

2003

An exploratory study of older persons' computer and internet usage in Hong Kong

Cheung Ming, Alfred CHAN

Lingnan University, Hong Kong, sscmchan@ln.edu.hk

David Rosser PHILLIPS

Lingnan University, Hong Kong, phillips@ln.edu.hk

Meng Soi, Florence FONG

Follow this and additional works at: <http://commons.ln.edu.hk/apiasmp>

 Part of the [Demography, Population, and Ecology Commons](#), [Gerontology Commons](#), and the [Information Literacy Commons](#)

Recommended Citation

Chan, C. M. A., Phillips, D. R., & Fong, M. S. F. (2003). An exploratory study of older persons' computer and internet usage in Hong Kong (APIAS Monograph Paper Series No.3). Retrieved from Lingnan University website: <http://commons.ln.edu.hk/apiasmp/10>

This Paper Series is brought to you for free and open access by the APIAS Paper Series 論文 at Digital Commons @ Lingnan University. It has been accepted for inclusion in APIAS Monograph 專題論文 by an authorized administrator of Digital Commons @ Lingnan University.

MONOGRAPH SERIES No. 3 (August 03)

**AN EXPLORATORY STUDY OF OLDER PERSONS' COMPUTER
AND INTERNET USAGE IN HONG KONG**

CHAN CHEUNG MING, ALFRED Ph.D.

PHILLIPS R. DAVID Ph.D.

FONG MENG SOI, FLORENCE BSoc Sc, MPhil

Acknowledgement:

The project was funded by Research and Postgraduate Studies Committee, funding reference: RES-017/200

We would like to express our gratitude to the assistance of Cyber Senior Network Development Association Limited in data collection and research support.
Website: <http://www.cybersenior.org.hk>

Research Team:

Principal Investigator: Professor Alfred Cheung Ming Chan
Director of Asia-Pacific Institute of Ageing Studies (APIAS)
Lingnan University

Co-investigator(s): Professor David R Phillips
Chair Professor
Head of Department of Politics & Sociology
Associate Director of Asia-Pacific Institute of Ageing Studies (APIAS)
Lingnan University

Research Support: Fong Meng Soi, Florence
Luk Kit Ling
Tang Wai Sin, Magdalene

An Exploratory Study of Older Persons' Computer and Internet Usage in Hong Kong

Table of Contents

Chapter 1: Background and Objectives of Study.....	1
Chapter 2: A review of studies to data.....	3
Chapter 3: Methodology.....	6
3.1 Research Design.....	6
3.2 Sampling Method and Size.....	6
3.3 Data Collection.....	6
Chapter 4: Findings.....	8
4.1 Demographic Profile.....	8
4.2 Patterns of Computer Usage.....	10
4.3 Patterns of Internet Access.....	12
4.4 Time Spent and Reasons for Learning Computer Skills.....	14
4.5 Perceptions towards Computer Usage.....	15
4.6 Impact of Learning Computer Skills.....	17
4.7 Psychological Well-being.....	19
4.8 Difficulties and Training Needs in Computer Learning.....	19
Chapter 5: Recommendations.....	21
References.....	22

Chapter 1: Background and Objectives of the Study

The foundation for information technology (IT) development in Hong Kong has been laid since the Chief Executive gave the direction in his Policy Address in 1999. Hong Kong is to take a leading role in IT development and retain its competitive edge and drive its overall expansion. With the establishment of the Information Technology and Broadcasting Bureau in April 1998, Hong Kong's information infrastructure has been consolidated. Its comprehensive strategy is to make Hong Kong a leading digital city in the globally connected world of the 21st century.

In answering queries from Legislative Councillor Mr. Sin Chung-kai, the Social Welfare and Health Bureau replied on 5 April 2000,

The Social Welfare Department (SWD) recently carried out a survey on 242 social centres and multi-service centres for the elderly on the availability of computers in these centres for use by their elderly members. 195 survey forms were returned and it was found that a total of 126 computers were provided in 24 centres (12.3%) for use by their elderly members. Thirty-eight of these 126 computers had access to the internet.

In his 2000 Policy Address, the Chief Executive (Chief Executive's Policy Address 2000) outlined the strategy to encourage the use of computer by elders by providing and installing:

- 280 personal computers at 246 Multi-service Centres and Social Centres for the Elderly by the end of 2001
- Internet access points at the above locations
- Information technology training for 2000 older persons by March 2001 and another 5000 elders in 2001-2002

According to information and statistics available, it appears that little has been done by the Government to develop IT training for older adults, at a time when there is already a pressing need to assist the older persons to equip themselves for an era of information technology. In fact, many countries, including technologically advanced ones, are plagued by similar problems. To quote an example:

The “digital divide”- the divide between those with access to new technologies and those without - is now one of America’s leading economic and civil rights issues. (US Department of Commerce, 1999)

Computer usage and internet access for older persons have been increasingly emphasized in Hong Kong, particularly as a live access tool for keeping frequent contacts with the outside world and the applicability in online medical consultation for those who are frail and isolated. But how are these computer communication technologies being used among the older persons? The question has not been much explored. Hence, this study aims, as a first step, to find out the profiles of older persons using computer aided communications including internet and e-mails. The objectives of the present study are to:

1. measure the proportion of older persons who have access to computers and the Internet in Hong Kong;
2. examine computer usage and online habits of Hong Kong older persons including frequency of use, email capabilities and online activities;
3. determine the percentage who use the Internet for financial or investment purposes;
4. examine Hong Kong older persons’ attitudes to the impact of the Internet on their own investment knowledge, ability and habits; and
5. examine the IT training needs of older persons and the difficulties that may arise, so as to enhance IT teaching in Hong Kong.

Chapter 2: A Review of studies to data

Computer Technical Know-how pertaining to older persons

Studies to date have revealed that older adults use computers for entertainment, education, as well as creative and business endeavors. Computer training helps them to increase productivity, learn skills and boost short-term memory. Electronic mail, online services and the Internet encourage socialization (Lawhon; Tommie, 1996).

Although many older adults initially use the Internet as a means of connecting with friends and family, they quickly learn that it is also a valuable source of information on financial, health, travel and other topics of interest. Among older adults, both computer ownership and online participation are tied to their level of education and socioeconomic status. When combined with Internet access, learning to use computer technology can provide older adults opportunities for lifelong learning and continued growth and development. It can also help offset social isolation and loneliness. It has been recommended that peer instructors who understand how adults learn can use teaching methodologies that are non-threatening and self-paced to teach older adults to use computer technology. As long ago as 1998, Imel noted that educators of adult and continuing education must be aware of the issues concerning access and equity and design training programs that will attract groups of older adults who have currently no access to the Internet.

Some studies suggest positive impact of computer usage on older persons, especially the contribution to their quality of life in providing them with social and emotional support (White 1999; Birren 1996; Wright, K. 1995, Swindell, 1992). The use of the Internet can enable older persons to feel they are connected with the world e.g. via online news (local and international). This could be of particular importance for those who are relatively isolated or disabled. Ordering goods and making payments via online services can also facilitate older adults enjoyment in later life. Moreover, it may also alter their communication patterns with family members (including those living overseas) and other

relatives and friends. They could even make friends with others via open chat rooms.

Potential barriers to older persons' use of computer

The belief that older persons are not capable of learning how to use computers as compared with the younger groups is widely held. Due to the alleged decline in cognitive functions of older persons, they are often believed to have less satisfactory performance in mastering computer skills. Their decline in memory and eye sight, slower motion in hand and fingers are widely believed to be barriers to older persons' use of computers (White, McConnell et.al., 1999). Naturally, many of these images are of course incorrect and stereotypical. Some studies suggest that the level of education would be a predictor for better performance and also a more favorable attitude is another crucial factor (Dunnett 1998). "*Technophobia*" is used to describe the fear, discomfort, or anxiety towards technology of various forms (Spresser1998; Brosnan, 1998). Gender is another factor identified as affecting older persons' attitude towards learning new technology (SeniorNet, 1999). Nevertheless, the design of the computer and its related facilities principally targeting younger groups may be a crucial factor in hindering older persons' use of new technology. Bigger screens, easy touch button keyboards and a wireless mouse could be structural reasons for the comparatively lower rate of computer usage amongst the older groups.

There is a need to research into the above factors in order to understand the situation of computer usage among older persons in Hong Kong. Little has been done in the past in identifying the older persons as a distinct target group in this respect.

If Hong Kong is to develop into a leading digital city, the problem of any "Digital Divide" needs to be tackled. At present, the Hong Kong government fosters the development of IT kiosks and computer training centres to enhance computer and Internet literacy among older citizens; other voluntary and benevolent organizations are undertaking similar things to achieve the same purpose. However, much is still left to be done as far as the full utilization of training facilities and design of teaching programme for

older people are concerned. There is a pressing need to overhaul the entire training programme and enhance collaboration between government and non-government organizations to cater for the training needs from a wider perspective.

Chapter 3: Methodology

3.1 Research Design

This study is divided into two parts. A self-administrated questionnaire (mainly comprising closed-ended question with a 5-point Likert scale) was designed to measure the motivations of older adults to learning computer technologies, computer usage habits and the impact on their psychological well-being. A group of older persons was then selected from the questionnaire respondents to join in focus group discussions. The purpose was to acquire a greater depth of understanding of their views and habits in using computers and Internet and to validate the findings of the survey.

3.2 Sampling Method and Size

A total of 227 older adults aged 55 or over responded to the questionnaire, via self-selection from the Cyber Senior Network Development Association Limited. The Association organizes computer training courses for over 1,000 older persons and, all the respondents had attended their computer courses. Two focus groups were held and a total of 30 participants who had responded to the questionnaire participated in the discussions.

3.3 Data Collection

The process of data collection started in September 2002 and preset questionnaires were distributed to the older persons attending the computer courses organized by the Cyber Senior Network. The respondents could either respond to the questionnaire via the Internet or by filling in the questionnaire and returning it to the research team. Among the 227 respondents, about 50% responded to the questionnaire via the Internet. The two focus groups, each lasting about an hour, were held two months after the survey in November 2002. There were 12 males and 18 females in the discussions.

A report based on these findings was delivered as a conference paper at the 10th Hong

Kong Association of Gerontology in 2002. The findings, published as this full working paper in the APIAS series, relevant journals and will hopefully stimulate academic discussions and public concern. The finished report was sent to government departments, such as the Social Welfare Department, the broadcasting authority and the Elderly Commission.

Chapter 4: Findings

4.1 Demographic Profile (Table 1)

Age, Sex and Marital Status

The majority of respondents were young-older persons, aged under 70. Over 50% (56.4%) of the respondents were aged between 60 and 69, while about 20% were aged under 60 and 22% aged 70 or over. The gender distribution of the respondents was fairly even, with slightly more female (55.1%) than male (43.6%) respondents. Over 70% of respondents were married, about 20% were divorced or widowed and only 5.3% were single.

Income, Education and Work Status

Near 60% of respondents had monthly disposable income of less than \$4,000 and a quarter had \$4,000 or above. People with secondary or tertiary education formed the majority (72.3%), while only 0.4% were uneducated and 26% had primary education. This shows that older persons with more education appear to have greater motivation to learn computer skills. Almost all the respondents were retirees (95.5%), with only 4.4% working full-time and 23.3% working part-time.

Health and Living Conditions

Only about 5% of the respondents reported bad health while the remaining majority enjoyed good to average health status. Most respondents (over 80%) were also living with one or more family members; those living alone constituted only 12.3%. Those living in an aged home (1.8%) were also a minority. More than half (55.5%) of the respondents lived in private buildings and the rest were either living in public housing estates (37.4%) or village houses (2.2%).

Table 1 Demographic Profile

N=227

Q.	Items		Number	%
1	Age	50 – 60	47	20.7
		60 – 64	66	29.1
		65 – 69	62	27.3
		70 – 74	27	11.9
		75 – 79	17	7.5
		over 80	6	2.6
2	Sex	Male	99	43.6
		Female	125	55.1
3	Monthly income	Under \$1000	36	15.9
		\$1000 - \$2000	29	12.8
		\$2001 - \$3000	35	15.4
		\$3001 - \$4000	27	11.9
		Over \$4000	60	26.4
4	Education	No Education	1	0.4
		Primary	59	26
		Secondary	118	52
		Tertiary / university or higher	46	20.3
5	Marital status	Single	12	5.3
		Married	164	72.6
		Separated / divorce	14	6.2
		Widowed	36	15.9
6	Work status	Full-time	10	4.4
		Retired / unemployed	164	72.2
		Retired / part-time	53	23.3
7	Health	Good	96	42.3
		Average	114	50.2
		Bad	12	5.3
8	No of family members living together	0 (living alone)	28	12.3
		1-2	111	48.9
		3-4	77	34.0
		Over 5	11	4.9
9	Living condition	Public estate	85	37.4
		Aged home	4	1.8
		Private building	126	55.5
		Village house	5	2.2
		Others	4	1.8

4.2 Patterns of Computer Usage (Table 2)

Home usage

Over 70% of the elderly respondents had access to a personal computer at home which belonged either to their children or themselves. Of those with access to a computer, almost 40% were frequent users, about 25% were occasional users while 17% seldom or never used the computer at home.

Usage at elderly center

Only 25% of the respondents would frequently use the computer at an elderly centre, over 20% had never used or heard of such facilities at the centre and 30% would seldom use. The remaining 20% preferred to use their computers at home.

The focus group discussions revealed that part of the reason for the comparatively low usage of computer at elderly centre was because of the big gap between demand and supply. The limited supply of computer facilities in these centres had led to long line-ups and waiting time, and deterred some from using them. For centres which had more resources or were in less densely populated districts, the availability of computer facilities for public use was much better.

Computer knowledge

About 40% of the respondents claimed that they either knew very little or were totally ignorant of computer skills. Near 45% said they had a basic knowledge and slightly over 10% claimed to have considerable to expert knowledge of computer. This would depend on how long they had learned computers, and the longer time they had learned, the better knowledge they possessed.

Table 2 Patterns of Computer Usage

N = 227

Q.	Computer Usage	Number	%
10	Have a personal computer (PC) at home		
	Yes	166	73.1
	No	57	25.1
11	Used PC at home		
	Never	22	9.7
	Seldom (less than 3 times a month)	17	7.5
	Sometimes	55	24.2
	Often	87	38.3
12	Used PC at elderly centre		
	Never	41	18.1
	Seldom	69	30.4
	Often	58	25.6
	Unheard of such service	12	5.3
	No such need, can use PC at other places	46	20.3
13	Computer Knowledge		
	None	8	3.5
	Know very little	87	38.3
	Basic knowledge	100	44.2
	Considerable knowledge	26	11.5
	Very knowledgeable	5	2.2

Computer applications (Table 3)

Over three-quarters of the respondents used the computer for information seeking and communication purposes. The majority would surf websites on the internet while over 70% used the computer to send and receive emails. The focus group respondents revealed that they had become accustomed to using email to communicate with both local and overseas relatives and friends, and even with their children who were living with them. About 40% of respondents used the computer for word processing and entertainment purposes, such as playing computer games and CD/VCD. Only about 10% of participants would engage in more technical applications such as image processing, office software applications and webpage editing.

Table 3 Computer Applications

N = 227

Q.	Items	Number	%
A	Browsing internet webpage	196	86.3
B	Sending and receiving emails	161	70.9
C	Word processing (e.g. Microsoft Word, WordPad, Notebook)	97	42.7
D	Office software application	24	10.6
E	Image processing (e.g. Photoshop, Photoimpact)	25	11
F	Drawing (e.g. paintbrush)	61	26.9
G	Computer games	98	43.2
H	Playing CD / VCD	72	31.7
I	Editing webpage	15	6.6
J	Others	10	4.4

4.3 Patterns of Internet Access (Table 4)*Habits and time spent*

A large proportion (70%) of elderly respondents had developed the habit of surfing the internet. Near 20% would spend more than 6 hours on the internet per week; another 20% would spend 4-5 hours, while near 25% would spend 1-3 hours. On average, nearly half the respondents (47.4%) would spend more than 3 hours on the internet.

Table 4 Pattern of Internet Access

N = 227

Q.	Internet Access	Number	%
15	Habit of using the Internet		
	Yes	160	70.5
	No	54	23.8
16	Time spent on the Internet weekly		
	Less than 1 hour	36	15.9
	1 – 3 hours	56	24.7
	4 – 5 hours	44	19.4
	6 – 8 hours	17	7.5
	more than 8 hours	22	9.7

Content of Internet Access (Table 5)

When surfing on the internet, ‘news and media’, ‘health and medicine’ and ‘leisure and living’ were the three most popular categories that about 30% – 50% of the respondents would visit. About 25% – 30% of participants would visit categories on entertainment and commerce and economic activities. The above pattern reveals that most elderly people are keen to engage in categories that are close to their daily living, while categories that involve more technical issues and the so-called ‘high-cultures’ were less popular (about 10% – 18%) among the older generation.

Table 5 *Content of Internet Access*

			N = 227
Q.	Categories	Number	%
A	Entertainment (e.g. comics, music)	65	28.6
B	Commerce and economic (e.g. stocks, banks commercial agencies)	56	24.7
C	Science (e.g. astronomy, computer and information technology)	40	17.6
D	Education (e.g. libraries, universities, secondary and primary schools)	27	11.9
E	Social science (e.g. psychology, economics)	27	11.9
F	Arts and culture (e.g. literature, photography)	26	11.5
G	News and media (e.g. TV, magazine)	122	53.7
H	Society and culture (e.g. religion, fashion and trends)	25	11
I	Leisure and living (e.g. travel, pets)	72	31.7
J	Government and politics (e.g. political parties, political criticism)	22	9.7
K	Health and medicine (e.g. fitness, medical treatment)	88	38.8
L	Others	14	6.2

4.4 Time Spent and Reasons for Learning Computer Skills (Table 6 and Table 7)

New 40% of respondents were beginners with computers and had learned for less than 3 months. About 17% had learned computers for less than a year. Near 30% had learned for a year or more while about 15% had never attended formal computer courses. Overall speaking, more than 70% of respondents were still fresh in using computer in their daily lives.

The more popular reasons for elderly learning computer were all related with factors about self-enhancement (mean score = 4.27), such as learning new things (mean score = 4.09) and skills (mean score = 4.1) to keep up with the world. This reflects the concern of the elderly not to lag behind and their desire to equip themselves with update knowledge and skills even during older age.

During the focus group discussions, some respondents shared the information that their initial attempts to learn computers were sparked off by their desire to prove both to their families and themselves that they were capable of mastering new skills and be just as good as the younger generation. Others also mentioned that learning computer had given them a good leisure time activity.

Table 6 Time spent on learning computer

N=227

	Duration	Number	%
A	No formal class	33	14.5
B	Under 3 months	89	39.2
C	Between 3- 12 months	40	17.6
D	Over 1 year	63	27.8

Table 7 Reasons for learning computer

N = 227

Q.	Reasons	Mean	S.D.
19	Communication with local and overseas relatives and friends	3.73	0.94
20	Kill time	3.32	1.02
21	Self-enhancement	4.27	0.62
22	Make friends on the web or in computer class	3.44	0.90
23	Receive update information	3.91	0.71
24	Learn new things and keep up with the world	4.09	0.63
25	Browse website on the internet	4.06	0.69
26	Job requirement	2.89	1.08
27	Relaxation	3.64	0.82
28	Entertainment and hobby	4.00	0.67
29	Find it Interesting	4.04	0.65
30	Learn more skills	4.10	0.67
31	Prepare for future multi-services on the internet	3.63	0.94
32	Influence by computer popularity	3.29	1.00
33	Family/relatives/friends know how to use computer	3.54	1.00
34	Encouragement from family/friends	3.40	1.01
35	Others	3.70	1.16

4.5 Perceptions towards Computer Usage (Table 8)

The overall response to learning and using computer among the elderly respondents was very positive. About 80% of them expressed their liking to learn computers, 65% were certain of the positive effects and benefits that the computer had brought to their life and relationships with others and over 70% assured that learning computer skills could improve their quality of life.

While over 90% expressed their interest and desire in continuing to learn computer skills, 65% admitted that they had encountered some difficulties and 8% had great difficulty in computer learning. The reasons, they stated were mainly due to their weak memory which often made them forget the keys (48.5%), and because they found computers too complicated to handle (28.2%). Only about 20% agreed that the government and elderly centres had given adequate support to elderly people in computer usage, while nearly 50% found this support inadequate.

Table 8 Perception towards Computer Usage

N = 227

	Questions	Number	%
36	Like to learn and use computer		
	Yes	181	79.7
	No	2	0.9
	No special preference	43	18.9
37	Impact of computer on life and relationship		
	Yes	148	65.2
	No	42	18.5
	Difficult to say / don't know	36	15.9
38	Benefit from learning and using computer		
	Yes	210	92.5
	No	4	1.8
	Don't know	10	4.4
39a	Difficulty in learning and using computer		
	No difficulty	52	22.9
	Some difficulty	148	65.2
	Great difficulty	18	7.9
39b	Reasons for difficulty		
	Too many keys, don't know how to operate	20	8.8
	Weak memory, forget the steps	110	48.5
	Weak eyesight	24	10.6
	Too complicated, unable to handle	64	28.2
	Others	20	8.8
40	Hope to continue learning computer		
	Yes	210	92.5
	No	1	0.6
	No such plan at the moment	15	4.4
41	Learning computer can improve quality of life		
	Yes	162	71.4
	No	9	4.0
	No comment / don't know	56	24.7
42	Government / elderly centre support to elderly in computer usage		
	Very adequate	3	1.3
	Adequate	42	18.5
	Not adequate	70	30.8
	Very inadequate	40	17.6
	Average	36	15.9
	Don't know	35	15.4

4.6 Impact of Learning Computer Skills (Table 9)

Most of the elderly respondents were positive about the impact of computer learning and usage, citing benefits such as leading a happy life in general (mean = 7.76), gaining greater life satisfaction than before (mean = 7.31), increase in self-confidence (mean = 6.86), improved communication with others (mean = 6.56) and feeling more capable of computer usage than other seniors (mean = 6.44). The analysis also shows that there are significant associations between computer usage and well-being of older adults. Those who liked using computers had enhanced self-confidence ($r=0.32$, $p<0.01$), communication skills ($r=0.36$, $p<0.01$), happiness ($r=0.14$, $p<0.05$) and purpose in life (0.13 , $p<0.05$). The t-test shows a significant difference between frequent users and infrequent users in terms of self-confidence ($t=-2.2$, $p<0.05$); happiness ($t=-2.8$, $p<0.05$) and communication skills ($t=2.2$, $p<0.05$). The above findings suggest that learning computers or internet access including e-mails are good means to improve older peoples' communication skills and confidence, which might in turn orientate them to improved happiness and purpose in life.

Self-confidence comes from a combination of one's assurance and others' recognition of one's abilities in terms of one's knowledge and adaptation to the outside world. Given that the elderly respondents in the survey endorsed the popular view that computers are a modern necessity and their mastery represents one's being in tune with modern life, it is perhaps thus natural that they would feel more confident about themselves or even have feelings that they were better than their counterparts once they acquired basic computer skills. It is also not surprising that the longer time the elderly people had spent on learning computer, the greater the confidence and satisfaction they generated from the process. A few of the respondents in the focus group reflected that they had become 'computer buffs', and they could not spend their day without working on the computer for some hours. One was proud of her achievement in that she had learned how to use certain software that even her daughter did not know how to use. These older respondents' feeling of inferiority towards the younger generation in respect of modern technology was overcome once they themselves could master the skills. Computers were no longer the privilege or domain of

the young, they were also a tool and a toy of the older generation.

Moreover, the acquisition of computer skills has also provided an alternative communication channel for elderly people to express themselves and communicate with others, mainly via email on the Internet. During the focus group discussion, one of the respondents was very proud of his attempt to send a birthday messages to his son. He found it much easier to express himself through writing and images. Such attempts also brought applause and recognition from his family members. Another respondent shared the opinion that using emails to communicate with her husband who was living overseas had greatly enhanced their relationship. She was able to share more in-depth feeling and show her tenderness through writing emails or sending e-cards instead of talking about trivial things on the phone.

The enhancement in self-esteem and communication with significant others, coupled with the fun and new information brought about by surfing the Internet, had given greater life satisfaction to the respondents in the survey. One participant explained that he had made some new friends in the computer class he attended who shared similar interests with him. Another reflected that she had more to talk about with her children and younger children after learning computers. She felt more self-sufficient than before even though some of her close friends were not interested in computers, mainly, she felt, because they were afraid of failure.

Table 9 *Impact of learning computer*

N = 227

Q.	Impact	Mean	S.D.
44	Increase in self-confidence	6.86	2.34
45	More capable in using computer compared to other seniors of same age	6.44	2.12
46	Leading a happy life in general	7.76	1.99
47	Greater life satisfaction than before	7.31	2.08
48	Improved communication with others	6.56	2.26

4.7 Psychological Well-being (Table 10)

The mean scores (scale 1 – 10) in the Likert scale revealed that the majority of elderly respondents held positive perceptions towards life. They felt richness in each day of their life (mean score = 7.69), they were active in accomplishing the goals they had set for themselves (mean score = 7.52), and had clear directions and goals in their life (mean score = 7.06). The significant differences found between frequent and infrequent users in these respects suggests that learning and using computers are able to enhance the subjective well-being of the users by giving them a sense of achievement and self-esteem, which in turn helps to improve their quality of life in general.

Table 10 Perception towards life

N = 227

Q.	Items	Mean	S.D.
49	I cannot find anything in life that I can devote myself to.	6.18	2.88
50	I have clear direction and goal for my life.	7.06	2.36
51	I have not tried my best to accomplish things that are important to me.	5.87	2.81
52	I am an active person in carrying out the plans I set for myself.	7.52	2.11
53	There are people who live aimlessly, but I am not one of them.	6.48	3.15
54	I have spent most of my time on trivial things.	6.86	2.56
55	I feel the richness of each day.	7.69	2.11

4.8 Difficulties and Training Needs in Computer Learning

More than half of the respondents expressed they had experienced difficulties in learning computers. Apart from their poor memory, weak eyesight and complicated steps to follow as mentioned earlier, the respondents also pointed out during the focus group discussions that the skills and experience of the tutors in teaching older students were also crucial factors. If the tutor was too young, they might not be patient and understanding enough to appreciate with their learning pace.

The survey results also indicated that more than half of the respondents found the support from government and social welfare agencies in helping them to learn computer skills inadequate. Some expressed the opinion during the focus group discussions that they expected subsidies from the government to assist them to attend computer classes and subscribe to internet packages. The need for more non-profit making computer training courses for older persons and for more advanced courses for those who had acquired computer skills was apparent for the respondents.

Chapter 5: Recommendations

The findings of the study clearly illustrate the benefits of computer learning and usage for the older persons in Hong Kong which can enhance their feeling of self-sufficiency and provide life-long learning opportunities. Master of such skills and using them on a daily basis might also promote a sense of self-dependence among the older users and enable them to be less dependent on others. In view of the above, the government should consider encouraging and supporting more non-profit making organizations to conduct computer training courses for the seniors. There is a capacity for the improvement of computer skills to enhance successful ageing and healthy ageing in Hong Kong, which are objectives of the government and other organizations.

Many older adults who do not yet possess computer skills may be receptive to using computer technology if it is introduced in a comfortable environment with understanding and experienced tutors. If introduced in the right way, technology can become a major hobby and interest in the lives of elderly people. Apart from organizing computer training courses in social centres for the elderly or private commercial buildings, the feasibility of conducting such courses in aged homes, elderly hostels, day care centres and nursing homes should also be considered and explored.

The government could also encourage and support the development of computer programmes such as seniors online, use of computers to develop and strengthen memory skills, use of computers for the writing and sharing of memoirs, intergenerational computing projects (teaming seniors with school aged students) as well as for dissemination of basic information on health, diet as nutrition and activities.

References:

- Allison Patterson (1998) "*High-Tech Ageism: HotBot Ad Falls Flat*", *Innovations in Aging*, Vol. 27, Issue 4, 1998
- Bass, Scott A.(1995) (ed). *Older and active: How Americans over 55 are contributing to society*. New Haven : Yale University Press
- Battersby, David (1985) *Continuing Education for the Elderly in New Zealand: A Survey of the Opportunities*. Working Paper #4.
- Bolt, David B., Ray A. K. Crawford (2000) *Digital Divide: Computers and Our Children's Future*
- Brosnan, M. J. (1998) *Technophobia: the psychological Impact of information technology*, New York: Routledge Press.
- Chan, Alfred C.M., Jimson W.T. Chan (1999). "*Impacts of Credit Cards on Individuals in Hong Kong: An Exploration*", *Asian Profile* Vol.27, No. 6
- CyberAtlas (1999) *Seniors Use Internet for Shopping*
- CyberAtlas (2000) *Baby Boomers and Seniors Fastest Growing Web Groups*
- CyberAtlas (2000) *Older Americans Lack Confidence in Computer Skills*
- CyberAtlas (2000). *Demographics of the Net Getting Older*
- CyberAtlas (2000). *Digital Divide More Economic than Ethnic*
- Davis, Jim, Thomas Hirschl, Michael Stack (1998) *Cutting Edge: Technology, Information Capitalism and Social Revolution*
- Dixon, Janet M. (1997) *Predicting Seniors' Use of Cyberspace (Garland Studies on the Elderly in America)*
- Dunnett, Colin W. (1998) *Senior Citizens Tackling Technology; Educational Media International*; v35 n1 p9-12 Mar 1998
- Fisher, James C. & Mary Alice Wolf (1998). *Using learning to meet the challenges of older adulthood*
- Galusha, Jill M. (1998) *The Use of Computer Technology by Older Adults*.
- Hong Kong Government (1999) *Chief Executive's Policy Address 1999*
- Hong Kong Government (2000) *Chief Executive's Policy Address 2000*

- Imel, Susan (1998) *Seniors in Cyberspace. Trends and Issues Alerts*
- Iamasia.com Press Release 16 Jan 2001
(http://www.iamasia.com/presscentre/pressrel/pressrel_news.cfm_id=368)
- King, Donald A. (1997) *Coming Of Age: The Virtual Older Adult Learner*
- Lawhon, Tommie (1996) *Senior Adults and Computers in the 1990s ; Educational Gerontology*; v22 n2 p193-201 Mar 1996
- Lensch, John E. (1997) *A High-Tech Magnet for Seniors, Educational Leadership*; v54 n5 p64-66 Feb 1997
- Lowry, Louis & O'Connor, Darlene (1986), *Why Education In The Later Years?*
- Merriam, Sharan B. & Caffarella, Rosemary (1999). (2nd ed.), *Learning In Adulthood: A Comprehensive Guide*
- Millar, P., Falk, I. (2000). *Seniors Online: Online literacy and learning by senior citizens in rural areas*
- Mizuko Ito, Annette Adler, Charlotte Linde, Elizabeth Mynatt, Vicki O'Day (1999). *Final Report: Broadening Access: Research for Diverse Network Communities* (SeniorNet 1999, NSF #9712424). <http://www.seniornet.org/research/9911.shtml>
- Moore, Kimberly A.; Askov, Eunice N. (1989) *Computer-Assisted Instruction in Basic Skills for Older, Low-Literate Adults. Final Report.*
- National Telecommunications And Information Administration (1998). *Falling Through the Net II: New Data on the Digital Divide*
- National Telecommunications and Information Administration (1999). *Falling Through the Net: Defining the Digital Divide*
- Pribble, Donald A.; Trusty, Kay (1981) *Gerontology and Social Studies Education: Learning Activities for Eliminating Negative Stereotypes; Educational Gerontology*; v6 n2 p181-90 Mar 1981
- Redding, Terrence R.; Eisenman, Gordon; Rugolo, John (1998) *Training in Technology for Late Adopters: Learning in Retirement, Computers for Seniors; Journal of Instruction Delivery Systems*; v12 n3 p19-24 Sum 1998
- Schachter-Shalomi, Zalman & Miller, Ronald S. (1995), *From Age-Ing To Sage-Ing: A Profound New Vision Of Growing Older*

- Schon, Donald A., Bish Sanyal, William J. Mitchell (1999). *High Technology And Low-Income Communities: Prospects For The Positive Use Of Advanced Information Technology*
- SeniorNet (1998). Research on Seniors' Computer and Internet Usage: Report of a National Survey
- SeniorNet and The Japan Research Institute Limited (2000). *The First U.S. - Japan Comparison Survey, The Reality of Internet Use by Individuals Age 50 and Over*
- Swindell, Rick (1992) *A Study of Teleconferencing as a Medium for Improving the Quality of Life of the Frail Elderly.*
- Spreser, J. Technology and Culture PL 212 (1998) Technophobia. [Online]
<http://www.loyola.edu/dept/philosphy/techne/tekfobia/html>
- The National Council on the Aging (1997). *Learning How to Create Senior-Friendly Access to The Internet and World Wide Web*
- U. S. Department of Education (2000) E-Rate and the Digital Divide: A Preliminary Analysis From the Integrated Studies of Educational Technology
- U.S. Department Of Commerce (1995). Falling Through The Net: A Survey Of the "Have Nots" in Rural and Urban America
- Wresch, William (1996) *Disconnected: Haves and Have-Nots in the Information Age*
- White, H., McConnell, E., et.al.(1999) "Surfing the Net in Later Life: A Review of the Literature and Pilot Study of Computer Use and Quality of Life" , *The Journal of Applied Gerontology* 18, No. 3, pp. 358-378.
- Wright, Kevin Ph.D. University of Oklahoma (1998). *Social Support and the Internet Survey Results*

Asia-Pacific Institute of Ageing Studies (APIAS) at Lingnan University

History

The Asia-Pacific Institute of Ageing Studies (APIAS) was established as a University-wide institute in 1998 and has been operation as one of the research Centers in the Institute of Humanities and Social Science (IHSS) since September 2001. The gerontology and issues related to population ageing in Hong Kong And the Asia-Pacific region.

Our Mission

“To develop a better environment for older persons and their families in Hong Hong and the Asia-Pacific region.”

Our Objectives

- To assist in the strengthening of undergraduate, postgraduate and professional Training in areas related to health and welfare of older persons, demography and epidemiology
- To enhance knowledge, awareness and understanding of ageing in society Amongst students, professionals and the wider public
- To encourage cross-cultural research and co-operation on ageing in the Asia-Pacific region
- To offer research and consultancy services

For further information on APIAS and opportunities for research collaboration and affiliations with the Institute, please contact

Lingnan University
Tuen Mun, Hong Kong

ISBN: 962-85508-7-X

Tel: (+852) 2616-7425

Email: apias@ln.edu.hk