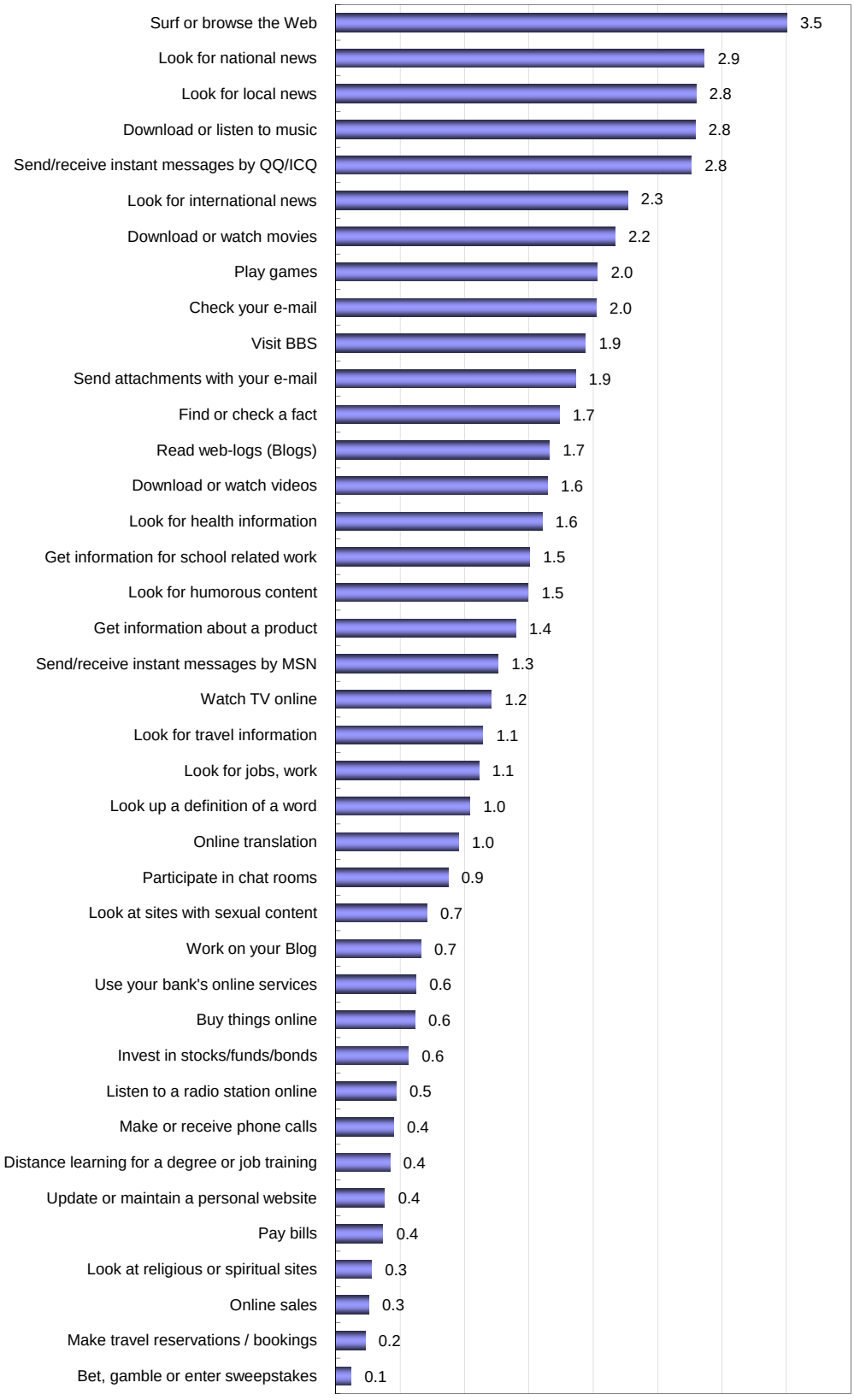


In the questionnaire, we classified the frequency of accessing a particular function or content type into five levels: 0 means that none of the interviewed users use this function or content, 1 means that the average frequency of use is less than monthly, 2 at least monthly, 3 at least weekly, 4 daily, and 5 several times per day. The following figure shows the average usage of each online activity.

Overall, the most frequent online activity is general browsing, which means surf online without intending to do something, and its average use exceeds weekly (3.5). Other activities whose frequencies are close to weekly are: searching for national and local news, downloading or listening to music online, and sending or receiving instant messages by QQ/ICQ (approximately 2.8). Following these are: searching for international news, downloading or watching movies online, playing games online, and checking email.

The most frequent online activities of Chinese Internet users are still to read news and to access entertainment. Within news reading, people pay more attention to national and local news than international news. We will see from Part Seven of this report that the most popular content read was still entertainment news.

Figure 4-35 Online Activities



4.6 Frequently Visited Web Sites

In our questionnaire, we required the interviewees to list the two Web sites they used most frequently. According to our analysis, the preferred Web sites are all Chinese. The favorite is still www.sina.com.cn, at 43.2 percent, and second is www.baidu.com at 39.1 percent. For the first time in our survey results, Baidu has surpassed Sina in people's "most favorite" list. Some of Baidu's increase in popularity is probably as a search engine, and a gateway to other online content.

Table 4-2 Frequently visited Web sites

	First List (N＝1193)	Second List (N＝1040)
1	Baidu (26.7%)	Sina (18.1%)
2	Sina (25.1%)	Sohu (13.7%)
3	Sohu (9%)	Baidu (12.4%)
4	163 (7.7%)	163 (10%)
5	Yahoo (4.4%)	Yahoo (7%)
6	Google (3.1%)	Google (5%)

4.7 Search Engines

The role of search engines is becoming much more important as the volume of online content grows. Today, 78.3 percent of Internet users have used a search engine, while 21.7 percent have never used a search engine. Since 2003, as the table below shows, the percentage of search engines users in the five cities (Beijing, Shanghai, Guangzhou, Chengdu and Changsha) has grown steadily and quickly.

Table 4-3 Comparison of the proportions of using search engines (Five cities)

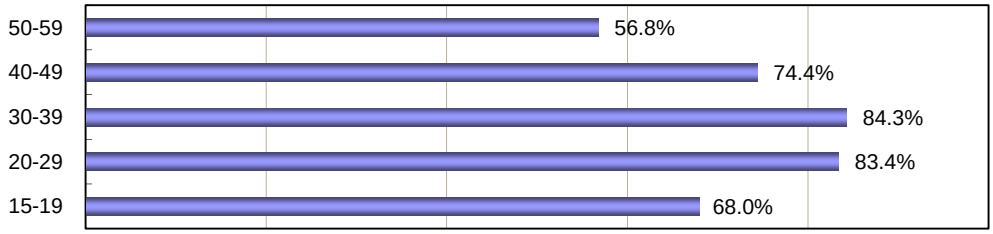
2003	2005	2007
43.8%	58.4%	79.3%

4.7.1 Who Uses Search Engines?

The likelihood of using a search engine depends on a user's age, gender, education, income, Internet experience and duration of Internet use. Some 80.7 percent of male users used a search engine, compared to 75 percent of female users. Among the different age

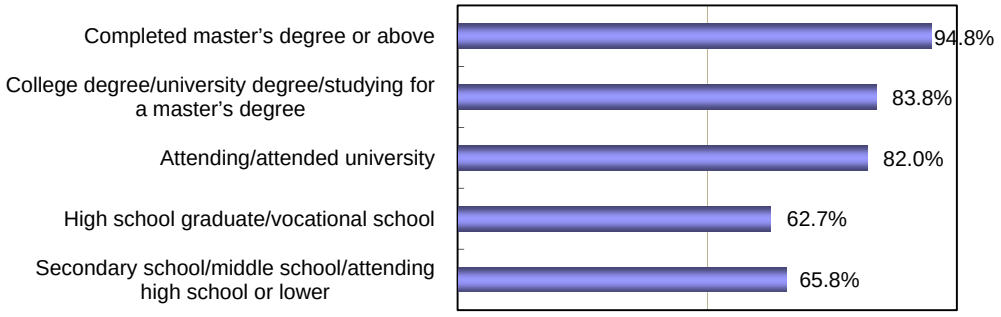
groups, the percentages of users aged below 20 years old and above 50 years old who used a search engine were relatively low, while the percentage of users aged between 20 and 39 years old who used a search engine was well over 80 percent. The table below shows the age breakup of users accessing a search engine:

Figure 4-36 Age difference in using a search engine (N=1314)



The higher a user's education level, the more likely he or she is to use a search engine. Among users with a master's degree or above, the percentage of those who used a search engine reached almost 95 percent, while among users with a middle school diploma or a high school diploma, only about 65 percent used a search engine.

Figure 4-37 Education difference in using a search engine（N=1314）

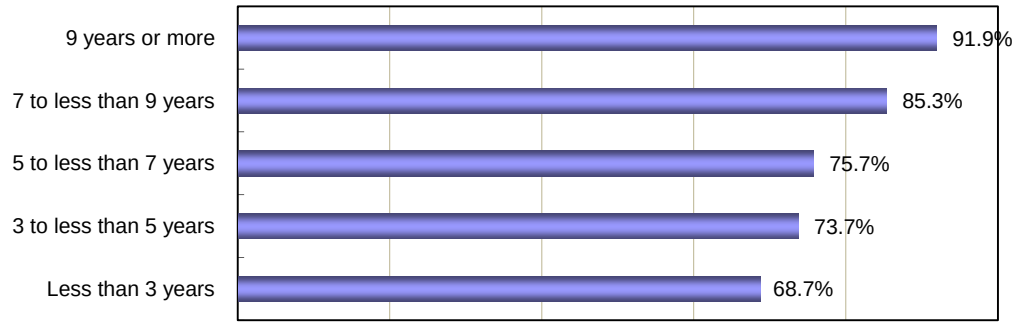


Income also matters: the higher a user's income, the more likely he is to use a search engine. Over 90 percent of users with an income of over 3,000RMB used a search engine, while less than 75 percent of users with an income of under 1,000RMB or no income used a search engine.

Figure 4-38 Income difference in using a search engine (N=1314)

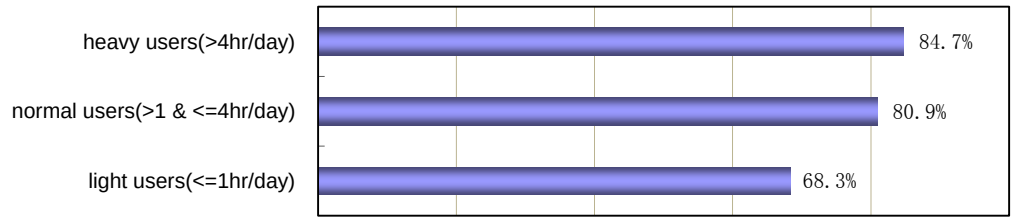
As shown our earlier reports, Internet users with more Internet experience are more likely to use the information function rather than the entertainment function of the Internet. The same holds true of using search engines: the more years a user has been online, the more likely he is to use a search engine. Among those with over 9 years of Internet experience, 92 percent have used a search engine, while less than 70 percent of those with less than three years of Internet experience have used a search engine.

Figure 4-39 Difference in using a search engine in terms of Internet experience (N=1314)



The proportion of heavy Internet users who used a search engine is also significantly more than that of light Internet users. Among users who used the Internet more than 4 hours per day, approximately 85 percent used a search engine, while the proportion of those who used the Internet less than 1 hour per day was less than 70 percent.

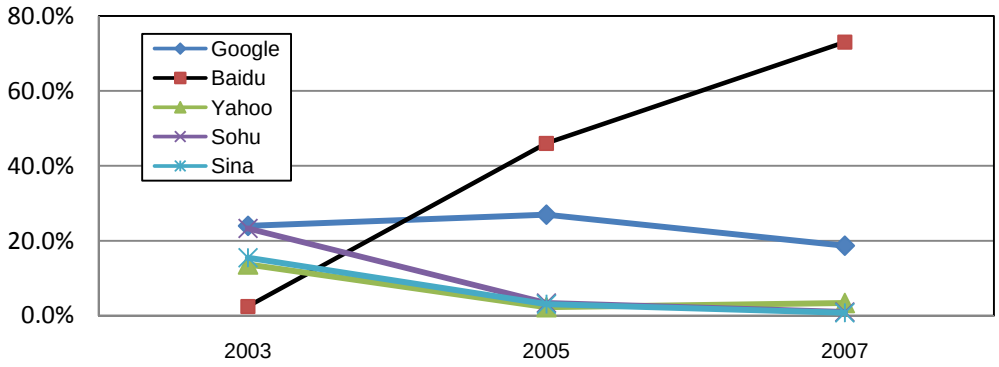
Figure 4-40 Difference in using a search engine in terms of duration of Internet use (N=1314)



4.7.2 Most Frequently Used Search Engines

The survey data in this year showed that, among the 79.5 percent of Internet users who used a search engine, Baidu (73.7 percent) was used most frequently, and Google (17.8 percent), although much lower, was second. For the five cities surveyed since 2003, the top five search engines listed by respondents are shown in the following figure.

Figure 4-41 Proportions of search engines first listed (Five cities)

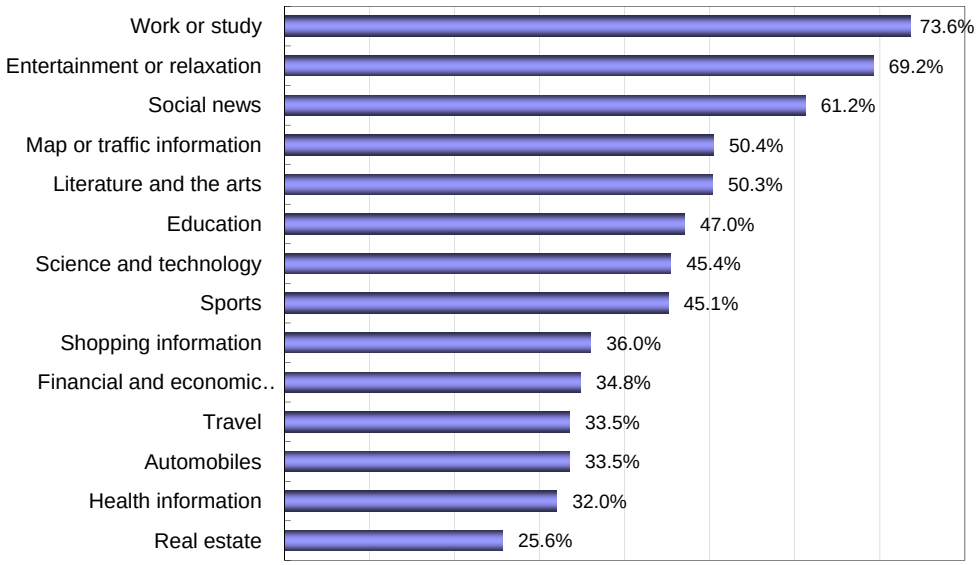


We can see that Baidu moved from last to first spot from 2003 to 2005. The percentage of Internet users who first listed Google also increased to 27 percent in 2005 from 24 percent in 2003. However, during the last two years, while Baidu has strongly increased its lead in the share of the search engine market, the share of Google has significantly decreased, and the percentage of users using other search engines has reduced to almost negligible levels.[1]

4.7.3 Information Searched for on a Search Engine

In contrast to 2005, most Internet users in 2007 said they searched for information related to work or study (74.5 percent). The next most frequently sought out categories of information related to entertainment or relaxation (70.2 percent), and the lowest was information on real estate (25.4 percent). In 2005, 67.9 percent of Internet users searched for entertainment or relaxation information, and 56 percent searched for work or study information.

Figure 4-42 Online information searched for on a search engine (N=1029, multiple choices)

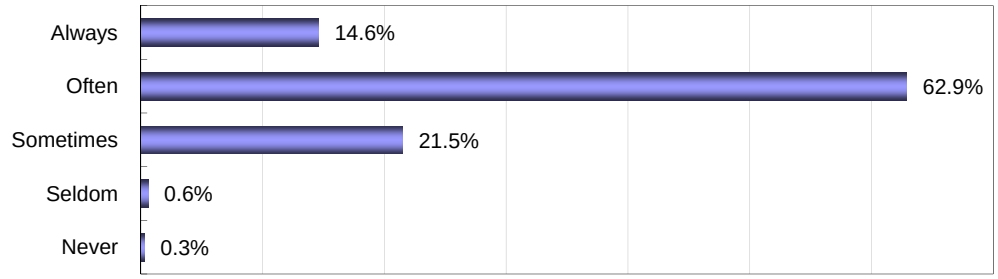


1. In the English report released at the end of 2005, we made a detailed demographic comparison between Baidu and Google users, and discussed the reasons for the changes in market share of the two. Please refer to http://www.wipchina.org/ for further details.

4.74 Degree of Satisfaction with Search Engines

Chinese searchers are very satisfied with the results of their search experience. Statistical results show that an overwhelming majority of Internet users are satisfied with search engines. Some 77.5 percent of Internet users reported they always or often could find what they wanted, 21.5 percent sometimes could find what they wanted, while only 0.9 percent said they seldom or never could find what they wanted.

Figure 4-43 Whether Internet users can find what they want when using a search engine (N=1029)



In Part Four, we discussed how people are using the Internet in urban China. With development of new technology, Internet access in China has become cheaper and faster. Most Internet users (80 percent) use monthly paid broadband Internet at home. Internet users are going online mainly for reading news, especially for infotainment. When the Internet was introduced to China, it was supposed to be an information highway but till now, it has remained as “entertainment highway” and a platform for interpersonal communication (used relatively rarely for work and study). The positive findings show that with the length of Internet experience growth, more people have start to use search engine, mostly to use Chinese Baidu.com, to seek information.

PART FIVE

THE INTERNET AND OTHER MEDIA

People depend on a variety of mass media sources for their information. As a new information source in China, the Internet is introducing new content to users and new ways to access that content. This is already having an impact on the use of traditional media in China.

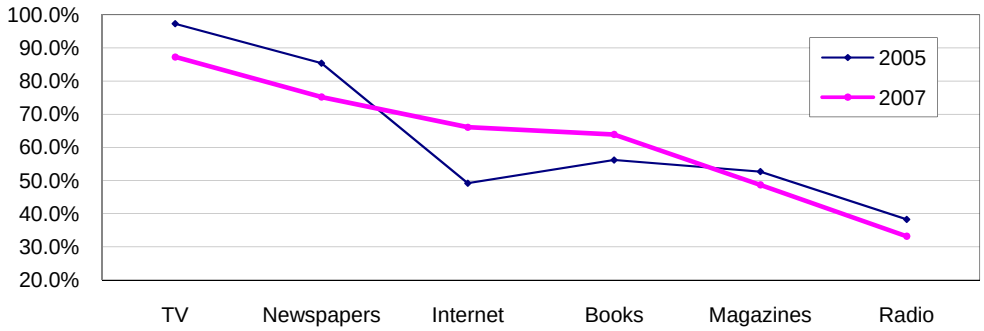
5.1 Media Use

In this section, we explore the kind of impact the Internet is having on media consumption in China.

5.1.1 Media Penetration Rate

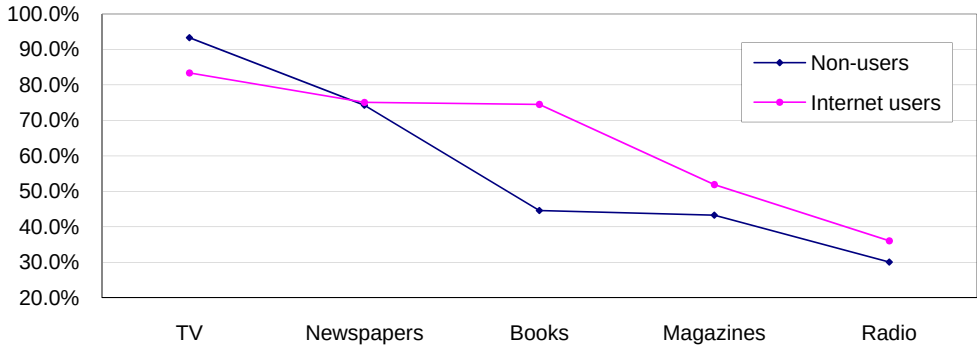
Television and newspapers are the most popular forms of media in China. Some 87.3 percent of all the interviewees watched television, and 75.2 percent read newspapers. But compared to the survey results in 2005, the number of those who watch TV or read newspapers has dropped about 10 percent over the last two years, while the number of those who use the Internet is on the rise of 17 percent. The penetration rate of the Internet increased to 66.1 percent, surpassing the number of those who read books, and moving the Internet into the spot as third most popular form of mass media.

Figure 5-1 Comparison of media penetration rates in 2005 and 2007



Internet users and non-users differ significantly in all forms of their media consumption, except for reading newspapers. The proportion of Internet users who watched television was significantly lower than that of non-users, while the proportions of Internet users who read books were significantly higher than those of non-users.

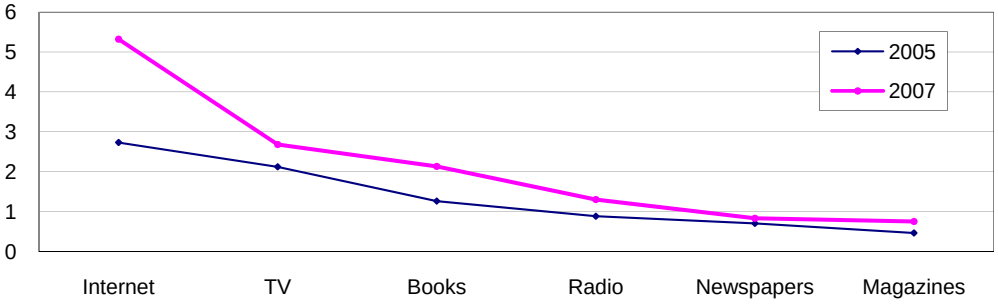
Figure 5-2 Internet use and media penetration (N=1994)



5.1.2 Duration of Media Use

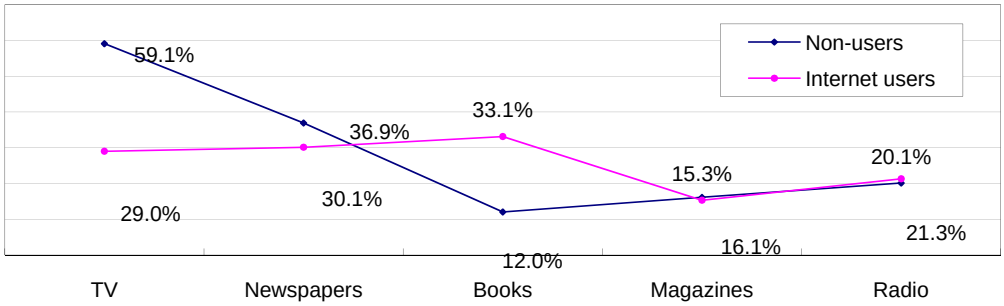
Although more people watch TV than use the Internet, Internet users spend more time online than TV watchers spend on TV. Overall, people have increased the amount of time they spent consuming media. Time spent online has increased the most, and only time spent reading newspapers has decreased.

Figure 5-3 Comparison of the average time spent on media use (Mean)



Internet users spend less time watching television and more time reading books than non users do. Some 59.1 percent of non-users spent at least three hours per day watching television, compared to 29 percent of users. Some 12 percent of non users spent at least two hours per day reading books, compared 33.1 percent of users. Some 36.9 percent of non-users spent at least one hour per day reading newspapers, compared to 30.1 percent of users. These significant differences may also have something to do with demographics: Internet users are more likely to be younger and higher educated.

Figure 5-4 Comparison of heavy users of other media among Internet users and Internet non-users



5.2 The Functions of the Media

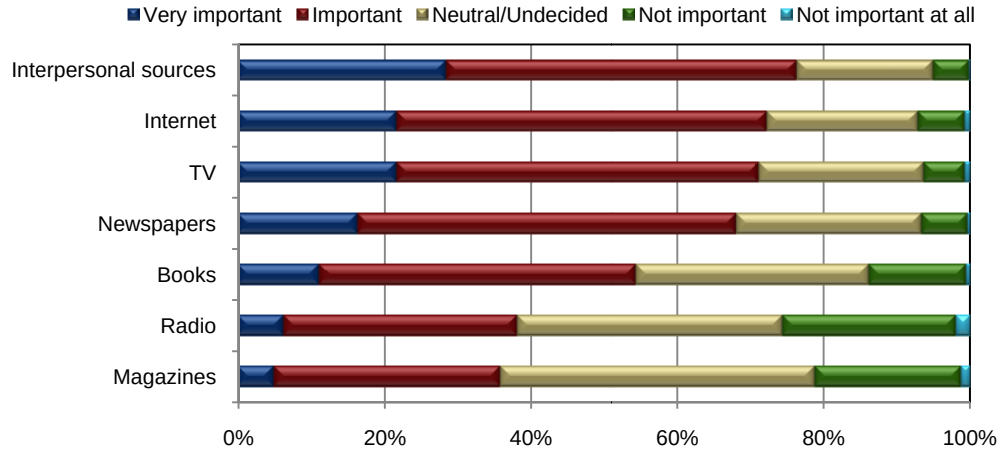
Generally speaking, media provide both information and entertainment. How are traditional and new media faring in these dual functions? And what does interpersonal communication as a news source throw into the mix?

5.2.1 The Role of Media as Information Sources

Some 71.9 percent of the interviewees believed that the Internet was an important information source. Some 70.2 percent of TV viewers and 68.2 percent of newspaper readers agreed TV and newspapers were important or very important. Some 55.2 percent of people believed that books were an important information source. Radio and magazines were deemed much less important as information sources, with fewer than 40 percent of respondents saying they considered them important.

Although traditional mass media play a crucial role in providing information, people still believe that interpersonal sources are the most important way for obtaining information. Overall, 76 percent of the interviewees agreed that interpersonal sources were an important information source.

Figure 5-5 The importance of different media in providing information



Both Internet users and non-users agree that interpersonal sources are an important information source. Among Internet users, however, the Internet is considered even more important as an information source.

Overall, Internet users value the Internet and books more than non users do for obtaining information, while non-users value television, newspapers and radio more than users. Internet users and non-users are not significantly different in the perceptions of the importance of interpersonal sources and magazines in obtaining information.

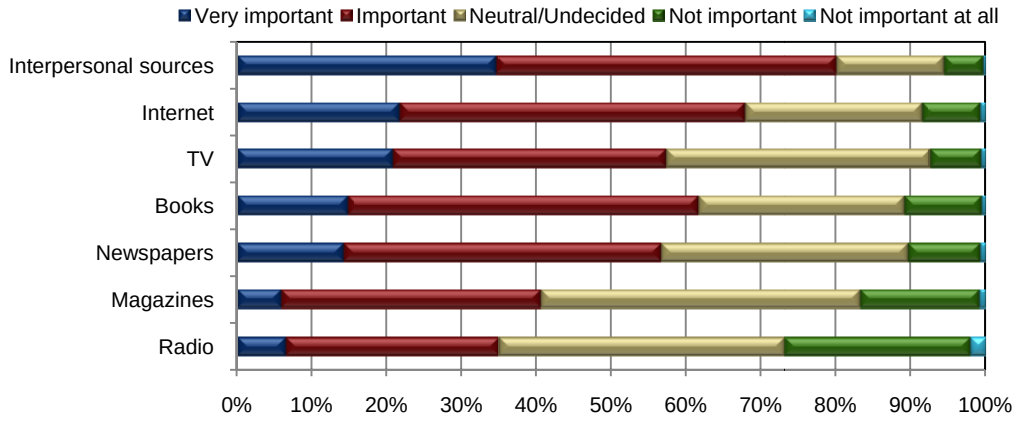
Figure 5-6 The importance of different media in providing information by Internet users and non-users

5.2.2 The Role of Media as Entertainment Sources

Most people turn to others, rather than to the media, for their entertainment. But when they do turn to the media, they turn first to the Internet. Some 67.3 percent of the interviewees believed that the Internet was an important or even very important entertainment source, compared to 62.1 percent of people agreed that books were important or very important, and 14.7 percent who believed that for TV. Some 56.6 percent of people believed that newspapers were an important entertainment source, while

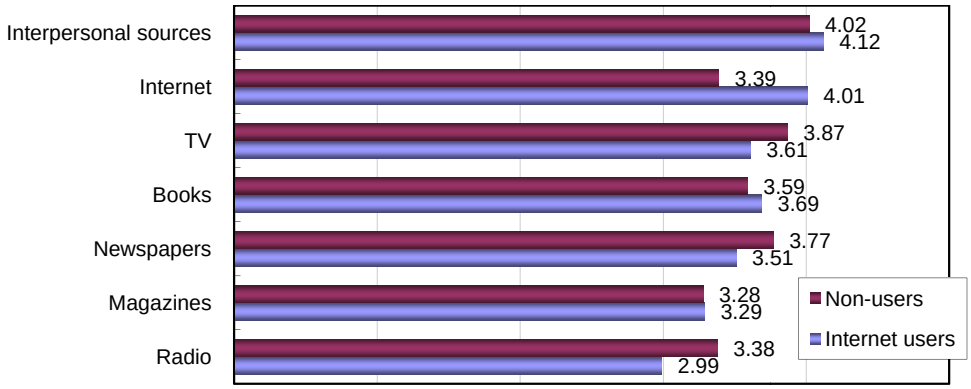
the percentages of people who agreed that magazines and radio were important for entertainment were relatively low, and were 40.5 percent and 34.9 percent, respectively.

Figure 5-7 The importance of different media as entertainment sources



Internet users pay more attention to the importance of the Internet and books in obtaining entertainment than non-users, while non-users pay more attention to the importance of television, newspapers and radio than users.

Figure 5-8 The importance of different media as entertainment sources by Internet users and non-users



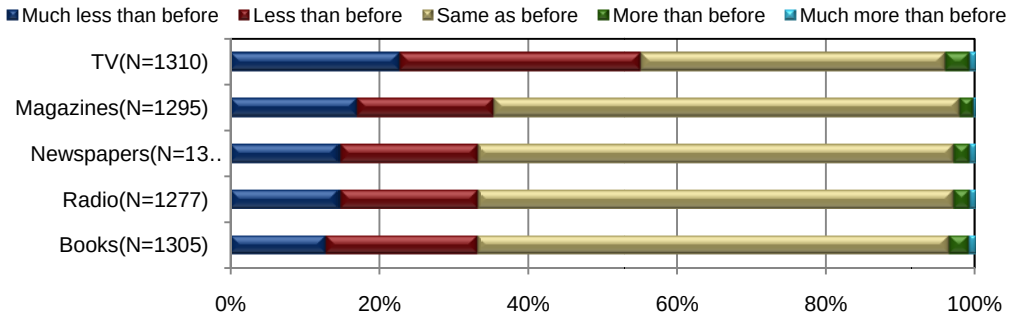
To summarize, interpersonal sources are still considered the most important way to obtain both entertainment and information. Internet users favor the Internet next. Generally, people agree that television and newspapers are about equally important for obtaining information or entertainment. Books are favored for entertainment. The importance of magazines and radio in providing information and entertainment is lower than other media.

5.3 The Influence of the Internet on Media Use

It appears that the Internet has a major impact on the use of traditional media, especially

on television consumption. Some 22.5 percent of Internet users said they greatly reduced the amount of time they spent watching television in favor of the Internet, and another 32.5 percent said they reduced TV watching somewhat. Magazine reading also suffered; some 35.2 percent of the interviewed users said they spent less time on magazines since using the Internet. Similarly, time reading newspapers, listening to the radio and reading books, were all down with more than 30 percent.

Figure 5-9 The influence of the Internet on the use of traditional media



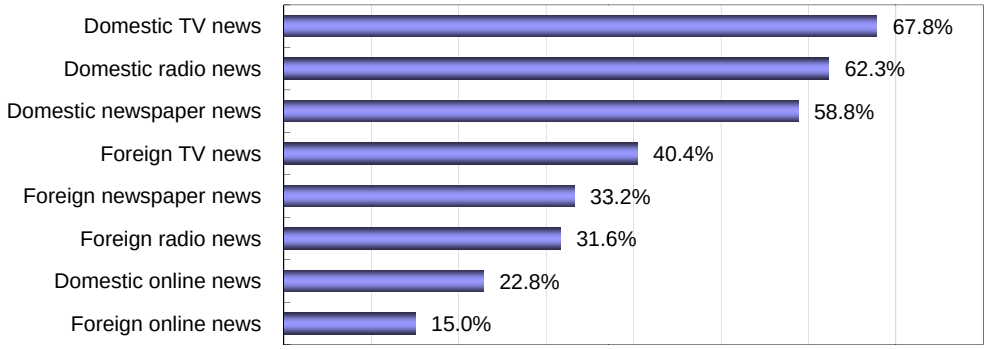
5.4 Media Trust

We also sought to measure people's trust in news delivered to them from: television, radio, newspapers and the Internet. We classified 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.

People's trust in domestic media news is higher than their trust in foreign media news. People trust – in order -- television, radio, newspapers and the Internet. Specifically, 67.8 percent of people trust domestic television news; 62.3 percent trust domestic radio news; 58.8 percent trust domestic newspaper news; 40.4 percent trust foreign television news; 33.1 percent trusted foreign newspaper news, and 31.6 percent trusted foreign radio news.

Respondents trust online news far less than other media.

Figure 5-10 The degrees of people's trust in various news sources



PART SIX

THE INTERNET AND INTERPERSONAL COMMUNICATION

The Internet is not only challenging traditional media, but is also bringing an interpersonal communications revolution to its users. In the United States, popular websites such as My Space and YouTube provide people with a multimedia platform for self-presentation and socialization. The same thing is happening in China with the appearance of big online communities such as Tianya, Maopu, Baidu Tieba; and online communities on portal websites, such as Sina, Netease and Sohu. People in urban China are establishing and maintaining their personalized social networks through ICTs.

The Internet is providing a new style of communication. It not only increases the frequency of communications with people they already know, but also provides people with more opportunity to develop new relationships. This may in turn change the structure of personal social networks. The Internet is becoming one of the most important tools in our daily interactions because of its relatively low cost, immediacy and interactivity.

This year's survey pays particular attention to the social impact of the Internet from an interpersonal communications perspective. We study how urban Chinese are using the Internet in their daily interactions to maintain various types of social ties, and through various kinds of Internet communication tools. Specifically, we consider daily communication among parents, children, cohabitants, siblings, other relatives, casual friends, close friends, online friends, neighbors, current colleagues/classmates/business connections, and others. We also classify computer-mediated communications into four categories: email, MSN, QQ (ICQ)[1] and IP phone communications. Because of the high penetration of mobile phones in China, we also study mobile phone communications, both via voice and text. In addition, we include more traditional communication methods, such as face-to-face and fixed phone communications. By comparing the use of these different methods to maintain different relationships, we try to present a more detailed picture of how the Internet may be changing daily interaction in China.

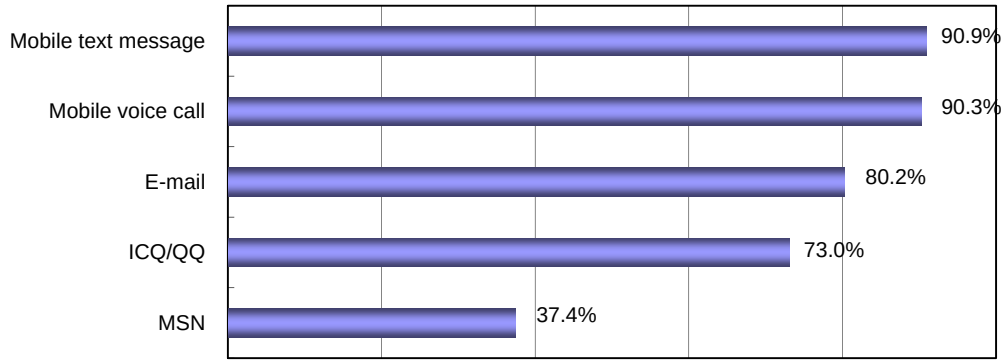
1. MSN (Microsoft Network) and QQ are communication tools for instant online chat and file transmission. MSN refers to a series of Internet based services, which includes a search engine, email (Hotmail), instant messaging, personal space (blog), and a portal with news, information and shopping. In the Chinese context, MSN is mainly used for instant messaging. QQ, a Chinese version of ICQ, meaning "I seek you", provides Chinese user-friendly online chatting service. Both are very popular in urban China nowadays.

6.1 The adoption of communications tools on the Internet and on the mobile phone

Before the emergence of ICTs, people would communicate face-to-face, by post and by fixed phone. In face-to-face communications, people express their thoughts and feelings through dialogue, countenance, gestures and other body language. But face-to-face communication can be unwieldy, as it requires temporal and physical co-presence. The adoption of postal services helped overcome the temporal and the physical constraints to some degree. However, obstacles to communications remained as posted mail is a slow and cumbersome communication tool. Fixed phones improved communications further by bridging physical separations and eliminating problems of time. That is, people could finally communicate in real time, despite great distances separating them.

With the development of ICTs, new communication tools emerged. Using mobile phones, people can communicate with others anywhere, anytime by voice or text messaging. On the Internet, people can interact across space using email, chat room, BBS, Blog, ICQ, MSN and so on. In Part Four, we examined the adoption of chat room, BBS and blog. Here, we will discuss usage of mobile voice calls, short message, email, QQ (ICQ) and MSN in seven cities. The detailed findings pertaining to these communication tools is shown in Figure 6-1.

Figure 6-1 Usage of various communication tools among Internet/mobile phone users. (Internet users N=1309, Mobile phone users N=1756)

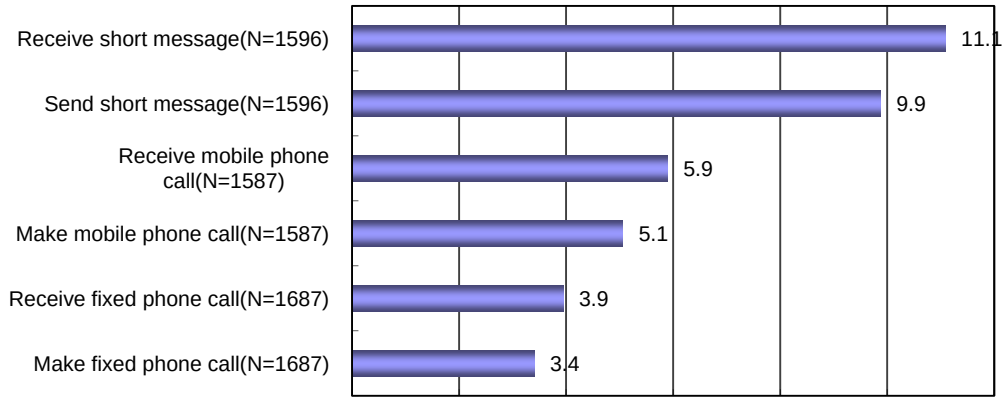


The mobile phone is the most widely used form of communication in China, both for voice calls and for text messages. The rates for personal use are 90.3 percent and 90.9 percent respectively (In our survey, we exclude the use of mobile phone for business purposes). As shown in our data, email and QQ (ICQ) have also been widely used among netizens. The usage rates are 80.2 percent and 73.0 percent respectively. In China, MSN is quickly becoming popular. Over one third of Internet users, 37.4 percent, now use MSN services. These data demonstrate that various communication tools, both offline and online, are being internalized into the daily interactions of large numbers of people in Chinese urban areas.

6.1.1 Mobile phone voice call and text message

The Ministry of Information Industry of the People's Republic of China has reported that by October 2007, the number of fixed phone and mobile phone subscribers had reached 370,683,000 and 531,447,000 respectively. In this survey, we asked how frequently people used fixed and mobile phones for voice calls, and how frequently they used mobile phones for text messaging. (Again, we only include calls and messages for personal purposes, not business). The results are shown in Figure 6-2.

Figure 6-2 Personal daily use of the fixed phone and the mobile phone



As shown above, in their personal communications, people use mobile phones more frequently than fixed phones, and on mobile phones, they use text messaging more often than voice. The average number of mobile text messages received daily is 11.1, the average number of short messages sent daily is 9.9. The average number of mobile voice calls received daily is 5.9, the average number of mobile phone calls is 5.1, the average number of fixed phone calls received daily is 3.9, and the average number of fixed phone calls made daily is 3.4.

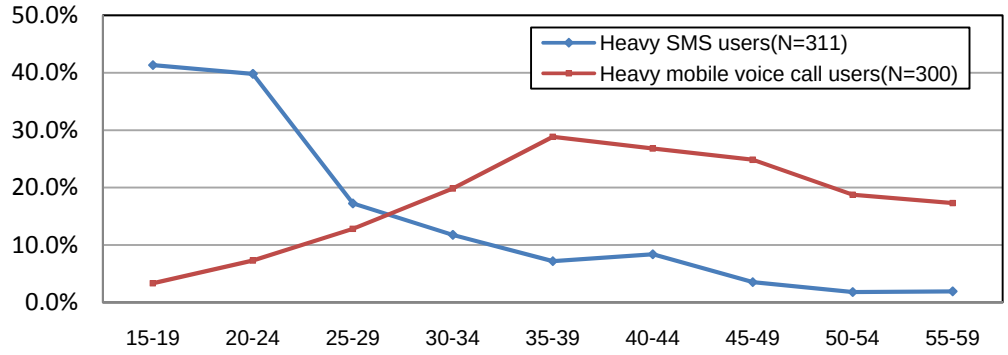
Among respondents in our survey, significantly more Internet users than non-Internet users use mobile phones. Some 87.8 percent of overall respondents are mobile phone users. But 93 percent of Internet users are mobile phone users, while only 77.8 percent of Internet non-users are mobile phone users. The rate of use of mobile phones varies by gender, age, profession, educational background and income. For example, more than 94 percent of respondents from 20 to 39 years old are mobile phone users, compared to 75 percent of respondents from 15 to 19, and 77 percent of respondents from 50 to 59. Over 90 percent of males, and 85 percent of females, are mobile phone users. The rate of use of mobile phone among student respondents (older than 15) reaches 83 percent, although it is still lower than the rate (95 percent) among non-students with a job.

The increasing number of mobile phone subscribers translates into a giant mobile phone market in China. The Ministry of Information Industry of China reported that Chinese

mobile phone users sent a total of 430 billion text messages in 2006, 41 percent higher than in 2005. In 2005, 304 billion text messages were sent, 40 percent more than in 2004. If we assume that each text message costs 0.1 RMB (0.013 USD at the current exchange rate), the market price for each text message, the revenue of text message service of China Mobile and China Unicom, the two biggest mobile service providers in China, would together reach at least 40 billion RMB (5.38 billion USD) in 2006 and 30 billion RMB (4.04 billion USD) in 2005.

As shown in Figure 6-1, over 90 percent of mobile phone users use mobile voice calls and text messages in their private lives. There are significant demographic differences among heavy users of text message and heavy users of mobile phone calls. We defined heavy users of text messages as those who sent or received more than 14 text messages and received less than 6 mobile phone calls on an average day. Heavy use of mobile phone calls was defined as those who made or received more than 10 mobile phone calls and received less than 6 text messages on an average day. Among the youngest group, those aged between 15 years and 19 years, 41.3 percent of respondents are heavy users of text messages, while only 3.3 percent are heavy users of mobile phone calls. The proportion of respondents aged 35 to 39 who use mobile phone calls heavily is the highest – about 28.9 percent. The following figure shows the details:

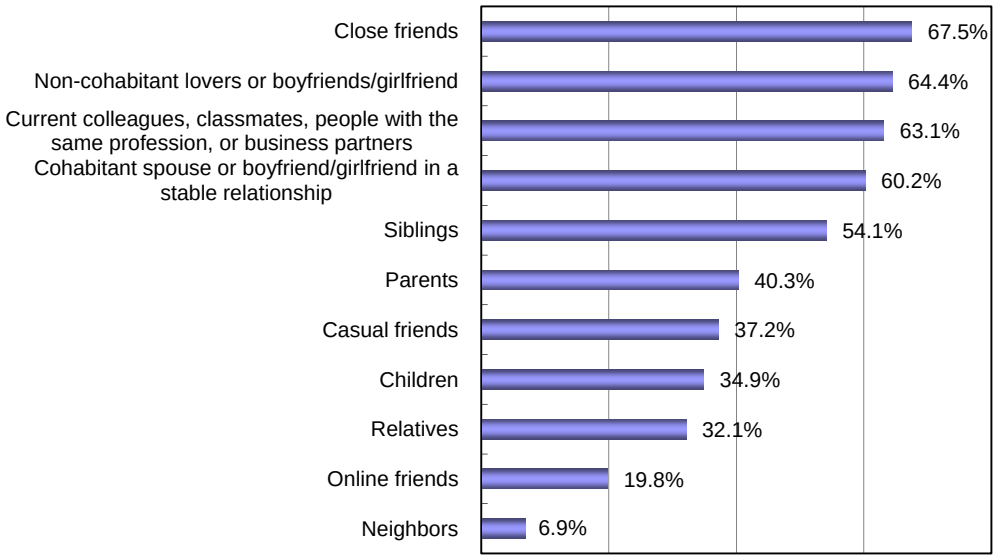
Figure 6-3 Proportion of heavy mobile phone users by age



Similarly, there are also significant differences in the number of heavy users according to gender, educational background, income and profession. The young, the less educated, the single, students, females, blue collar workers and those with lower incomes tend to send and receive text messages more often, while others tend to use mobile voice calls more often.

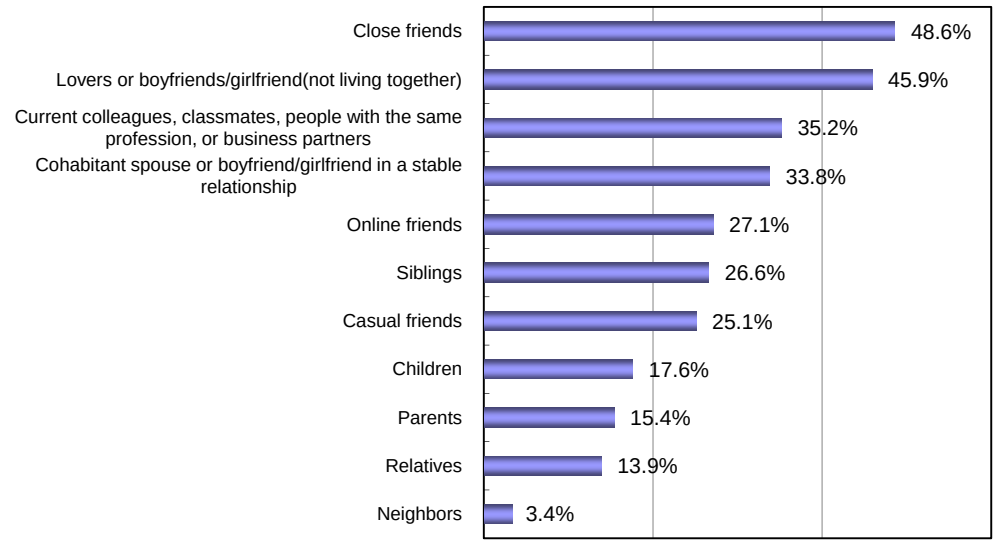
Most people, over 60 percent of those who use mobile phones, call their close friends, spouses or romantic partners, and current colleagues/classmates/business connections/people within the same profession. Mobile voice call communication is also frequently used for communication with siblings, parents, casual friends, children and relatives.

Figure 6-4 Proportion of heavy use of mobile voice calls by relationship



Although text messages are widely used to contact close friends (48.6 percent), non-cohabiting lovers or boyfriends/girlfriends (45.9 percent) text messages are used less in communications with family members than are mobile voice calls. As a whole, the number of text messages sent and received on an average day is higher than that of mobile voice calls.

Figure 6-5 Proportion of heavy use of mobile text message by relationship



The adoption of modern information communication technology challenges traditional communication modes. According to statistics from the Ministry of Information Industry, the volume of fixed phone calls during the first half of 2007 was 4.6 percent lower than the volume during the same period in 2006, the time spent on intra-city mobile calls was 35.7 percent longer than last year, the revenue of mobile communication was 17 percent

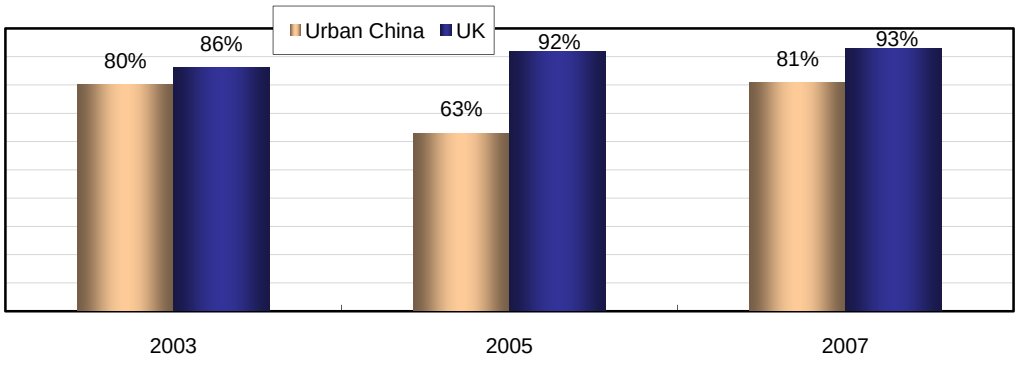
higher, and the revenue of mobile data services was 32.5 percent higher than last year.

On the one hand, the growth of fixed phone service has recently slowed, and the mobile phone is substituting for the fixed phone in many ways. But on the other hand, fixed phone line providers are making up for lost revenue by providing Internet access, particularly broadband. Up till to the end of first half of 2007, The number of broadband subscribers had reached 59.432 million, among whom 7.534 million were new subscribers. The revenue from digital services of fixed phone line providers was 39.1 percent higher than in the same period the previous year.

6.1.2. Email

In western countries, email is the most widely and frequently used communication tool on the Internet. In China, email has always been less popular than in the west, although its rate of use has fluctuated in recent years. According to our survey in 2003, most Internet users were young, well-educated males with relatively high incomes. The rate of use of email among Internet users then was 80 percent. In 2005, a large number of young people began to use the Internet for the first time, turning mostly to entertainment, not email as their major online pursuit. The percentage of Internet users using email actually dropped from 80 percent in 2003 to 63 percent in 2005. By 2007, however, users were turning again to email, and the percentages of users was rising. According to this year's survey results, 81 percent of Internet users are using email. However, as noted, this remains low compared to rates of use in Western countries. The figure below illustrates the differences in email use among Chinese and UK Internet users.

Figure 6-6 Rates of using email in urban China and UK (OxIS 2007 P.53) in 2003, 2005 and 2007



As for demographic differences, Internet users with higher educational backgrounds are more likely to use email than less educated users. Users who are single are more likely to be email users (84 percent) than married users (74.1 percent). The rates of email use among different age groups also vary significantly. The percentages among users aged between 20 and 34 are the highest, all over 80 percent, and the percentage among the oldest group (50 to 59) are the lowest, at only 53.7 percent. In addition, Internet users who are students, white collar workers, professionals, senior executives or employers are more likely to use email than blue collar workers, the jobless and the laid-off, the retired or

full-time housewives. The percentage of email users among the laid-off, the retired or full-time housewives is the lowest, at 57.1 percent. The figures below show the differences.

Figure 6-7 Email users by educational status (percentages)

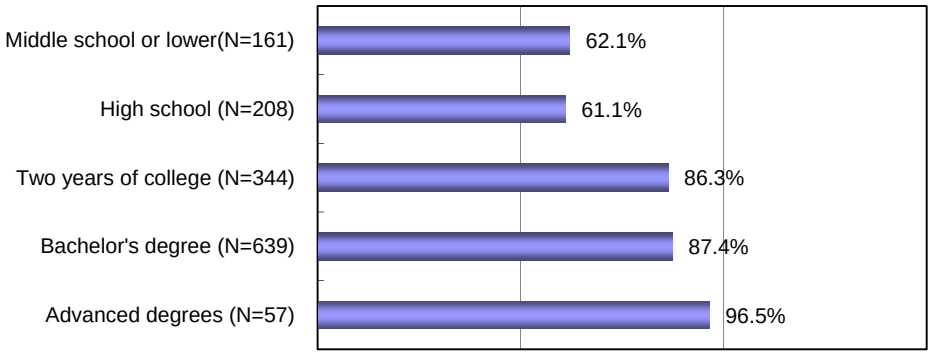


Figure 6-8 Email users by age group (email users=1052, Sig.=.000)

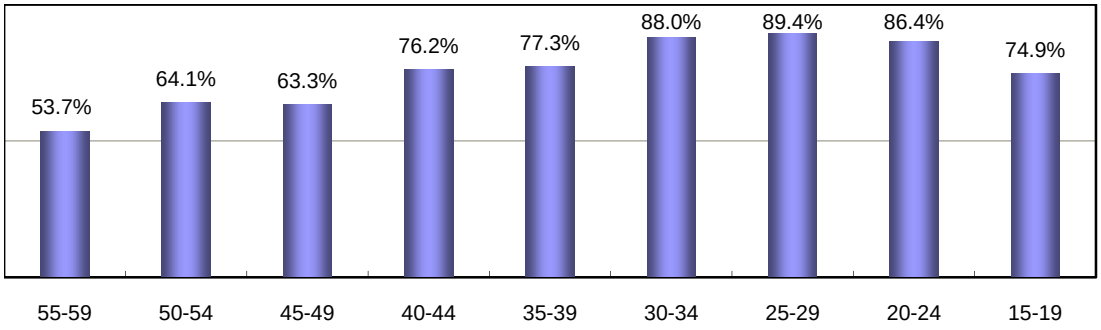
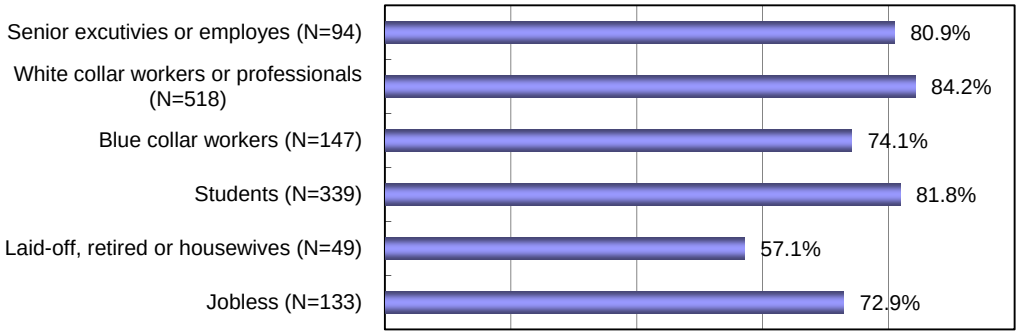


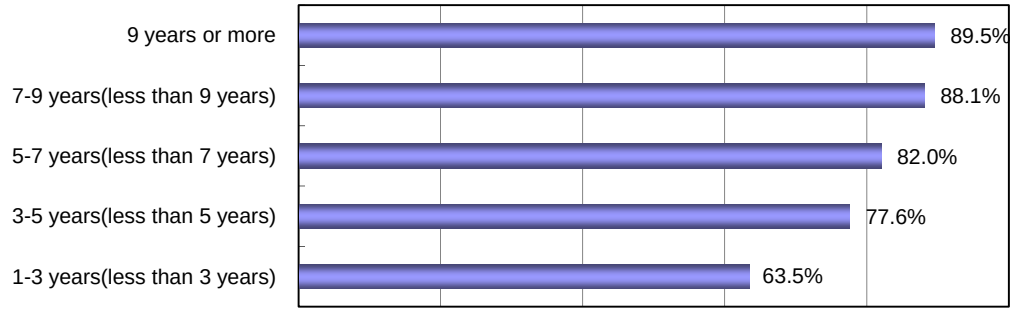
Figure 6-9 Email users by employment status (percentages) (N=1052)



Further, veteran netizens are more likely to use email than those with less online experience. Nearly 90 percent of Internet users with over seven years of experience are email users, while only 63.5 percent of Internet users with 1 to 3 years of online experience use email. Email also corresponds with time spent on the Internet. Internet users who spend over 4 hours per day online are more likely to be email users than those who spend less than 1 hour. These data suggest that email use will continue to grow in

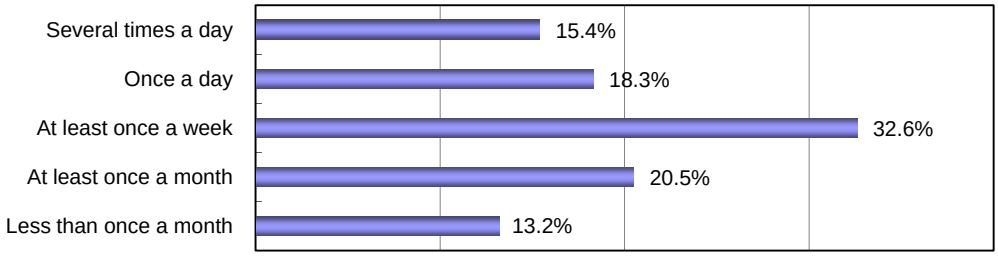
popularity in the future, as people spend more time on the Internet.

Figure 6-10 Internet experience and email use (N=1130)



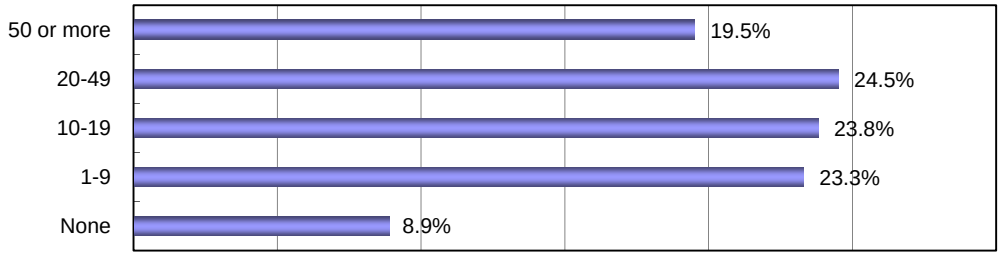
Not only is email less popular as a means of instant communication among Internet users in China, it is less frequently used than in many Western countries. For example, while 65.9 percent of email users in the US[1] use email at least once a day, only 33.7 percent of email users in China do so.

Figure 6-11 Frequency of users checking email (N=1050)



Another way to measure users' engagement with email is to count the number of email addresses they have in their address books. Nearly 9 percent of email users have never saved any email address, nearly one fourth of email users have saved 1-9 email addresses, and about half of email users have saved 10-49 email addresses. The paucity of saved email addresses suggests a relatively low engagement with email as a means of communication. In particular, it suggests a low degree of repeat communications, as these would typically involve (if not require) saving email addresses.

Figure 6-12 Distribution of the number of saved email addresses (N=1016)

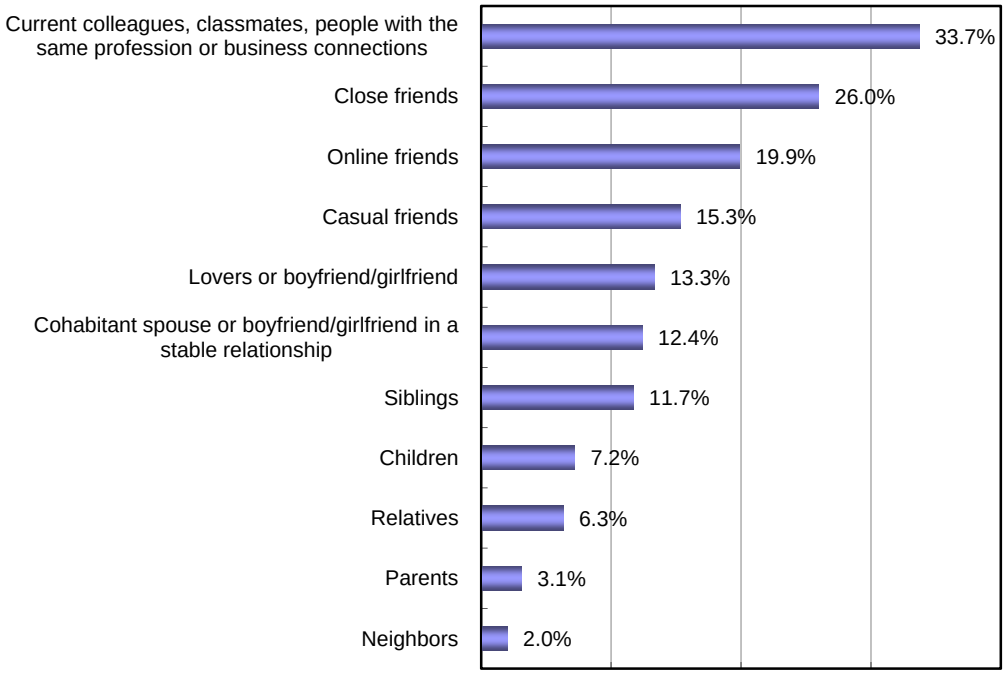


As discussed above, people communicate online with many different kinds of friends, relatives, and colleagues. In this study, we found email communication to be more common among impersonal or professional acquaintances than among personal friends

1.USC Annenberg School, Center for the Digital Future: *The 2007 Digital Future Report.* P.85

and family. Some 34 percent of Internet users frequently use email to communicate with their current colleagues, classmates, business connections and people within the same profession, 26 percent with close friends, and 20 percent with online friends. In China, few people frequently use email for communications with neighbors, parents, relatives and children.

Figure 6-13 Proportion of email users who frequently use email to communicate with different social relations



6.1.3 MSN

MSN is a relatively new Internet communication tool in China, and its popularity is increasing. We reported in 2005 that 24.4 percent of Internet users are MSN users. Our survey in 2007 reveals that the proportion of Internet users who use MSN has risen to 37 percent. Almost one fifth of Internet users use MSN at least once a day.

Better educated Internet users are more likely to be MSN users. Internet users aged 25 to 29 are most likely to be MSN users, and, generally, the rate of MSN usage decreases as age increases. However, the rate of MSN use among Internet users aged 15 to 24 is lower than among those aged 25 to 39. Employment status is another factor affecting the use of MSN. White collar workers, professionals, senior executives and employers are more likely to use MSN than blue collar workers, the retired, the laid-off, full-time housewives and the jobless. In addition, single Internet users are more likely to use MSN (42.7 percent) than married Internet users (31.5 percent).

Figure 6-14 Use of MSN among Internet users by educational background (percentages) (N=1304)

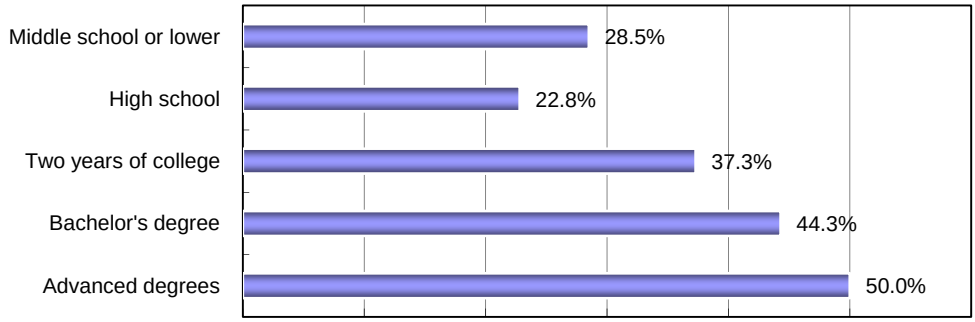


Figure 6-15 Use of MSN among Internet users by age (percentages)

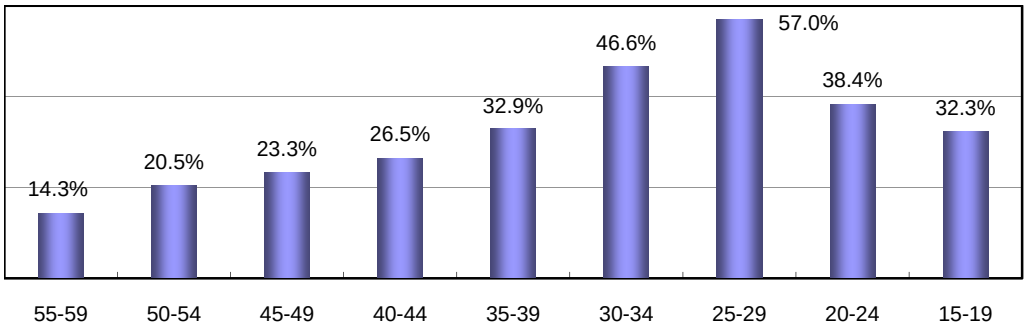
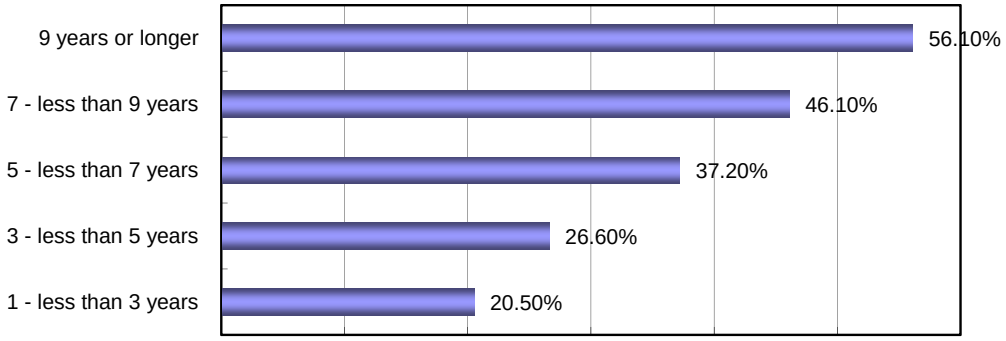


Figure 6-16 Use of MSN among Internet users by employment status (percentages) (N=474)

The use of MSN is also significantly related to the length of Internet experience. The more years of experience users have, the more likely they are to be MSN users. The chart below illustrates these findings.

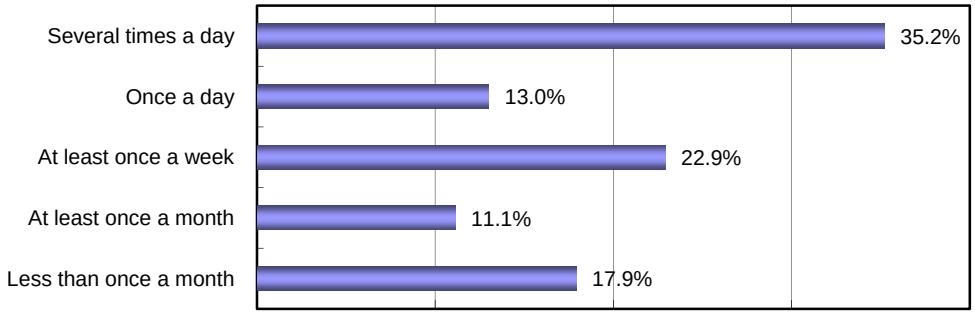
Figure 6-17 Use of MSN and length of Internet experience (N=1124)



Use of MSN also correlates with time spent on the Internet. The more hours a day users are online, the more likely they are to be MSN users. In our report, we define heavy Internet users as those who spend over 4 hours a day on the Internet. It is found that 53.4 percent of heavy Internet users are MSN users. Among Internet users who spend no more than 1 hour a day on the Internet, the rate of the use of MSN is only 23.2 percent.

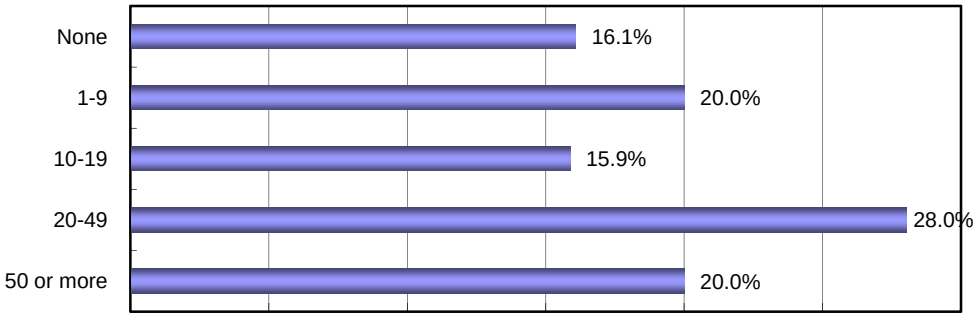
Although fewer users in China use MSN than email, they use MSN more frequently. Some 48.2 percent of MSN users use MSN once or several times a day.

Figure 6-18 Frequency of using MSN (N=488)



As with email, the number of saved MSN addresses is one measure of users' engagement with the application. About one fifth of MSN users have saved more than 50 MSN contacts, one fifth of MSN users have saved 1-9 MSN contacts, 44 percent of MSN users have saved 10-49 MSN contacts, and 16 percent have never saved any MSN contacts.

Figure 6-19 Distribution of the number of saved MSN addresses (N=485)



While email is more widely used within professional or impersonal relationships, MSN is more popular for communicating with close friends. 44.3 percent use MSN for communication with close friends, the single largest group among MSN users. Some 35 percent of users frequently use MSN in their communications with online friends. Detailed information is provided in Table 3 and Figure 21.

Figure 6-20 Proportion of users who frequently use email and MSN to communicate with different kinds of friends (by percentage).

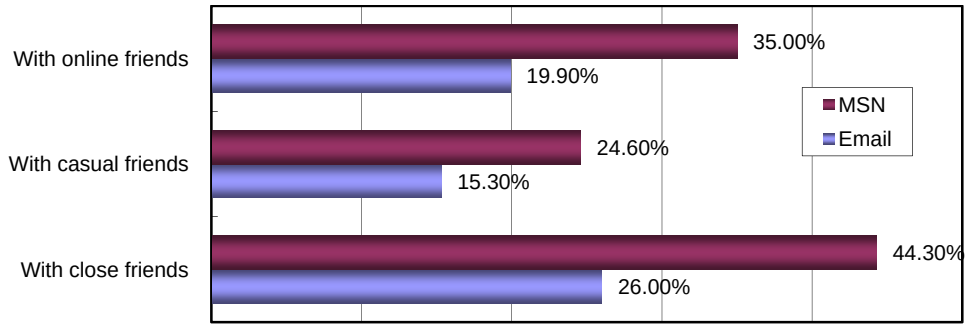
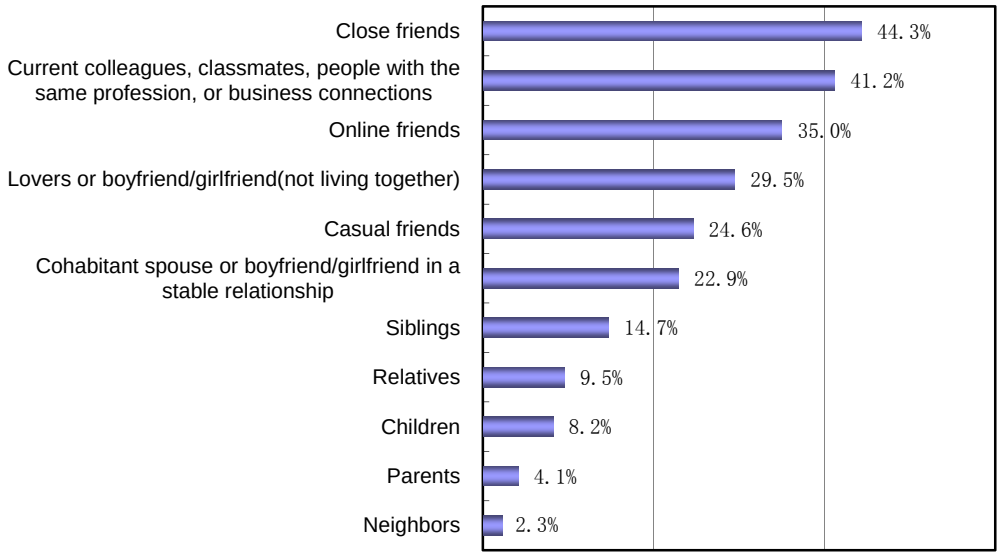


Figure 6-21 Proportion of MSN users who frequently use MSN to communicate with different social relations



6.1.4 QQ (ICQ)

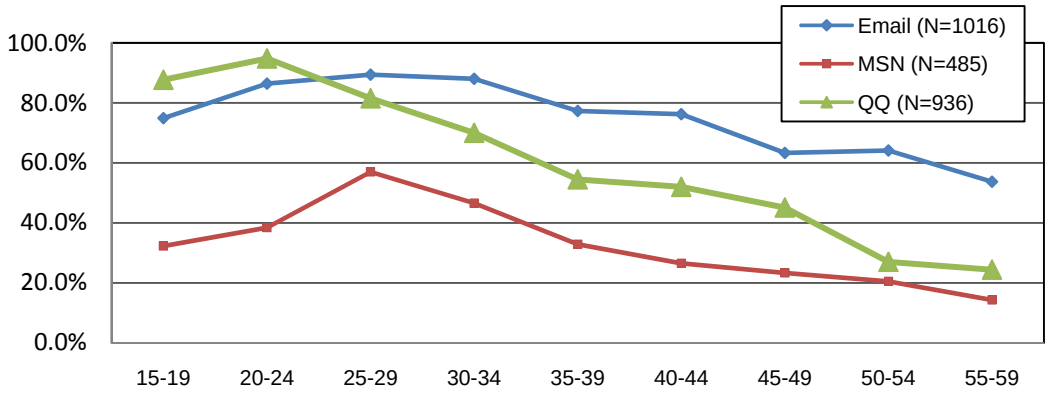
In China, QQ (also called ICQ) is the most popular instant messaging software. According to the company's most recent report, issued in the summer of 2007, the largest number of people using QQ at any given time had reached 30 million, and the total number of registered users was 270 million[1]. In this year's survey, we found that some 73

1. http://tech.163.com/07/0820/11/3MBB1LK9000915BF.html

percent of Internet users are now QQ users, up from 66.6 percent in 2005. Among QQ users, some 62.2 percent use QQ at least once a day.

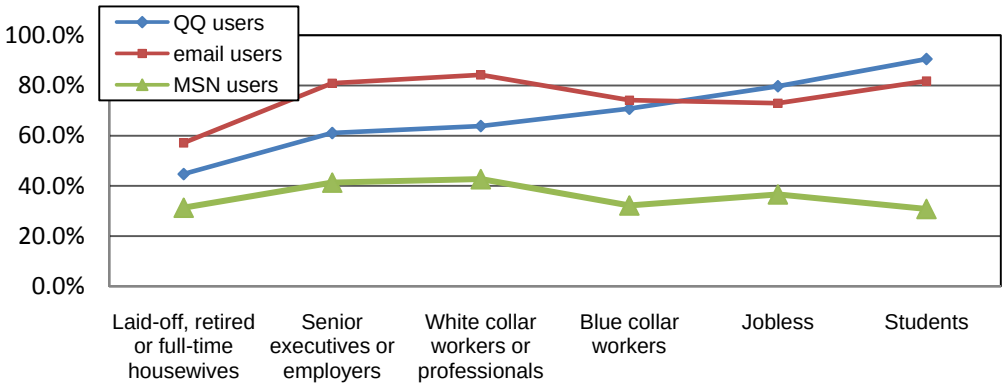
Age, employment status, marital status and educational background are important factors affecting the use of QQ. Young Internet users are more likely to use QQ, whereas older Internet users are less likely to use QQ. Among Internet users aged between 30 and 59, there is a significant decrease in the proportion of QQ users as age increases. Compared to email and MSN users, QQ users are younger. Among the 15-19 age group, 87.7 percent were QQ users, 74.9 percent were email users, and 32.3 percent were MSN users.

Figure 6-22 Age distribution among QQ, MSN and email users



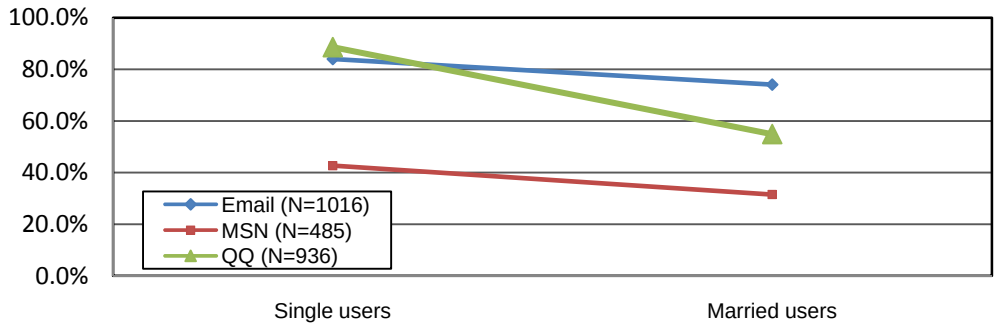
Among different occupations, the highest percentage of QQ users is among students (90.6 percent), followed by the jobless (79.7 percent), blue collar workers (70.7 percent), white collar workers or professionals (63.8 percent) and senior executives or employers (61.1 percent); the lowest percentage is among the laid-off, the retired or full-time housewives (44.7 percent). Compared to email and MSN users, more students and jobless people tend to use QQ, while more white collar workers, professionals and senior executives tend to use email. There were not as many MSN users as QQ and email users.

Figure 6-23 QQ, MSN and email users among Internet users, by employment status



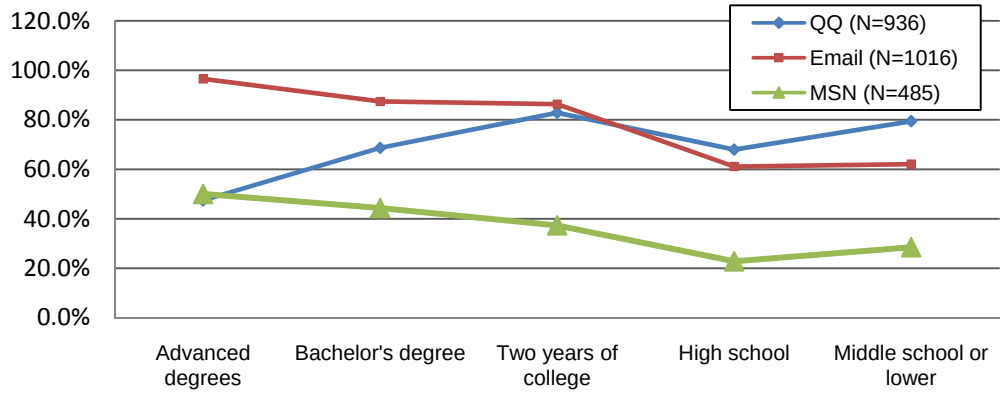
Single Internet users (88.6 percent) are more likely to use QQ than married Internet users (54.9 percent). Overall, more single users use QQ than email and MSN.

Figure 6-24 QQ, MSN and email users among Internet users, by marital status



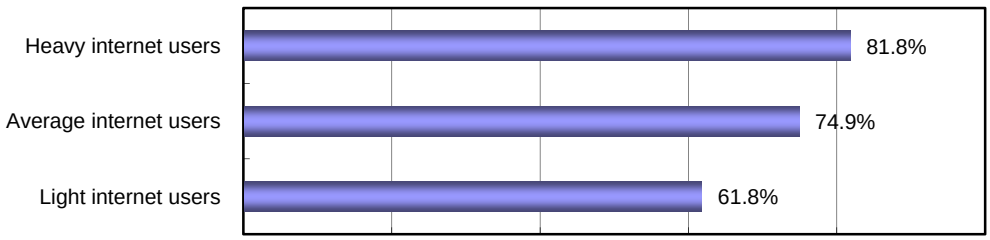
In addition, education is an important variable. Internet users with higher educational backgrounds are less likely to use QQ than those with lower educational backgrounds. The proportion of QQ users with advanced degrees (MA. and Ph.D.) is 47.4 percent, the lowest proportion among different educational groups. Compared to email users and MSN users, QQ users are likely to be less educated.

Figure 6-25 QQ, MSN and email users among Internet users, by educational background



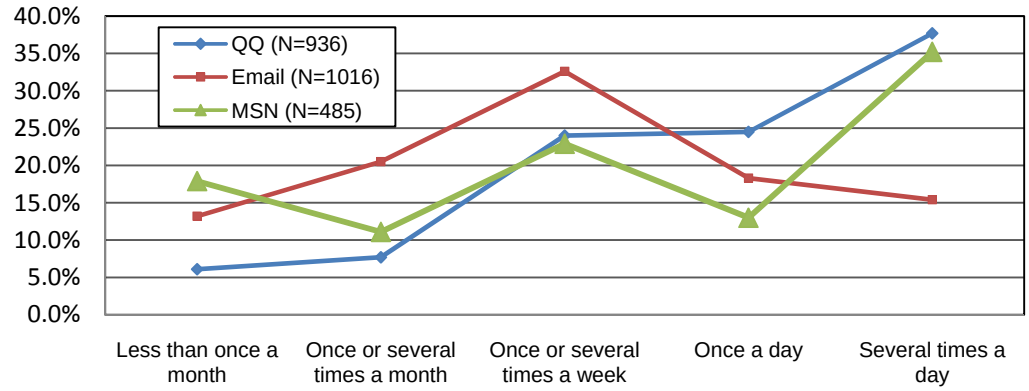
As with MSN, the longer people have been Internet users, the more likely they are to use QQ**.** Time spent online also correlates with QQ use. The more hours per day users are online, the more likely they are to be QQ users. For this survey, light Internet users are defined as those who spend 1 hour or less on the Internet on an average day, heavy Internet users are those who spend more than 4 hours on the Internet on an average day, and average Internet users refer to those who spend more than 1 hour and no more than 4 hours on the Internet on an average day.

Figure 6-26 Use of QQ and time spent on the Internet (N=1289)



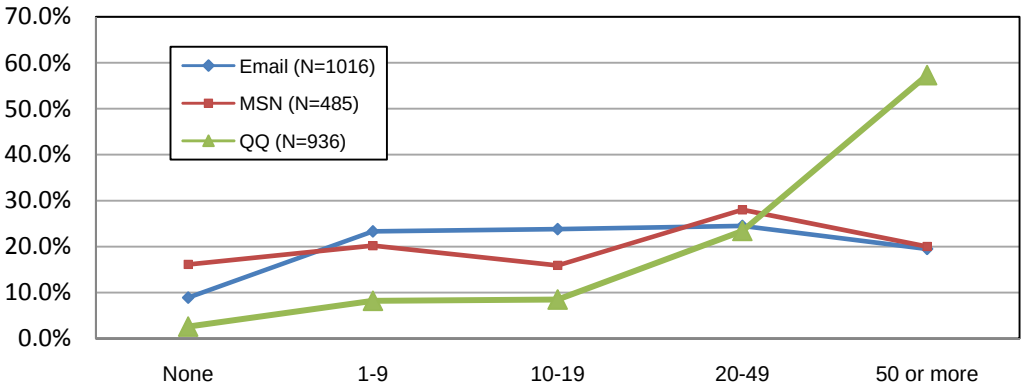
Another way to understand the use of different communication tools is to check how often they are used. The survey results show that QQ is a heavily used communication tool, far more frequently accessed than MSN and email. The figure below shows more than 60 percent QQ users at least use QQ every day, while only 33.7 percent email users check their email every day.

Figure 6-27 Frequency of using QQ, MSN and email



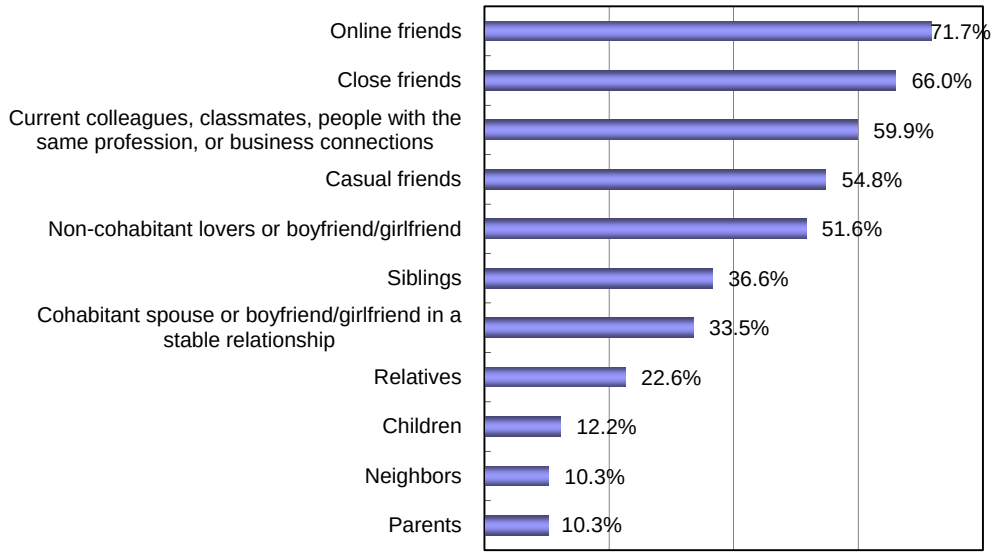
Again, the number of saved QQ numbers could be a measure of engagement with QQ communications among its users. On average, the number of saved QQ numbers is higher than the numbers of saved email and MSN addresses. Almost 60 percent of QQ/ICQ users save at least 50 QQ numbers, 23.4 percent save 20-49, less than 20 percent save 1-19, and only 2.6 percent do not save any QQ numbers.

Figure 6-28 Comparison between the number of saved QQ, email and MSN addresses



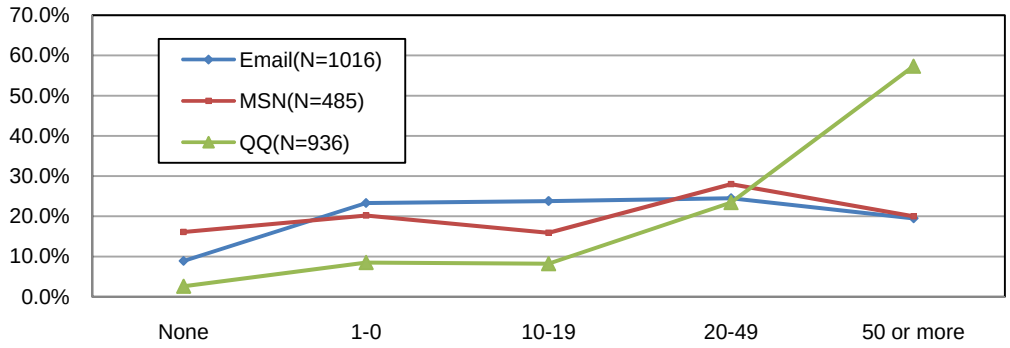
As with MSN, the use of QQ is also preferred in communications with friends and current colleagues, classmates, and people within the same profession. QQ is most widely used in communication with online friends. Most users do not use QQ frequently to communicate with family members or neighbors.

Figure 6-29 Proportion of Internet users who frequently use QQ to communicate by social relationship



In sum, engagement with QQ, as measured by the number of saved addresses, is higher than engagement with MSN and with email. 20 percent of MSN users and 19.5 percent of email users save 50 or more addresses, whereas 57.3 percent of QQ users save 50 or more QQ numbers.

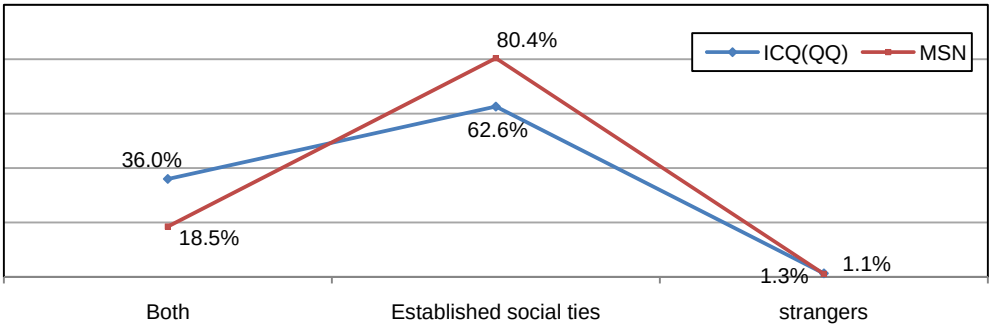
Figure 6-30 Distributions of the number of saved addresses



The scope of the QQ communications network is also different from the scope of the MSN network. Almost 80 percent of MSN users use MSN mainly to communicate with individuals from within an established a network of social ties, and 19 percent of MSN users use MSN to communicate with both an established group of acquaintances and strangers. By contrast, 63 percent of QQ users use QQ mainly to communicate with an established network of social ties, and 36 percent of QQ users use QQ to communicate with both an established social network and strangers. Online instant messengers, especially QQ, are helping people to communicate with individuals they haven't met before as well as to maintain their existing social relationships. This suggests that as the Internet is integrated into daily life in China, the boundary between the cyber and the physical spaces are getting blurred. One of the reasons is that MSN requires approval

before contact, while QQ not only allow people to contact those they do not know but also provide a search engine to seek those they are interested to chat.

Figure 6-31 The scope of MSN communications and QQ communications (N_{QQ}=912, N_{MSN}=407)



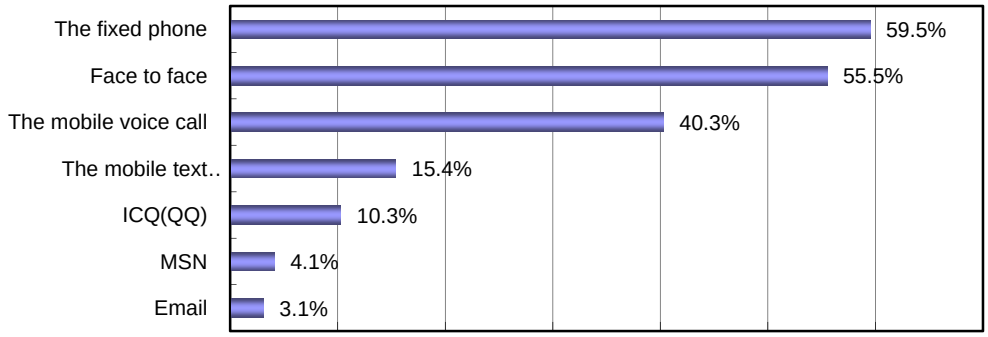
6.2. Communications with different groups of people

For this study, we divided people's social networks into 11 different groups of friends, family, and acquaintances. We looked at use of the Internet and of the mobile phone, as well as the use of the fixed phone and face to face contact, as tools of communication among these different groups.

6.2.1 Parents

Among the 1868 respondents who have parents, 56 percent of them have frequent face to face communication with their parents. 40.3 percent of mobile phone users frequently communicate with their parents by mobile voice calls. Our survey suggests that fixed phone and face-to-face communication are still the two leading methods of communication between parents and their children. Mobile phones are the third most common means of communication.

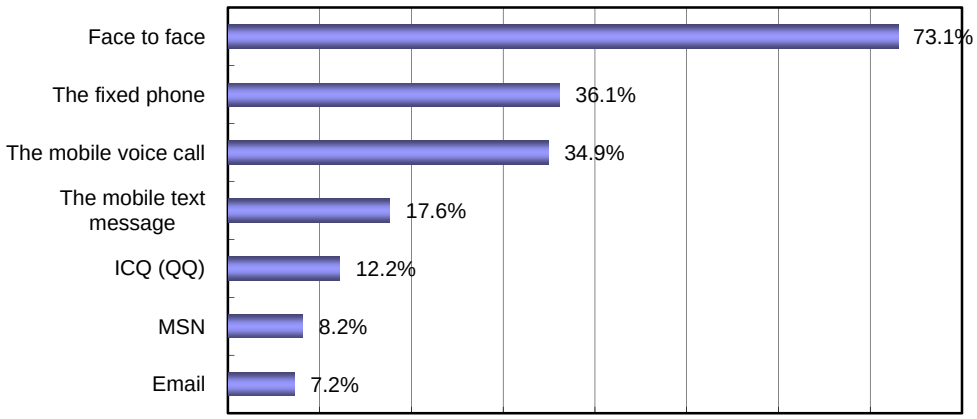
Figure 6-32 Heavy use of different tools for communicating with parents



6.2.2 Children

There are 1074 respondents who have children in our survey. 73 percent of them have frequent face to face communication with children. 36.1 percent of fixed phone users frequently call their children using the fixed phone. 34.9 percent of mobile voice call users frequently call their children via mobile phones. The Internet is not often used in communications with children. And mobile voice call is preferred to text messages for communication with children. In general, parents and children use the same communication tools to communicate with each other.

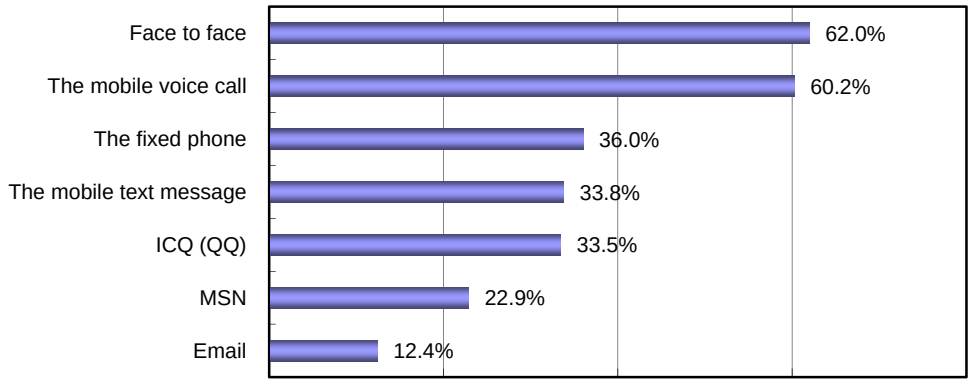
Figure 6-33 Heavy use of different tools to communicate with children



6.2.3. Cohabitant spouse or boyfriend/girlfriend in a stable relationship

For purposes of this survey, we considered communication between cohabitant heterosexual relations and spouses together. The details are shown in the following figure. It suggests that the use pattern of communication tools within this group of people is quite different from the use pattern between parents and children. The most significant difference is that the Internet is more actively used in communication within this group. Another interesting phenomenon is that mobile voice calls tend to be used more often than the fixed phone does. 60 percent of mobile voice call users have frequent mobile voice communications with their spouse or cohabiting romantic partner, whereas only 36 percent of fixed phone users have frequent fixed phone communications with the same group.

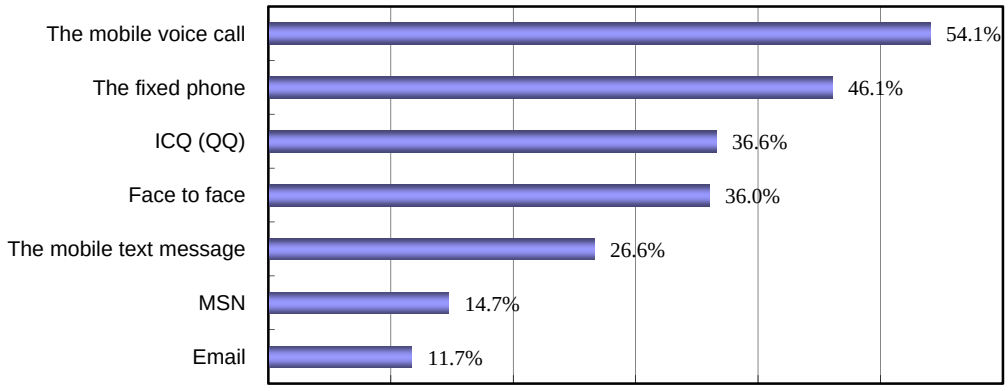
Figure 6-34 Heavy use of different communication tools to communicate with cohabitant spouse or boyfriend/ girlfriend in a stable relationship



6.2.4 Siblings

There are 1554 respondents who have brothers or sisters in our survey. 36 percent of them often have face to face communication with their brothers or sisters. 54 percent of mobile phone users have frequent mobile voice communications with their siblings, and 46 percent of fixed phone users frequently use the fixed phone in communications with their siblings. 36.6 percent of QQ users often use it to communicate with siblings. This suggests that although face to face communication with siblings is not as frequent as with parents, children or spouses, both traditional and new communication tools help people keep in touch with their siblings.

Figure 6-35 Heavy use of different tools to communicate with siblings

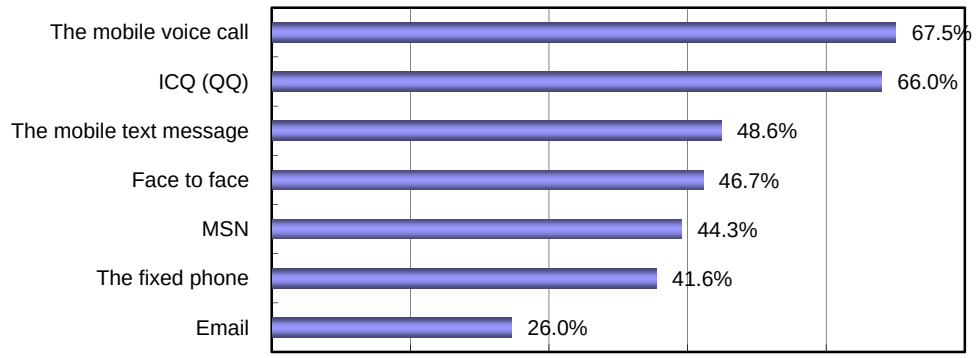


6.2.5. Close friends

In our survey, we divide friends into close friends, casual friends and online friends. Here, we will first discuss the use of different communication tools in communication with close friends. We found that QQ and the mobile phone tend to be used most in

communication with close friends. 66 percent of QQ users frequently use it to communicate with close friends, and 67.5 percent of mobile voice call users frequently communicate with close friends via mobile voice calls. 48.6 percent of SMS users frequently send text messages to their close friends, and 44.3 percent of MSN users have frequent MSN communication with close friends. 41.6 percent of fixed phone users often make fixed phone calls to their close friends, and 46.7 percent of the 1951 respondents who have close friends communicate frequently with close friends face to face. The mobile phone and the Internet have already become two of the most important communication tools to maintain relationships with close friends.

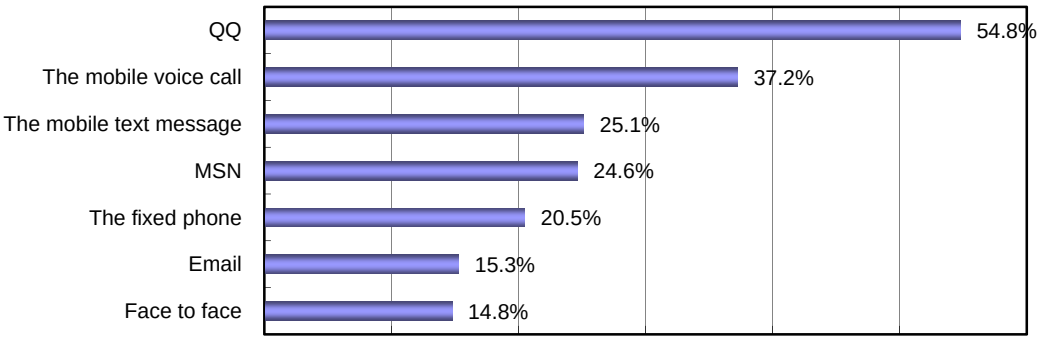
Figure 6-36 Heavy use of different communication tools to communicate with close friends



6.2.6 Casual friends

A significant difference between patterns of communication with common friends and with close friends is the frequency of face to face communication. 14.8 percent of respondents who have common friends have frequent face to face communications with them, whereas 46.7 percent of respondents who have close friends have frequent face to face communication with them. QQ is the primary communication tool used to communicate with common friends. The proportion of heavy use of QQ in communications with common friends is 54.8 percent. One fourth of MSN users frequently use it to communicate with close friends. Since the frequency of face to face communication with common friends is lower than with close friends, new communication tools appear quite important in maintaining these relationships.

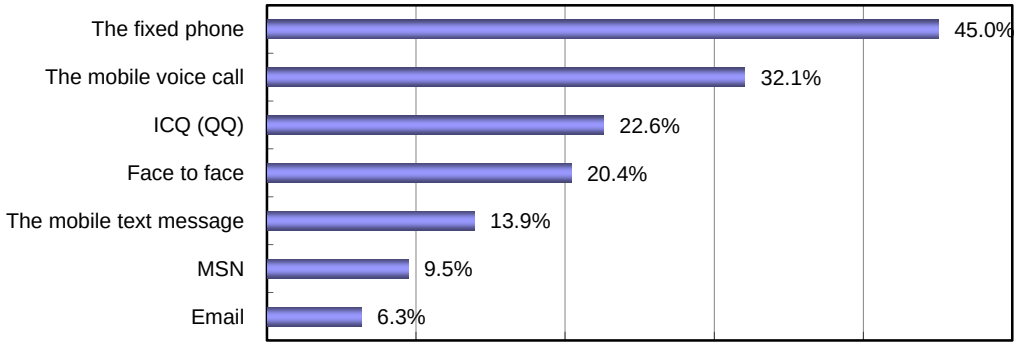
Figure 6-37 Heavy use of different tools to communicate with casual friends



6.2.7 Relatives

We found that respondents do not often have face to face communication with relatives. The fixed phone plays the most important role in keeping frequent contact between relatives. 45 percent of fixed phone users regularly make fixed phone calls to their relatives. Mobile voice calls are also used to maintain these ties. 32.1 percent of mobile voice call users frequently call their relatives through the mobile phone. In addition, 22.6 percent of QQ users keep regular contact with relatives by means of QQ.

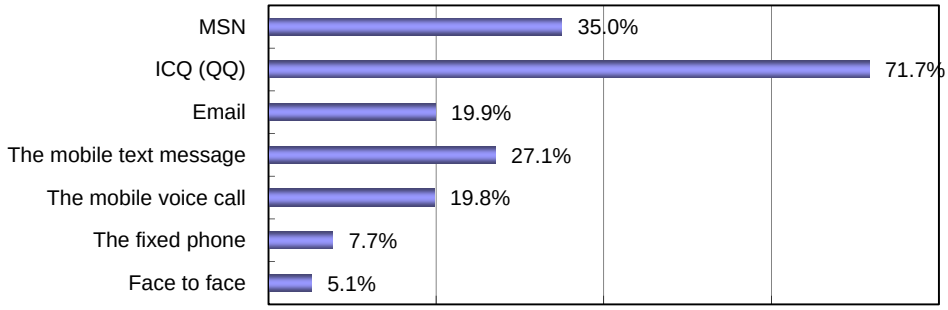
Figure 6-38 Heavy use of different tools to communicate with relatives



6.2.8 Online friends

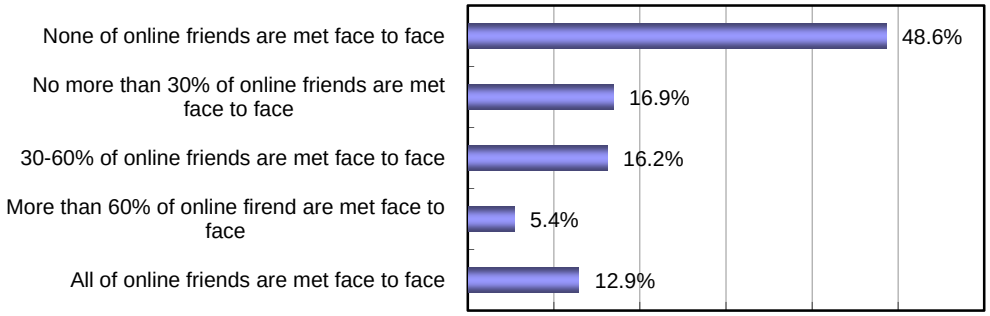
With the assistance of the Internet, people are able to make new friends in cyber space, thus enlarging their social networks. It is therefore important to consider online friend as a new category of social relationship. In China, QQ is the most popular online communication tool that helps people meet strangers and make new friends. 71.7 percent of QQ users often communicate with their online friends by QQ. MSN is another important tool to make online friends, and 35 percent of MSN users have regular communication with online friends through MSN. 19.9 percent of email users keep regular contact with their online friends through email. An interesting point is that online friends can also become friends in the offline world. It is shown that the Internet and the mobile phone are complementary in daily interactions with this new type of social ties.

Figure 6-39 Heavy use of different tools to communicate with online friends



Although some people develop their relationship with online friends by keeping communications with them in the physical world, most Internet users are not likely to have face to face communications with their online friends. The Internet is still the main medium to maintain online networks. Almost half of Internet users who have online friends have never met their online friends, 12.9 percent have met all of their online friends, and 38.5 percent have met some of their online friends.

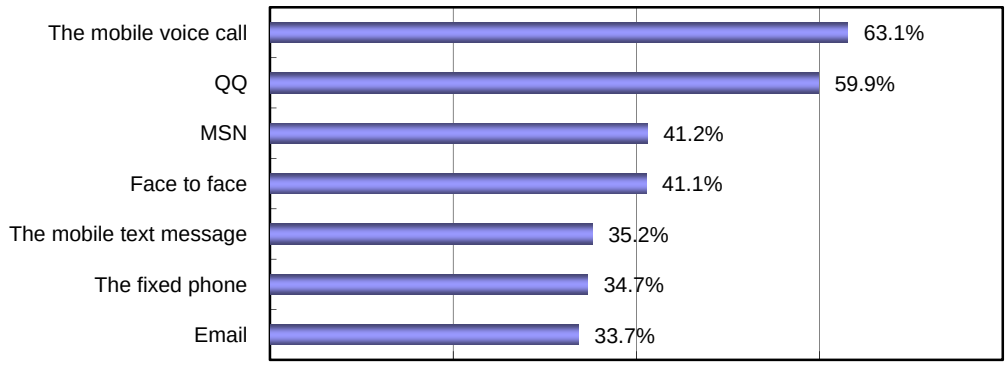
Figure 6-40 Meeting online friends face to face (N=642)



6.2.9 Current colleagues, classmates, people within the same profession or business connections

Current colleagues, classmates, people within the same profession and business connections were placed within the same category. The use pattern of communication tools for this category is similar to the use pattern for communication with close friends. Mobile phone voice calls and QQ are the two most important communication tools. 60 percent of QQ users frequently communicate with this group of people via QQ, and 63 percent of users have regular contacts with this group of people by making mobile voice calls. The proportions of heavy use of email, MSN, SMS and fixed phones among users to communicate with this category range from 30-40 percent. In addition, 41.1 percent of respondents who have this category of social tie keep in touch through regular face to face communication.

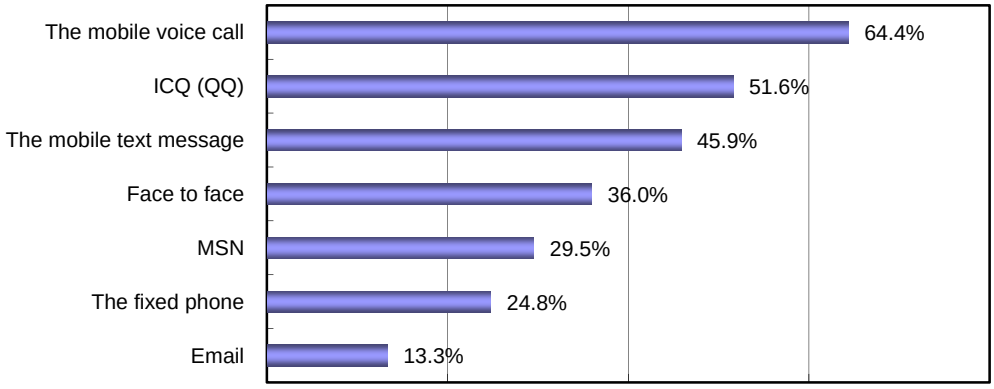
Figure 6-41 Heavy use of different tools to communicate with current colleagues, classmates, people within the same profession and business connections



6.2.10 Non-cohabiting lovers or boyfriends/girlfriends

QQ and the mobile phone (both voice call and text message) are heavily used in communications within this category of romantic relationships. 51.6 percent of QQ users have frequent QQ communication with their lovers or boyfriends/girlfriends. 45.9 percent of SMS users regularly send messages to their lovers or boyfriends/girlfriends. 64.4 percent of users frequently call their lovers or boyfriend/girlfriend using mobile voice call. By contrast, only 36 percent of respondents meet their lovers or boyfriends/girlfriends regularly.

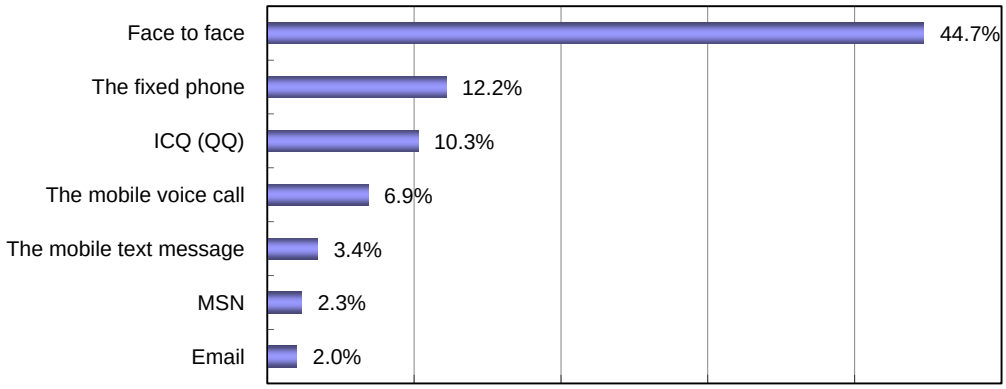
Figure 6-42 Heavy use of different tools to communicate with non-cohabiting lovers or boyfriends/girlfriends



6.2.11 Neighbors

Our survey found that communication tools, such as the Internet, the mobile phone, or the fixed phone, are not used frequently to communicate with neighbors. Face to face communication is still the preferred method. The detailed data are shown in the following figure.

Figure 6-43 Heavy use of different communication tools to communicate with neighbors



6.2.12 Which communication tool is frequently used in maintaining social relations

So far, we have discussed the use of specific communication tools to maintain specific social ties. In this section, we take a more general approach, asking users whether they use ICTs to maintain their social networks.

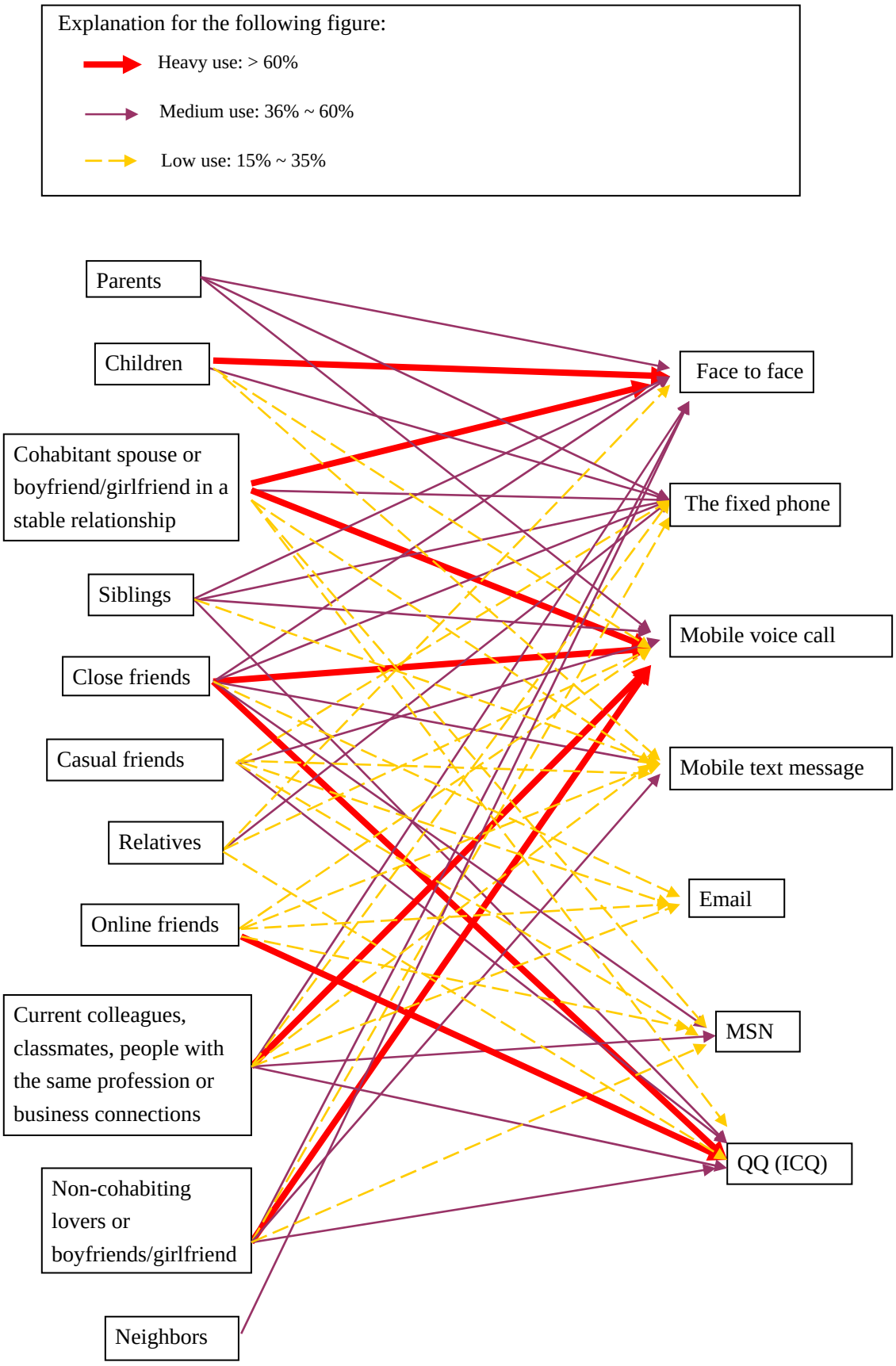
We found that children mainly communicate with their parents face to face, which is probably a result of the generation gap in the adoption of new communication tools. Since the adoption rates of SMS, email, MSN and QQ are lowest among older groups, face to face is possibly still the most convenient way to communicate with parents. However, parents who are users of specific new communication tool do not use SMS, email, MSN and QQ as frequently as other tools such as fixed phones, mobile voice calls or face to face communication. Thus, these new communication tools are probably still playing a complementary role in parent-children communications, supplementing more traditional methods like face to face contact.

In general, mobile voice calls are more likely to be frequently used in communication with four kinds of social relationships: spouse, romantic relationships, close friends, and current colleagues, classmates, people within the same profession or business connections. Thus, it is possible that mobile voice calls are used most in daily communications among users. The mobile voice call helps people to connect with others at anytime and anywhere. In addition, placing a mobile call does not require much skill, and thus is more widely used among people across demographics. This is a plausible reason that may explain why mobile calls are more often used in communications with most social ties than other new tools such as SMS, email, MSN and QQ.

QQ (ICQ) tends to be used frequently in communication between peers. More than 60 percent of QQ users who have close friends often communicate with them using this tool. The adoption of QQ is still specific to particular socio-demographic categories despite its increasing penetration rate in recent years, and thus QQ users should consider whether this new communication tool is also accessible to the recipients of their communications. This perhaps could explain why QQ seems more popular in communications with peer like ties rather than with parents. Generally, people tend to use various communication tools to maintain and strengthen close ties. Consequently, in communication with close friends and peers, QQ is widely used. In addition, the high percentage (71.7 percent) of frequent use of QQ to communicate with online friends shows that QQ has been a regular tool to maintain online social networks.

The following figure shows the responses we received.

Figure 6-44 Use of different communication tools in contacting different social relationships



In this section, we presented a rough picture of how different communication tools are used within different social relations. However, the role of these tools in maintaining social networks is rather complex, and thus deserves further investigation.

6.3 The impact of the Internet on interpersonal communication

6.3.1. The scope of communications between Internet users and non-users

To further analyze the role of the Internet in interpersonal communication, we compare and contrast how Internet users and non users use different tools to communicate with different groups of people in their social networks.

There is no significant difference between Internet users and non users in their communications with parents. Internet users and non users both chose fixed phones and face to face communications as the primary communications tools, and both groups talked face to face with their parents with equal frequency. Further, there is no significant gap between Internet users and non users in their mobile phone communications with parents.

Communication patterns with children between Internet users and non users are more complex. Parents who are Internet users are more likely to have frequent face-to-face communications with their children. Some 74.5 percent of Internet users who have children have frequent face to face communications with their sons or daughters, whereas only 62.5 percent of non users who have children do so. Internet users with children are less likely (30.2 percent) to contact their children frequently by fixed phones than non users with children (46 percent). There is no significant difference between Internet users and non users in their mobile phone communications with children.

In communications with spouses, cohabitants and siblings, there are no significantly different patterns between Internet users and non users. Both Internet users and non users tend to frequently use the mobile phone in communications with these categories of people. In communications with other groups of people (such as close friends, casual friends, neighbors, relatives and current colleagues, classmates, business connections and people within the same profession) Internet users and non users also use the mobile phone, the fixed phone, and face to face communications with similar frequency.

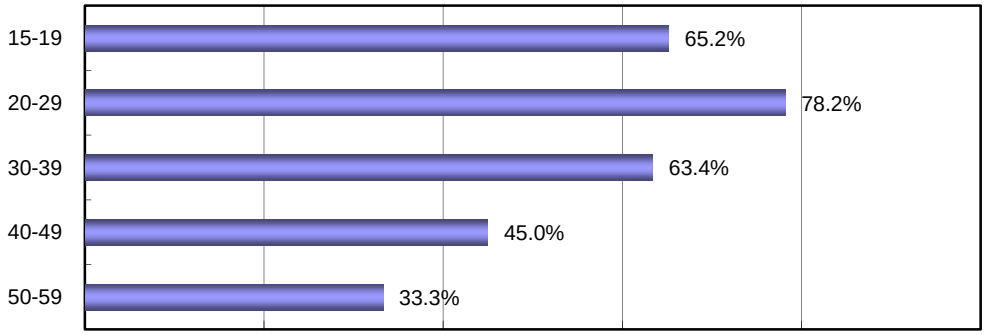
Therefore, the survey results suggest that the Internet, until now, has had no direct negative impact on face to face, fixed phone and mobile phone communications. This topic is discussed further below.

6.3.2 Online Friends

As noted, online friend is an important new category of social tie in urban China. Some 64.7 percent of Internet users have online friends, whereas 34.3 percent have no online

friends. Internet users with online friends have an average of about 15. Demographically, age presents the most significant differences between those with and without friends. Internet users between 20 and 29 years old have the most online friends (78.2 percent). The youngest group, between 15 and 39 years old, are less likely (65.2 percent) to have online friends, as are all the older groups. Only one third of Internet users at aged between 50 and 59 have online friends.

Figure 6-45 Proportion of Internet users having online friends, by age (N=1314, Sig.=.000)



Half of Internet users who have online friends have between 1 and 6 of them, 24.7 percent have 7-13 online friends, and 25.6 percent have more than 13 online friends. Gender and marital status significantly affect the number of online friends a user has. Some 30.4 percent of male Internet users have more than 13 online friends, whereas only 18.6 percent of female Internet users have more than 13 online friends. Some 29.1 percent of single Internet users have more than 13 online friends, whereas only 17.4 percent of married Internet users have more than 13 online friends.

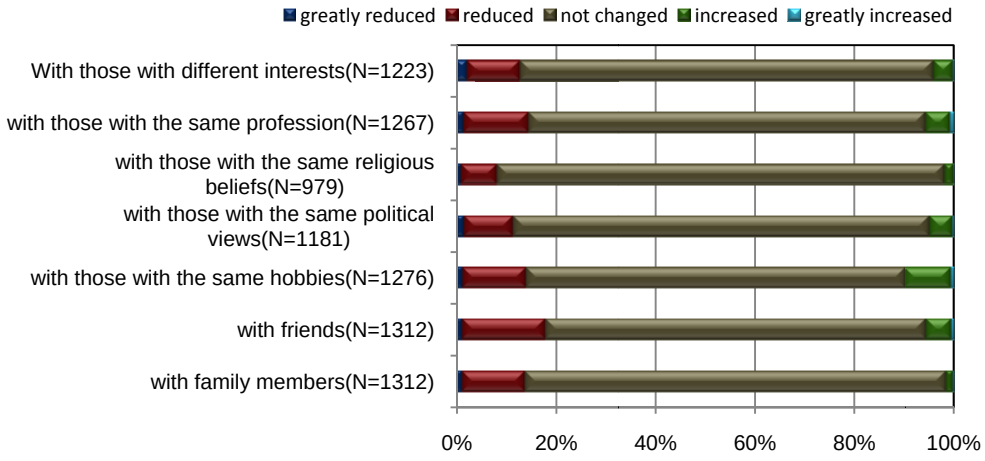
The amount of time one spends online also correlates with having online friends. Some 48 percent of light Internet users, defined as those who spend 1 hour or less on the Internet on an average day, have online friends. By contrast, some 68 percent of heavy users, those who spend more than 1 hour and less than 4 hours on the Internet, have online friends. 77.1 percent of those who spend more than 4 hours on the Internet have online friends. The number of friends also increases with time spent online. Some 17.8 percent of light Internet users have more than 13 online friends, compared to 28.7 percent of heavy Internet users. Some 62.3 percent of light Internet users have 1-6 online friends, compared to 43.3 percent of heavy Internet users. In addition, Internet users with more years of online experience are more likely to have extensive networks of online friends.

6.3.3 The Internet and face-to-face communication

With the emergence of the Internet as a new tool of communication, people have wondered about its effect on face-to-face communications. In this section, we will examine whether the Internet has changed time spent on face to face communication among seven different groups: family members, friends, people with the same profession, people with the same hobbies, people with the same political views, and people with

different interests.

Figure 6-46 Effects of Internet use on face to face communication.



The Internet has little effect on face to face communications among any of the social groups. The vast majority of users have not changed their face to face patterns when communicating with family members (84.8 percent), with friends (76.7 percent), with those within the same profession (80 percent), with those with shared hobbies (76.2 percent), with those with different interests (83.4 percent), with those sharing the same religious beliefs (90.2 percent), and with those with the same political views (83.8 percent).

Between just 7.0 percent and 16.5 percent of Internet users spend less time on face to face communication with various kinds of people, face to face communications with friends taking the biggest blow. On the other hand, some Internet users said they have increased face to face communications time with some groups. Some 9.3 percent of Internet users increase the time spent on the face to face communication with those with the same hobbies.

PART SEVEN

THE INTERNET AND POLITICS

The Internet has the potential to fundamentally affect the political system in China. The Internet has already grown into a powerful platform for users to form and express public opinions State authorities and government agencies have made an attempt to learn about public's views through the Internet, and to serve the public better through their own presence on the Internet.

As with our earlier surveys, we conducted a follow-up survey regarding the possible effects of the Internet on politics. In addition, this year, we posed questions about e-government efforts.

7.1 The Internet and Political Participation

The WIP survey questions measures the Internet's political impact through a set of four statements. They are:

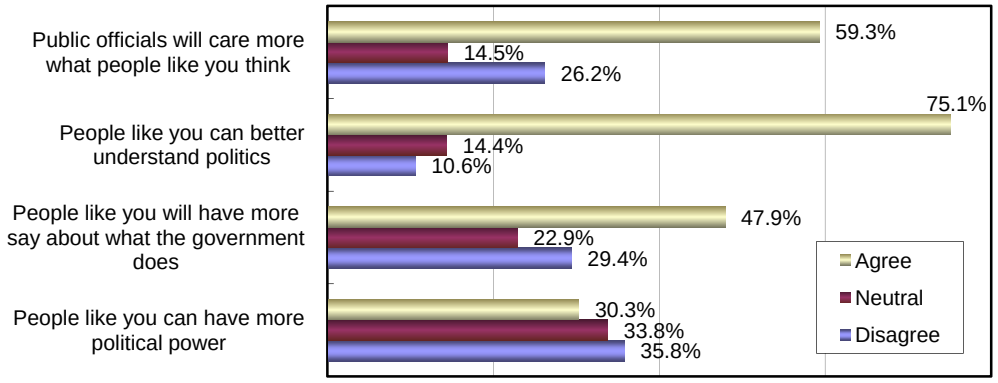
"By using the Internet:

1. People like you can have more political power
2. People like you will have more say about what the government does
3. People like you can better understand politics
4. Public officials will care more what people like you think"

Overall, most of the interviewees strongly anticipate the potential for political participation created by the Internet. 47.9 percent of the respondents agreed it could bring people more say about government actions,, 75.1 percent agreed that the Internet could help people better understand politics, and 59.3 percent agreed that it could create an opportunity for public officials to care more what people think. The strongest consensus focused on the Internet's potential to bring Internet users a greater understanding of politics; three quarters of respondents agreed that this was so. While people were overwhelmingly more positive about the potential of the Internet to have a positive impact

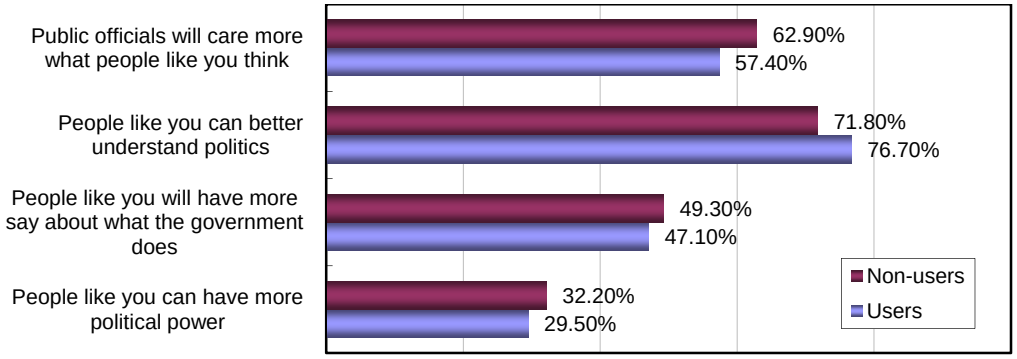
in the political arena, one statement drew a more negative than positive reaction: More respondents, 35.8 percent, disagreed that using the Internet could bring a user more political power, while 30.3 percent agreed.

Figure 7-1 Attitudes toward the Internet and politics



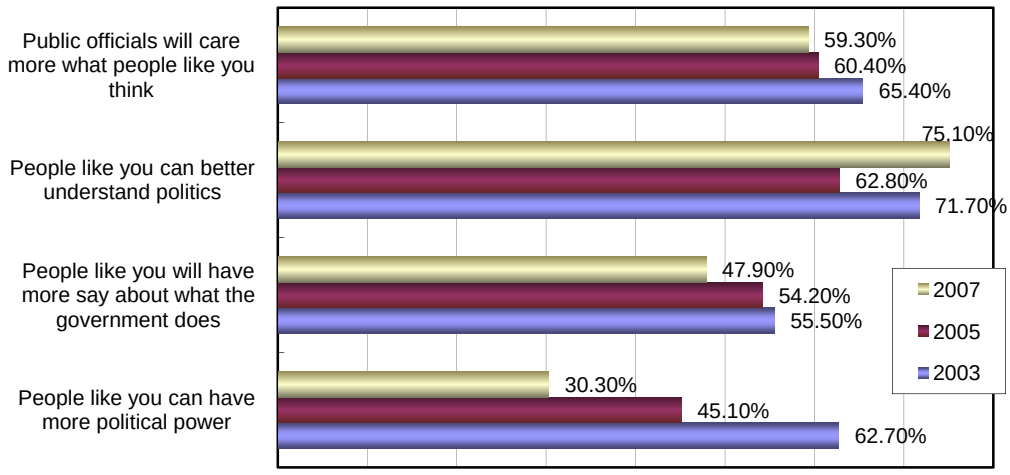
No significant differences were found between the attitudes of users and non users.

Figure 7-2 Comparison between Internet users and non-users



Over the past 4 years, people's positive attitudes about the potential of the Internet to affect political change – while still positive – have been declining. The decline is particularly prominent on the question of the potential for political power to users. In 2003, more than 65 percent of respondents thought that the Internet could bring users more political power. Four years later, that number has fallen by more than half, to just over 30 percent. In contrast, in 2003, 71.7 percent of users thought the Internet could bring them a better understanding of politics. That number dipped to 62.8 percent in 2005, and then rebounded to 75.1 percent in 2007.

Figure 7-3 people's positive attitudes about the potential of the Internet to affect political change have been declining



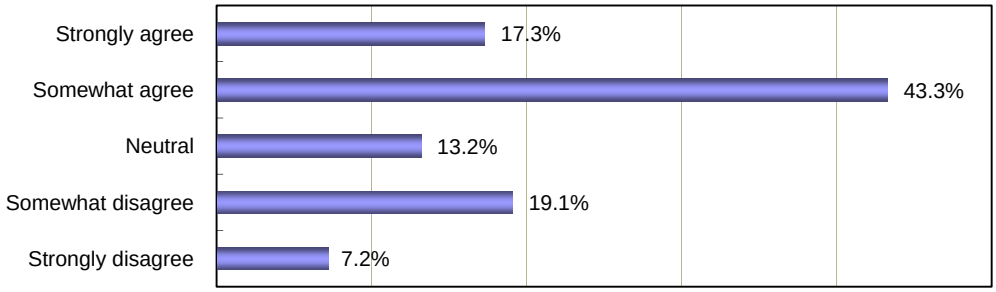
7.2 E-government

With the continuous efforts of the government, IT enterprises and media, e-government has a tremendous development in China. This especially the case in the development of the government-run intranet, which means running government-only systems to promote better quality and more efficiency within the administration, While there is a widely accepted view that government can serve people better by using the Internet, there is limited knowledge and use of e-government websites.

7.2.1 Perceptions of E-government

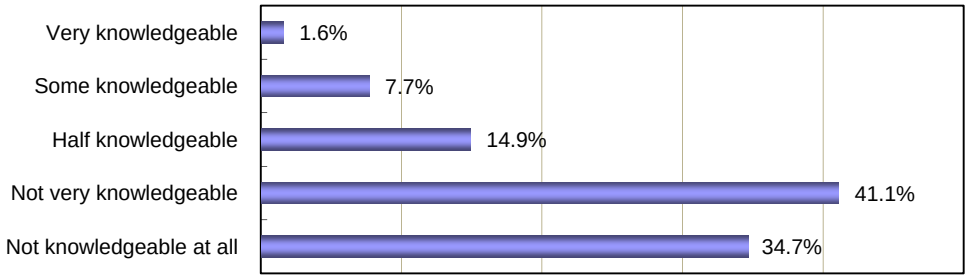
An overwhelming majority of the interviewees held positive attitudes about the potential of e-government efforts. Some 17.3 percent of people strongly agreed that “by using the Internet, the government can better serve people like you”, 43.3 percent somewhat agreed with this, while only 26.3 percent disagreed with this.

Figure 4 By using the Internet, the government can better serve people like you



However, when we tried to analyze people’s knowledge of e-government, as many as 75.8 percent of the interviewees thought they were not very knowledgeable or not knowledgeable at all about e-government.

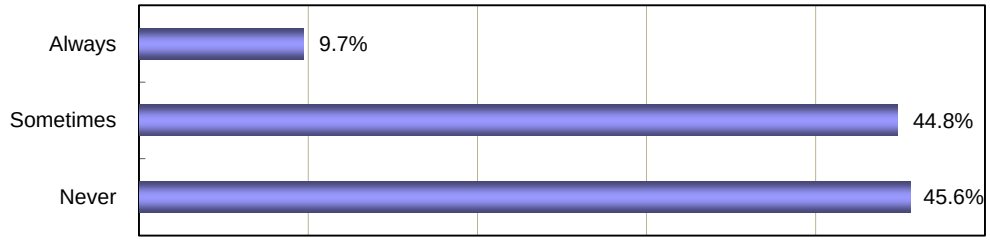
Figure 5 Knowledge about e-government



7.2.2 Use of E-government

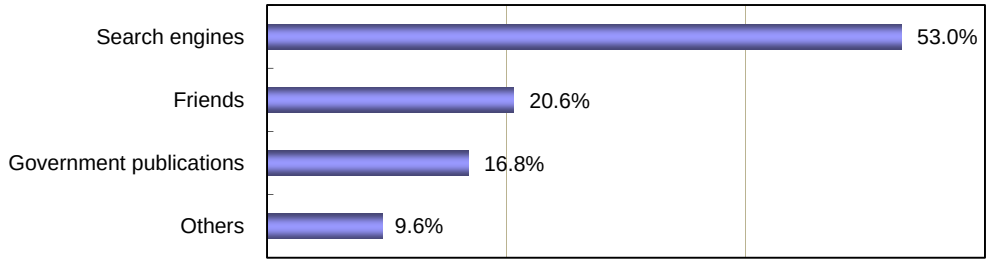
Despite the government's efforts to build government Web sites, the proportion of Internet users who have actually visited these Web sites is limited. The results show that 45.6 percent of Internet users never visited government Web sites, 44.8 percent sometimes, while only 9.7 percent always visited them.

Figure 7-6 Proportion of visiting government Web sites



Further, 16.8 percent of those who have used government Web sites learned about them from government publications, 53 percent from search engines, 20.6 percent from friends, while another 9.6 percent learned about them from other channels.

Figure 7-7 From where did people learn about government Web sites



APPENDIX I

Demographic Distribution of the Sample after Weighting

CITY	AGE	GENDER		TOTAL
		MALE	FEMALE	
Beijing	15-19	28	26	54
	20-24	46	45	91
	25-29	54	49	103
	30-34	50	47	97
	35-39	54	55	109
	SUM:	232	222	454
Shanghai	15-19	24	24	48
	20-24	43	39	82
	25-29	40	40	80
	30-34	57	43	100
	35-39	42	51	93
	SUM:	206	197	403
Guangzhou	15-19	26	18	44
	20-24	30	34	64
	25-29	28	18	46
	30-34	17	22	39
	35-39	14	13	27
	SUM:	115	105	220
Chengdu	15-19	32	37	69
	20-24	44	34	78
	25-29	31	26	57
	30-34	34	26	60
	35-39	23	30	53
	SUM:	164	153	317
Changsha	15-19	21	17	38
	20-24	16	19	35
	25-29	18	20	38
	30-34	23	13	36
	35-39	17	18	35
	SUM:	95	87	182

Xi'an	15-19	24	27	51
	20-24	29	16	45
	25-29	24	22	46
	30-34	19	20	39
	35-39	21	18	39
	SUM:	117	103	220
Shenyang	15-19	11	12	23
	20-24	24	24	48
	25-29	24	21	45
	30-34	18	28	46
	35-39	25	17	42
	SUM:	102	102	204

APPENDIX II

FREQUENCY QUESTIONNAIRE

A2. Gender

	Users	Non-users	N
Male	73.3%	26.7%	1031
Female	57.6%	42.4%	970

A3. Age

	Users	Non-users	N
15-19	84.2%	15.8%	241
20-29	86.8%	13.2%	561
30-39	69.2%	30.8%	507
40-49	46.5%	53.5%	411
50-59	28.9%	71.1%	280
Mean	30.29	41.39	

A4. Education

	Users	Non-users	N
Middle school	43%	57%	374
High school	41.9%	58.1%	499
2 Years college	86.7%	13.3%	398
BA	81.5%	18.5%	666
MA or higher	90.5%	9.5%	63

A5. Employment

	Users	Non-users	N
Jobless	57%	43%	235
Laid-off	26.5%	73.5%	49
Retired	18.1%	81.9%	155
Students	91.4%	8.6%	371
Housewife or househusband	24.3%	75.7%	37
Full-day job	69%	31%	1052
Half-day job	64.1%	35.9%	103

A6. Occupation

	Users	Non-users	N
Official in government or public institution	88%	12%	25
Clerk or staff person in government or public institution	79.6%	20.4%	108
Entrepreneur in a company	75%	25%	96
Staff or technical worker in a company	69.6%	30.4%	484
University or college faculty member	88.9%	11.1%	54
High school, middle school, or primary school teacher	70.2%	29.8%	47
Commercial or service worker	58.7%	41.3%	138
Manufacturing or transportation equipment operator	47.1%	52.9%	51
Freelance	75%	25%	24
Private business owner	48.7%	51.3%	76
Soldier or officer in the army	55.6%	44.4%	9

A7. Marital Status

	Users	Non-users	N
With spouse	83.7%	16.3%	786
Without spouse	52.3%	46.8%	55

A8-A9. Number of people in the household

Mean	Standard Deviation	N
3.73	1.570	1988

A10. Political affiliation

	Users	Non-users	N
Communist Party member	72.1%	27.9%	330
Youth League member	79.8%	20.2%	664
Other Party member	66.7%	33.3%	12
No party affiliation	54.2%	45.8%	977

A11: Do your parents live in the same city as you?

	Users	Non-users	N
Not applicable	32.8%	67.2%	119
No	72%	28%	532
Yes	66.2%	33.8%	1350

A12. Do your children live in the same city as you?

	Users	Non-users	N
Not applicable	85.7%	14.3%	916
No	53%	47%	116
Yes	48.5%	51.5%	968

A13. Do you live alone, or do you live with others?

	Users	Non-users	N
Alone	58.7	41.3	566
With others	68.5	31.5	1433

A15. Your birthplace

	Users	Non-users	N
A rural village	57.6%	42.4%	410
A town	53.5%	46.5%	157
A county-level city	69%	31%	184
A prefecture-level city	77.7%	22.3%	148
A provincial capital	70.8%	29.2%	659
A municipality	64.7%	35.3%	417

A16. Personal Monthly Income

	Users	Non-users	N
No income	78.1%	21.9%	421
1000 Yuan or less	38.4%	61.6%	359
1001-2000 Yuan	56.8%	43.2%	382
2001-3000Yuan	73.9%	26.1%	211
MT 3000 Yuan	81.3%	18.7%	251

A17. Household Monthly Income

	Users	Non-users	N
2000 Yuan or less	38%	62%	287
2001-3500 Yuan	49.8%	50.2%	235
3501-5000 Yuan	72.5%	27.5%	287
5001-8000 Yuan	69.4%	30.6%	242
MT 8000 Yuan	78.2%	21.8%	238

A18. Do you have bank cards?

	Users	Non-users	N
No	46.4%	53.6%	399
Yes	70.5%	29.5%	1602

A19. Have relatives or friends living overseas

	Users	Non-users	N
Yes	60.4%	39.6%	1352
No	76.8%	23.2%	630

A20. Do you have following electronic facilities at home?

	Users	Non-users	N
Electronic game machine	71.3%	28.7%	673
Electronic projector	77.5%	22.5%	71
Digital scanner	85.8%	14.2%	260
PDA	76.9%	23.1%	273
VCD	66.8%	33.2%	1558
DVD	69.5%	30.5%	1542

VCR	67.3%	32.7%	762
Stereo equipment	69.9%	30.1%	1544
MP3 player or walkman	72.3%	27.7%	1578
Digital camera	74.5%	25.5%	1232
DV	75.9%	24.1%	556
Printer	79.2%	20.8%	665
Air conditioner	68.8%	31.2%	1619

B1. Daily hours spent (Users: N=1314; Non-users: N=681)

		Mean	SD
Watching TV	Users	1.92	1.70
	Non-Users	3.10	2.21
Listening to radio	Users	0.44	0.94
	Non-Users	0.47	1.10
Reading newspapers	Users	0.61	0.73
	Non-Users	0.67	0.67
Reading books	Users	1.73	2.40
	Non-Users	0.67	1.35
Reading magazine	Users	0.38	0.72
	Non-Users	0.34	0.62
Watching movie at home	Users	0.70	1.24
	Non-Users	0.61	1.42
Listening to music/CD/MP3	Users	1.20	1.68
	Non-Users	0.81	1.48
Meeting friends face to face	Users	2.29	3.73
	Non-Users	1.92	3.14
Meeting family face to face	Users	2.33	3.75
	Non-Users	2.60	4.24
Doing exercises	Users	0.52	1.01
	Non-Users	0.73	1.22
Playing e-games	Users	0.47	1.23
	Non-Users	0.23	0.73

B2. How much of the information on the WWW is reliable?

	None	A small portion	About half	Most	All	N
Users	0.8%	14.8%	54.0%	29.9%	0.5%	1303
Non-Users	6.0%	27.6%	48.7%	16.9%	0.8%	620

B3. By using the Internet,

	Users	Non-users	N	Sig.
One may learn about more new things	98.2%	93.6%	1987	.000
One may make wrong friends	42.5%	65.9%	1890	.000
One may easily expose his or her privacy	41.6%	55.3%	1917	.000
One may be easily affected by pornography	61.4%	72.1%	1908	.000
One may feel out of date if One has no idea about the Internet	82.3%	75.9%	1981	.001
One may become easily addicted to the Internet	61%	81%	1962	.000
One may buy something he needs	71.3%	64.1%	1864	.002
Much of the Internet content is not suitable for children	92.6%	94.3%	1965	.159

B4. By using the Internet,

1= Strongly disagree, **2**= Disagree, **3**= Neutral, **4**= agree, **5**= Strongly agree

		1	2	3	4	5	N
People like you can have more political power	Users	14.5	23.5	32.6	23.7	5.8	1280
	Non-Users	9.8	21.8	36.3	25.7	6.5	651
People like you will have more say about what the government does	Users	10.4	20.7	21.7	36.2	10.9	1297
	Non-Users	7.4	18.2	25	38.7	10.6	648
People like you can better understand politics	Users	1.8	8.3	13.2	57.4	19.3	1304
	Non-Users	3.2	8.4	16.6	56.4	15.4	663
Public officials will care more what people like you think	Users	9.3	18.6	14.6	41.4	16	1284
	Non-Users	7.1	15.6	14.4	46.7	16.2	647
The government can better serve people like you	Users	7.5	20.1	13.3	43	16.1	1297
	Non-Users	6.5	17	12.9	43.9	19.6	658

B5. Does the Internet need to be managed or controlled?

1=Very Unnecessary, **2**= Unnecessary, **3**= Half necessary, **4**=Necessary, **5**=Very Necessary

	1	2	3	4	5	N
Users	2.6%	3.6%	11.2%	31.3%	51.4%	1315
Non-Users	2.9%	2.1%	9.9%	31.7%	53.5%	679

B6. Who should manage or control the Internet

	Internet Companies	Internet Cafés	Parents	Schools	Government
Users	76.4%	57.6%	64.5%	59.2%	83.8%
Non-Users	83.2%	62.1%	73.3%	73.4%	86.8%

B7. What should be managed or controlled on the Internet?

1=Very Unnecessary, **2**=Unnecessary, **3**=Half necessary, **4**=Necessary, **5**=Very Necessary

		1	2	3	4	5	N
Pornography	Users	2.2%	4.5%	6.6%	31%	55.6%	1279
	Non-Users	3.3%	8.9%	4.5%	23.7%	59.5%	662
Violence	Users	1.4%	5.9%	6.3%	37.2%	49.2%	1280
	Non-Users	2.7%	9.7%	3.5%	32.1%	51.9%	657
Politics	Users	2.3%	28.8%	28%	33.7%	7.2%	1266
	Non-Users	1.7%	26.4%	22.9%	41.5%	7.5%	643
Advertisement	Users	1.3%	11.7%	21.4%	48.3%	17.3%	1278
	Non-Users	0.9%	17.6%	23.9%	44.3%	13.3%	648
Online Chatting	Users	2.6%	36.6%	33.6%	24.9%	2.4%	1274
	Non-Users	0.9%	31.7%	31.4%	31.1%	4.8%	646
Online Gaming	Users	1.3%	22.7%	26.5%	41.9%	7.6%	1271
	Non-Users	1.5%	19%	23.9%	46.6%	8.9%	652
Junk mails	Users	2.2%	9.1%	5.7%	45.4%	37.6%	1270
	Non-Users	2.8%	15.2%	5.9%	43.7%	32.4%	645
Malicious speculation	Users	1.6%	13.1%	21.4%	38.7%	25.2%	1276
	Non-Users	3.2%	14.7%	9.6%	39.1%	33.4%	653

C1. The importance of following channel as a source of entertainment

1=Not important at all, **2**=Not important, **3**=Neutral/Undecided, **4**=Important, **5**=Very Important

		1	2	3	4	5	N
TV	Users	1%	7%	40%	34.1%	17.9%	1315
	Non-Users	0.3%	6.3%	26.1%	41%	26.3%	685
Newspapers	Users	1%	11.3%	36.1%	39.1%	12.4%	1313
	Non-Users	0.4%	6.3%	26.8%	49%	17.4%	683
Radio	Users	2.8%	28.6%	40.2%	23.5%	4.9%	1296
	Non-Users	0.7%	17.4%	34%	38.5%	9.3%	667

Books	Users	0.6%	9.3%	27.6%	46.3%	16.1%	1314
	Non-Users	0.4%	12.4%	27.1%	48%	12.1%	679
Magazine	Users	0.8%	14.7%	45%	33.9%	5.6%	1302
	Non-Users	1%	18.2%	38.3%	36.1%	6.4%	674
The Internet	Users	0.2%	2.5%	21%	49%	27.3%	1312
	Non-Users	2%	18.3%	29.2%	40.2%	10.3%	651
Face to face communication	Users	0.5%	4.5%	14.2%	44.1%	36.8%	1314
	Non-Users	0	6.6%	14.8%	48.2%	30.5%	683

C2. The importance of following channel as a source of Entertainment

1=Not important at all, **2**=Not important, **3**=Neutral/Undecided, **4**=Important, **5**=Very Important

		1	2	3	4	5	N
TV	Users	1.1%	6.5%	24.6%	47.8%	20%	1316
	Non-Users	0.3%	3.8%	18.7%	53.1%	24.2%	686
Newspapers	Users	0.5%	6.1%	27.2%	50.3%	15.8%	1311
	Non-Users	0.1%	6.6%	21.7%	54.6%	16.9%	681
Radio	Users	2.5%	27.5%	36.8%	27.5%	5.6%	1293
	Non-Users	1.2%	16.5%	35.1%	39.9%	7.2%	666
Books	Users	0.5%	12.6%	30.2%	43.9%	12.7%	1311
	Non-Users	0.4%	15.1%	35%	41.7%	7.7%	674
Magazine	Users	1.5%	20.2%	43%	30.5%	4.9%	1306
	Non-Users	0.9%	19.8%	43%	31.4%	4.9%	668
The Internet	Users	0.4%	2%	17.2%	53.4%	27%	1313
	Non-Users	1.6%	15.6%	27.7%	45.3%	10%	643
Face to face communication	Users	0.1%	5.4%	20%	46.3%	28.3%	1313
	Non-Users	0.4%	4.1%	16.2%	51.3%	27.9%	684

C3. Do you trust the following source of news

		Do not trust	Half trust	Trust	N
Domestic TV news	Users	3.8%	29.7%	66.5%	1307
	Non-Users	4.4%	25.2%	70.4%	682
Foreign TV news	Users	8.3%	51.2%	40.5%	1210
	Non-Users	12%	47.8%	40.1%	598
Domestic radio news	Users	5.2%	35%	59.8%	1250
	Non-Users	4.6%	28.3%	67.1%	653

Foreign radio news	Users	12.1%	56.8%	31.1%	1108
	Non-Users	19.8%	47.5%	32.7%	550
Domestic newspapers	Users	3.6%	37%	59.4%	1304
	Non-Users	4.8%	37.3%	57.9%	668
Foreign newspapers	Users	9.9%	55.1%	35%	1078
	Non-Users	20.4%	50.3%	29.3%	495
Domestic Online News	Users	13.3%	64.8%	21.8%	1297
	Non-Users	16.3%	58.7%	25.1%	578
Foreign Online News	Users	16.4%	68.8%	14.8%	1165
	Non-Users	26.2%	58.3%	15.6%	508

D1. How many mailing addresses have you saved?

	Mean	SD	N
Users	32.36	84.41	1276
Non-Users	20.40	68.81	649

D2. How many cell phone numbers have you saved?

	Mean	SD	N
Users	112.04	125.77	1178
Non-Users	76.33	152.30	500

D3. How many fixed telephone line numbers have you saved?

	Mean	SD	N
Users	75.97	183.90	1269
Non-Users	41.48	60.47	658

D4. How many friends do you meet with at least once per week?

	Mean	SD	N
Users	4.87	10.14	1299
Non-Users	5.19	10.11	668

D5. How many personal calls do you receive on fixed telephone line per day?

	Mean	SD	N
Users	3.44	5.06	1295
Non-Users	4.14	7.46	668

D6. How many personal calls do you dial with a fixed telephone line per day?

	Mean	SD	N
Users	2.96	3.88	1297
Non-Users	3.36	5.31	670

D7. How many members of your family living with you have cell phones?

	Mean	SD	N
Users	3.01	1.42	1298
Non-Users	2.88	1.71	681

D8. Do you have a cell phone?

	Mean	SD	N
Users	0.93	0.26	1315
Non-Users	0.78	0.42	686

D9. Which year did you start to use cell phone?

	Before 1996	96-97	98-99	00	01	02	03	04	05	06-07	N
Users	7.2%	9.1%	17.4%	16.9%	8.5%	11%	7.9%	7.7%	7.9%	6.6%	1121
Non-Users	8.9%	8.7%	17.6%	18.3%	7.1%	9.1%	7.1%	8.1%	6%	9.1%	482

D10. How many mobile text messages do you receive per day?

	Mean	SD	N
Users	13.37	24.76	1202
Non-Users	7.94	14.08	512

D11. How many mobile text messages do you send per day?

	Mean	SD	N
Users	12.01	23.50	1203
Non-Users	6.77	15.57	517

D12. How many cell phone calls do you receive per day?

	Mean	SD	N
Users	6.05	8.26	1195
Non-Users	5.27	6.97	517

D13. How many cell phone calls do you dial per day?

	Mean	SD	N
Users	5.17	7.32	1182
Non-Users	4.76	7.28	518

D14. How much is your cell phone bill per month?

	Mean	SD	N
Users	113.75	132.01	1198
Non-Users	98.48	107.21	523

D15. Can your cell phone bill be reimbursed?

	Complete reimbursement	Partial reimbursement	No reimbursement	N
Users	7%	11.6%	81.5%	1219
Non-Users	3.9%	7.3%	88.8%	534

D16. Do you usually forward mobile instant messages?

	Never	Sometimes	Always	N
Users	23.8%	65.1%	11.1%	1221
Non-Users	42.1%	47.2%	10.7%	534

D16_2. Do you usually forward following mobile instant messages?

	News	Greetings	Jokes	Notices	N
Users	4.2%	56.5%	50.5%	22%	214
Non-Users	4.2%	75%	51.4%	20.8%	72

D17. Have you received any mobile instant messages sent by the local government about the municipal administration or traffic?

	Never	Sometimes	Always	N
Users	52.3%	41.5%	6.2%	1218
Non-Users	51.8%	41%	7.2%	527

D18. Do you contact following people with different means?

1= No such person, **2**= SMS, **3**= Cell phone, **4**= Fixed line call, **5**= F2F, **6**= Don't contact

		1	2	3	4	5	6	N
Parents	Users	3.2%	14.2%	36.5%	54.6%	54.1%	3.8%	1315
	Non-Users	13.1%	7.7%	22.3%	50.6%	47.4%	5.2%	686
Children	Users	60.6%	5.9%	10.6%	11.9%	29.4%	1.9%	1315
	Non-Users	19%	10.9%	24.8%	31.8%	58.2%	4.5%	686
Spouse or lover living together	Users	34.4%	23%	38.7%	22.4%	40.1%	4.2%	1315
	Non-Users	13.1%	15.3%	36.4%	30.6%	54.8%	9.3%	686
Brothers or sisters	Users	29.2%	17.3%	34.1%	27.8%	23.8%	10.6%	1315
	Non-Users	9.3%	15.9%	37.9%	46.4%	36%	11.5%	686
Friends met online	Users	35.4%	16.5%	10.9%	4.3%	3.3%	39.7%	1315
	Non-Users	73.2%	4.4%	5.7%	2%	1.3%	16.8%	686
Close friends	Users	1.2%	45.4%	61.1%	34.3%	47.1%	5.1%	1315
	Non-Users	5%	28.4%	46.4%	44.3%	42.4%	8.3%	686
Acquaintances	Users	1.2%	23.7%	32.8%	15.4%	11.6%	37.4%	1315
	Non-Users	2.6%	14.1%	27.7%	25.7%	20.3%	35.4%	686
Relatives	Users	0.8%	12.5%	27.7%	39.8%	20.5%	32.9%	1315
	Non-Users	1.2%	9.2%	25.7%	47.5%	19.5%	29.6%	686
Current colleagues of classmates	Users	1.1%	33.4%	56.8%	30.3%	42.7%	11.3%	1315
	Non-Users	5.4%	19%	43.9%	35%	34.8%	18.8%	686
Lovers	Users	61.9%	17%	23.6%	8.7%	14%	6.8%	1315
	Non-Users	73.6%	7.6%	12.7%	6.7%	8.9%	7.7%	686
Neighbors	Users	4.9%	2.8%	4.9%	9%	38.5%	47.3%	1315
	Non-Users	3.2%	2%	6.1%	15%	51%	34.5%	686

E1. Are the following statements accurate descriptions of you?

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

		1	2	3	4	5	N
I would like to know the idea and things of those people who are totally different from me.	Users	11.7%	25.5%	19.6%	32%	11.2%	1308
	Non-Users	18.4%	34.4%	20.8%	20.2%	6.2%	678
I like to express my opinion more than others.	Users	8.4%	37%	21%	25.3%	8.3%	1315
	Non-Users	10.9%	36.5%	20%	22.5%	10.1%	680

People always think that I do not follow convention.	Users	12.7%	43.6%	16.2%	19.7%	7.7%	1307
	Non-Users	18.2%	48.2%	13.1%	14%	6.5%	677
Although I will not color my hair, I am not against others doing so.	Users	5.1%	6.8%	7.8%	41.9%	38.4%	1311
	Non-Users	6.5%	10.4%	10.1%	41.4%	31.6%	681
Even if I disagree with someone, I am still interested in listening to his/her explanation.	Users	2.1%	4.6%	7.8%	48.1%	37.4%	1315
	Non-Users	2.6%	7.2%	11.5%	46.7%	32%	685
I always actively try to know or learn something new.	Users	1.1%	8.3%	15.4%	46%	29.2%	1314
	Non-Users	3.2%	11.7%	18.4%	40.5%	26.2%	684
I always try to do something new.	Users	3%	18.3%	20%	40.5%	18.2%	1310
	Non-Users	5.7%	27.3%	18.5%	33%	15.5%	682
I can easily get along with those who are from different social positions.	Users	3.2%	19.3%	19%	39%	19.6%	1313
	Non-Users	6.9%	22.3%	16.8%	35%	19%	685
Because of my ability to get to new things, I feel very young.	Users	2.3%	15.6%	18.3%	42.1%	21.7%	1312
	Non-Users	4%	16.7%	19.1%	40.2%	20.1%	682
I like to interact with people with different ideas.	Users	3.2%	16.1%	17.4%	43.9%	19.3%	1314
	Non-Users	6.1%	23.4%	18.4%	35.1%	17%	684
False ideas should be not spread	Users	8.5%	32.3%	20.9%	27%	11.3%	1297
	Non-Users	8.3%	25.8%	16.4%	31.9%	17.6%	677
I usually keep silent in group discussion.	Users	14.1%	38.4%	16.4%	22.4%	8.6%	1310
	Non-Users	11.9%	31%	19.7%	25.1%	12.3%	681
I do not speak when meeting those whom I dislike.	Users	9.2%	25.8%	14.1%	33.3%	17.6%	1313
	Non-Users	10.8%	19%	12%	32.3%	25.9%	684

F1. How many people in your family go online?

	Mean	SD	N
Users	2.26	1.17	1296
Non-Users	1.43	1.31	678

F2. How many computers are there at your home?

	Mean	SD	N
Users	1.56	0.78	1227
Non-Users	1.32	0.62	500

F3-4. Do you use computers at home?

	Desktop	Notebook	Both Desktop and Notebook	Don't use computer	N
Users	63.1%	7.8%	24.8%	4.4%	1245
Non-Users	33.4%	3.4%	7.3%	55.9%	506

F5. Is the computer in your home or dormitory connected to the Internet?

Users	93.9%	N=1189
Non-Users	76.5%	N=221

F6.F11. Did you use the Internet in the past half a year?

Yes	Had used but not in the past half a year	Never	N
65.7%	6.6%	27.7%	2001

F7. (Non-users) Do you usually ask an Internet user to help you receive or send emails or to search for information online?

Never	Sometimes	Always	N
63%	31.7%	5.3%	552

F8. (Non-users) Are you going to go online within the coming half-year?

No	Possibly	Very likely	N
50.3%	38.9%	10.8%	545

F9. What is the main reason you do not use the Internet (N=512)?

No interest/ not useful	34%
Do not know how to use/Confused by tech	23.4%
No computer/ Internet Connection	4.2%
Too expensive/ cannot afford the fees/charges	4%
No time/ too busy	34.4%

F10. Internet experience

Mean	SD	N
6.52	2.59	1135

G1. How many times do you use the Internet per week?

LT once	1-3 times	4-6 times	Once a day	Many time a day	Always on	N
4.4%	20.7%	10.5%	21.3%	29.6%	13.6%	1309

G2. How can you connect the Internet at home? (N=1317)

ADSL	ISDN	LAN	Campus network	Modem
53.1%	0.9%	17.2%	2.7%	5.8%
Leased lines	Set-top Box	Power line	Wireless or cell phone	
0.7%	1%	1.4%	2.5%	

G3. How is the fee charged for the Internet connection for your private use?

No home access	Monthly fee	Yearly fee	Package	N
8.3%	64.6%	21.2%	5.9%	1049

G4. Your monthly fee for private Internet use

Mean	SD	N
101.19	90.162	860

G5. Daily hours spent on

	Mean	SD	N
Cell phone	1.18	0.99	10
PDA	1.72	0.78	6
Wireless Internet	3.31	3.81	24

G6. Daily time spent on the Internet at following locations

	Mean	SD	N
At home	2.77	2.46	1066
At work or at schools	3.63	2.96	827
At relatives of friends' home	1.28	1.24	86
Library or other public places	1.48	1.30	158
Internet cafés	1.28	1.26	388

G7. The purpose for you to go online at an Internet café is

Play games	Chat	Check E-mail	Reading news	General browsing	Search for information	N
51.6%	66.2%	46.7%	59.7%	69.4%	65%	426

G8. Do you often leave messages in chat rooms or BBS?

1= Seldom or never use a chat room or a BBS, **2**= Only read, but never leave messages,

3= Seldom leave messages, **4**= Often leave messages

1	2	3	4	N
39.8%	14.7%	32.6%	12.8%	1315

G9. Do you often use a proxy server?

Never	Seldom	Always	N
61.4%	21%	5.5%	1315

G10. Do you know e-governments?

1= Not knowledgeable at all, **2**= Not very knowledgeable, **3**= Half knowledgeable,

4= Somewhat knowledgeable, **5**= Very knowledgeable

1	2	3	4	5	N
33.9%	40.1%	14.5%	7.5%	1.6%	1315

G11. Do you often use government Web sites?

Never	Seldom	Always	N
45.6%	44.8%	9.7%	1315

G12. From where do you learn about government Web sites?

Government publications	Search Engines	Friends	Others	N
16.6%	52.3%	20.3%	9.5%	716

G13-14. Do you have your

G13. Personal Web site	G14. Blog	N
9.9%	26.2%	1315

G15. The reason for your maintaining a personal Web site or a blog is

Hobby	Work or study	Sell things	Show yourself	Contact people	Post news	Share personal experience	Fun	N
89.2%	34.8%	11%	42.3%	63.9%	23.5%	72.4%	73.4%	386

G17. How many IDs do you have on the BBS that you use most frequently?

Mean	SD	N
1.64	3.26	651

G18-G22. Do you often use the Internet for (N＝1315)

1= Never, **2**= Less than once a month, **3**= Monthly, **4**= Weekly, **5**= Daily, **6**= Several times a day

	1	2	3	4	5	6
G18. 1. Checking E-mails	19.7%	10.5%	16.3%	26.1%	14.7%	12.3%
2. QQ/ICQ	27.3%	4.4%	5.6%	17.3%	17.7%	27.3%
3. MSN	62.1%	6.6%	4.1%	8.5%	4.8%	13.1%
4. Chat rooms	65%	9.8%	6.7%	11.2%	4.4%	2.5%
5. send attachments with e-mail	33.6%	11.9%	15.2%	21.2%	7.2%	9.9%
6. Making online phone calls	80%	7.4%	4.5%	5.3%	1.5%	1.3%
7. renewing blog	73.8%	5.3%	6%	10.6%	3.4%	0.6%
8. Go to BBS	37.2%	7.9%	9.9%	21.9%	14%	8.8%
9. update your personal Web site	85.8%	2.5%	2.7%	5.7%	2.2%	0.8%
G19. 1. Look for local news	15.7%	8.9%	9.3%	24.7%	28.7%	12.6%
2. Look for domestic news	15.9%	7.1%	8%	25.6%	30.5%	12.8%
3. Look for foreign news	29.2%	8%	9.5%	22.3%	21.3%	9.4%
4. Look for travel information	42.5%	22.7%	18.2%	12.5%	2.7%	1.4%
5. Look for information for jobs	54.7%	13.6%	10.2%	12%	4.7%	4.3%
6. Reading blogs	40.3%	10%	13.2%	21.4%	9.5%	5.3%
7. Look for jokes or humorous etc.	40.3%	12.7%	16.6%	21.6%	5%	3.8%
8. Look for info. on health	31%	16.1%	22.3%	24%	4.5%	1.8%
G20. 1. Play games	34.5%	9.5%	9.4%	21.6%	14.3%	10.5%
2. Download or listen music	13.9%	6.8%	12.6%	34.4%	16.7%	15.1%
3. Download or watch movies	26.9%	7.3%	15.4%	30.5%	11.9%	7.7%
4. Download or watch Video	40.5%	10.6%	11.7%	23.6%	7%	6.2%
5. visit religious or Spiritual sites	86%	6%	3%	3%	1.1%	0.4%
6. listen to radio online	80.2%	6.5%	4.3%	4.7%	3%	1.1%
7. Watch TV online	55%	9.4%	9.7%	15.1%	7%	3.7%
8. gamble online	95.3%	1.3%	0.5%	2.1%	0.4%	0.3%
9. Browse the Web	11.4%	3.3%	6%	19.1%	23.2%	36.8%
10. Look at sites with sexual contents	67.6%	13.3%	6.9%	7.2%	2.6%	2.3%
G21. 1. Get info. about a product	43.1%	12.8%	16.8%	18.6%	5%	3.5%
2. Buy things online	64.1%	17.3%	12.1%	5.3%	0.6%	0.4%
3. Make travel reservation	83.2%	11.9%	3.5%	1%	0.1%	0.1%
4. Pay bills	79.1%	9.2%	7.7%	3.4%	0.2%	0.2%

5. Online banking	68%	11.2%	12.5%	6.5%	0.8%	0.6%
6. sell things online	87%	5.6%	3.8%	2.3%	0.7%	0.5%
7. Invest in stocks/funds	81.1%	3.7%	3.3%	3.4%	4.5%	3.5%
G22. 1. Online translation	60%	10.9%	11%	11.4%	4.1%	2.3%
2. Look up a definition of a word	56.3%	12.6%	10.7%	14%	3.7%	2.7%
3. find or check a fact	31.1%	15.1%	17.4%	24.5%	7.5%	3.9%
4. Get info. for school work	41.5%	10.7%	16.8%	20.4%	5.6%	4.3%
5. Distant learning or job training	80.5%	6.5%	6.3%	4.3%	1.6%	0.7%

G23. How many paid e-mail accounts do you have?

Mean	SD	N
1.51	1.48	132

G24. How many free e-mail accounts do you have?

Mean	SD	N
2.28	1.82	1090

G25. How many e-mail addresses have you saved?

Mean	SD	N
36.75	77.83	1002

G26. How many MSN addresses have you saved?

Mean	SD	N
31.93	49.47	497

G27. How many QQ numbers have you saved?

Mean	SD	N
88.92	108.77	1022

Whom do you contact …(N＝1315)

	Strangers	Acquaintances	Both of them	Seldom or never use
G28. Using QQ	0.9%	48.9%	27.9%	21.7%
G29. Using MSN	0.8%	31.1%	7.1%	59.6%

G30. How soon do you think one should respond to personal e-mails?

1= As soon as possible, **2**= Within a day, **3**= Within 2-3 days, **4**= Within 4-5 days, **5**= Within a week, **6**= Within half a month, **7**= Within a month, **8**= When one has the time, **9**= No need to respond

1	2	3	4	5	6	7	8	9	N
47.5%	16.8%	11.5%	0.9%	6.7%	0.4%	1.1%	4.6%	5.1%	1315

G31. Do you do following things while going online (N＝1315)

	No	Yes, sometimes	Yes, most of the time
1. Listen to music	18.8%	38.7%	42.5%
2. Chat with people	27.6%	34.5%	37.8%
3. Watching TV online	57.9%	32.8%	9.3%
4. Making phone calls	54.8%	38.3%	6.8%
5. Listen to radio	83.9%	14.7%	1.4%

G33. Do you use search engine (N=1315)? Yes=78.3%

G35. Do you often use search engines to search following information? (N=1035)

1.Work or study	73.2%
2. Entertainment or relaxation	68.7%
3. Social news	60.9%
4. Shopping information	5.7%
5. Health information	31.9%
6. Travel	33.3%
7. Map or traffic information	50.1%
8. Financial and economic news	34.7%
9. Science and technology	45.2%
10. Sports	44.9%
11. Real estate	25.5%
12. Automobiles	33.3%
13. Education	46.7%
14. Literature and the arts	50%

G36. Can you usually find what you want when using a search engine?

Never	Seldom	Sometimes	Often	Always	N
0.3%	0.6%	21.5%	62.9%	14.6%	1030

H1. Did the following situation happen to you frequently? (N＝1315）

	Never	Sometimes	Always
1. Use the Internet longer than planned	25.7%	34.1%	39.5%
2. Would rather use the Internet than meet with friends	62.2%	27.8%	9.3%
3. People complain that you spend too much time online	66.7%	21.6%	11.5%
4. Feel lost if not online	70%	19.8%	10.1%
5. Feel annoyed if disturbed while using the Internet	62.2%	26.6%	11.2%
6. Because of going online you tend to ignore or forget other things	62%	31%	7%
7. Feel reluctant to disconnect when finish using the Internet	73.2%	19.2%	7.3%
8. The relationships with your family or with the people around you become tense due to your use of the Internet	92.8%	6.2%	1.1%

H2. The cable connecting China to the US was damaged because of an earthquake in Taiwan. To what extent did this affect your life, study, or work?

Not affected at all	Hardly affected	Neutral	Somewhat affected	Greatly affected	N
47.4%	26.7%	7.7%	13.2%	4.8%	1315

H3. You think the amount of time you spend online is:

Too short	Not enough	Enough	More than enough	Too much	N
6%	12%	56.2%	18.3%	7%	1315

H4. Suppose you could not use the Internet for a week. How would you find this?

Intolerable	Somewhat intolerable	Uncomfortable, but okay	It wouldn't matter at all	N
2.6%	9.9%	31.5%	55.8%	1315

I1. What types of online news do you mainly read? (N=1315)

1. Domestic news	76%
2. International news	64.6%
3. Social life news	72%
4. Entertainment news	76.1%
5. IT news	43.6%
6. Financial and economic information	44.2%
7. Sports news	58.1%
9. None	4.2%

I2. After using the Internet, has there been any change in the amount of time you spend with the following media? (N＝1315)

	Much less than before	Less than before	Same as before	More than before	Much more than before
1. TV	22.4%	32.3%	40.8%	3.2%	0.9%
2. Radio	22.7%	14.8%	57.6%	1.1%	1%
3. Newspapers	14.5%	18.2%	63.6%	2.1%	0.9%
4. Magazines	16.6%	18.1%	61.6%	1.8%	0.4%
5. Books	12.8%	19.9%	63%	2.5%	1%

I3. How much of the following information sources on the World Wide Web do you consider generally reliable? (N＝1315)

0= None of it; 1= A small portion of it; 2=About half of it; 3= Most of it; 4=All of it

	0	1	2	3	4
1. Information on news pages posted by established media on the WWW	2.3%	10.2%	40.3%	41.2%	5.2%
2. Information on information pages posted by individuals on the WWW	11.3%	42.2%	40.5%	4.2%	0.2%
3. Information on government pages on the World Wide Web	0.7%	3.2%	18.3%	51.9%	22.8%
4. Information provided by search engines on the WWW	2.2%	14.1%	52.1%	26.8%	1.6%
5. Information on BBS on the WWW	4.7%	29.9%	50.4%	10.5%	0.7%
6. Advertisements or commodity information on the WWW	7%	31.3%	47.3%	10.7%	0.4%
7. Information in the chat rooms on the World Wide Web	13.5%	42.8%	35.3%	3%	0.1%

J1-J2. How many friends have you made on the Web? (N＝720)

	Mean	SD
The total number of Net friends	17.70	43.02
Keep in regular contact	6.02	16.37
Meet through network videoing but not face to face	5.24	19.41
Have met face to face	3.47	9.20
Live in the same city	7.05	16.29
Do not live in mainland China	0.82	3.55

J3. Your contacts with the following groups

1=E-mail, **2**=QQ/ICQ, **3**=MSN, **4**=Net phone, **5**=Don't contact

	1	2	3	4	5	N
1. Parents	2.6%	8.1%	1.9%	4.8%	86.5%	1269
2. Children	6.3%	11.2%	4.5%	4.8%	82.8%	528
3. Spouse or lover living together	10%	22.7%	9.2%	6.2%	69.2%	879
4. Siblings	9.8%	27.8%	5.8%	5%	63.6%	893
5. Friends made through the Internet	17.3%	64.7%	15.7%	4.5%	27.5%	851
6. Close friends	21.4%	51.7%	17.9%	7%	34.7%	1287
7. Acquaintances	12.7%	42.9%	10.3%	3.3%	47.1%	1278
8. Relatives	5.2%	17.9%	4%	4.4%	74.9%	1296
9. Current colleagues, classmates, people in the same profession, or people of business connection	27.9%	46.6%	16.6%	6.3%	34%	1294
10. Lover	10.5%	40.9%	13.4%	7.8%	50.8%	536
11. Neighbors	1.7%	7.9%	1.3%	1.2%	90.4%	1251

J4. Has the use of the Internet increased or decreased your contact with the following groups?

1=Not applicable, **2**=Greatly decreased, **3**=Somewhat decreased, **4**=Remained the same, **5**=Somewhat increased, **6**=Greatly increased

	1	2	3	4	5	6	N
1. Family	0%	1.1%	12.4%	84.8%	1.4%	0.3%	1313
2. Friends	0%	1.1%	16.5%	76.7%	5.1%	0.6%	1313
3. People in the same profession	3.5%	1.4%	12.4%	77.2%	4.7%	0.8%	1314
4. People who share your hobbies or recreational	2.8%	1.1%	12.2%	74.1%	9%	0.7%	1313

activities							
5. People who share your political interests	9.3%	1.4%	8.8%	76.1%	4.1%	0.4%	1303
6. People who share your religion	24.6%	0.7%	5.3%	68%	1.3%	0.1%	1300
7. People with the different interest	6.5%	1.9%	9.8%	78%	3.6%	0.3%	1308

J5.Because of your Internet access, do you feel that your work performance/productivity has improved?

Improved a lot	Improved somewhat	Same as before	Worsened somewhat	Worsened a lot	Already had Internet when started to work	N
28.1%	32.1%	31.4%	5.9%	1.6%	0.9%	1301

J6. Have you ever fell in love on the Web?

Mean	SD	N
2.20	3.46	138

K1. Do you think online shopping … (N=1315)

1. Is cheaper	57.6%
2. Will expose your privacy	47.5%
3. Is faster	67.8%
4. Presents difficulties in terms of returning or exchanging goods	72.1%
5. Offers more choices	70.9%
6. Makes yourself be easily cheated	79%
7. Allows you to easily find the things you want	71.3%

K2. In an average month, how many times do you purchase products or services over the Internet?

Mean	SD	N
1.82	2.10	415

K3. Have your Internet purchases reduced your purchases of similar products and services from local retail stores?

Not at all	Reduced a little	Reduced a lot	N
59.9%	27.1%	13%	426

K4. How concerned would you be about the security of your credit or bank card information when or if you ever bought something online? Would you be…?

Not concerned at all	Somewhat concerned	Very concerned	Extremely concerned	Do not have credit card or bank card	N
26.8%	44.5%	18.5%	6.5%	3.6%	425