Study of Hong Kong youth online behaviour and parents' perceptions

A study commissioned by

Symantec Hong Kong Ltd

Centre for Youth Research and Practice

Hong Kong Baptist University

13 March, 2008

Study of youth online behaviour and parent's perceptions

Background

The study on youth online behaviour and parent's knowledge was commissioned by Symantec. The theme of the study is to explore the online behaviour and related online activities of young people aged between 13 – 21 years old and parents' perceptions of such behaviour. The survey has two integral components: the youth survey and the parent survey.

Objective of the study

The objective of the study is two-fold**:**

1. To explore the online behaviours and activities of youth in Hong Kong;
2. To explore parents' perception of the online activities of their children.

Definition of key terms

1. Youth refers to Hong Kong young people aged between 13 to 21 years old.
2. Online behaviour refers to the activities that the respondents conducted online.
3. Parent refers to either father or mother who has children aged 13 to 21 years old.
4. Perception is not used in an academic sense in this survey. It refers generally to observation, knowledge, and self-defined understanding.

Research method and sampling

1. The youth survey

The youth survey was designed to be an exploratory study. In order to arrive at a representative sampling of youth, a two-tier sampling method was adopted, whereby schools (including secondary and post-secondary) were used as a sampling frame. In the first tier we randomly drew 18 secondary schools in various locations. Based on this framework we used a cluster sampling method to randomly assign one class for each school and invited the school to support this survey. At the end, 10 schools returned their questionnaires. Apart from secondary schools, we also randomly drew 2 post-secondary institutions and used convenient sampling methods to locate our respondents. A structured questionnaire was used for data collection, and the questionnaire was self-administered.

2. The survey on parents

This survey of parents was also designed to be exploratory and paralleled the youth survey. In order to reach a wide spectrum of representative sampling, two different sampling methods were adopted, whereby parents were either reached by random phone numbers or by interval sampling in various pedestrian areas in different districts. A structured questionnaire was used for data collection. Data was collected respectively by telephone interviews for phone samples and face-to-face interviews for street samples.

Presentation of findings

The findings of this study are presented in three parts. The first part looks at the youth survey followed by key findings of the parent survey. The third part is a comparison of the two.

A. The youth survey

A1. Profile of respondents

A total of 483 valid questionnaires were collected. Of the total respondents 34.6% were male and 65.4% female. The majority of respondents are between 16-18 years old, about a quarter (24.2%) aged between 13-15, while another one fifth (20.9%) of the respondents are between 19-21 years old. As far as the education level is concerned, the majority (66.5%) are between Form 4 and Form 7, one fifth have an education level between Form 1 and Form 3, while 12% have postsecondary and university education. Since the survey used schools as sampling frame, the vast majority of the respondents are full-time students. Table 1 below gives the details about the respondents.

Table 1: Profile of respondents

	N	Percent
Sex		
Male	167	34.6
Female	316	65.4
Age		
13-15	117	24.2
16-18	253	52.4
19-21	101	20.9
No answer	12	2.5
Education level		
F.1 – F.3	97	20.1
F.4 – F.7	321	66.5
Postsecondary	58	12.0
No answer	7	1.4
Economic Status		
Full-time student	480	99.4
Full-time work	3	0.6
Total	**483**	**100**

Of the total respondents, 40% spent 1-3 hours online each day, while one sixth (17%) spent 3-5 hours online each day. On the other hand, respectively 6.8% and 8.5% spent more than 5 hours and less than 1 hour online. Overall, the mode is 1-3 hours. This finding coincides well with another survey conducted by the Centre for Youth Research and Practice conducted in 2006 where the average time spent online each day was 3.88 hours each day.

Table 2: Time spent online each day

	Frequency	Valid Percent
None / Very rare	33	6.8
Only occasional	80	16.6
Below 1 hour	41	8.5
1-3 hour	193	40.0
3-5 hour	82	17.0
More than 5 hours	33	6.8
Don't know	17	3.5
No opinion	4	.8
Total	483	100.0

There is no correlation between gender and the time spent online each day, although there are slightly more male frequent users compared to their female counterpart (See table 3 below).

Table 3: Time spent online each day by gender

% within Sex

	Sex		Total
	Male	Female	
None / Very rare	4.8%	7.9%	6.8%
Only occasional	14.4%	17.7%	16.6%
Below 1 hour	10.8%	7.3%	8.5%
1-3 hours	40.7%	39.6%	40.0%
3-5 hours	18.0%	16.5%	17.0%
More than 5 hours	7.2%	6.6%	6.8%
Don't know	3.6%	3.5%	3.5%
No answer	.6%	.9%	.8%
Total	100.0%	100.0%	100.0%

As far as age is concerned, there is no correlation between time spent online and age of respondents, although the largest proportion of frequent users is from those aged between 15-18 years old. Likewise, there is no correlation between time spent online each day and education level of respondents, although there are more frequent users among the Form 4 to Form 7 group (see table 4 below).

Table 4: Time spent online each day by education level

% within Education Level

	Education Level				
	F.1 - F.3	F.4 - F.7	Postsecondary / University	No opinion	Total
Below 1 hour	13.8%	13.1%	3.8%		11.7%
1-3 hours	50.8%	54.1%	67.3%	33.3%	55.3%
3-5 hours	29.2%	22.3%	21.2%	33.3%	23.5%
More than 5 hours	6.2%	10.5%	7.7%	33.3%	9.5%
Total	100.0%	100.0%	100.00	100.0%	100.0%

A3. Online activities of respondents

Regarding online activities of the respondents in the previous year, 97.5% had researched online (including updating news, researching for information, and e-learning); 94.8% had sent and read e-mails, while another 85.3% had attempted online chat with friends or other strangers. Apart from the above activities, 36% of the respondents revealed that they had played online games; one third (33.3%) had made new online friends, while another 28.6% had experienced online shopping or online auction. Table 5 gives the details below.

Table 5: Online activities of youth respondents

	% (Number)
Online games	36.0 (174)
Online shopping or auction	28.6 (138)
Online chat with friends / strangers	85.3 (412)
Make new friends online	33.3 (161)
Send and read e-mails	94.8 (458)
Online research (including e-learning and news updates)	97.5 (471)

- *Online games*

  50.3% of the male respondents had played online games, while only 28.5% of female respondents had the same experience in the previous year. As far as age is concerned, majority (59.8%) of the respondents aged between 13-15 years old played online games in the previous year, while the proportion in the 16-18 and 19-21 age groups were respectively 30.8% and 21.8%. Besides, 66% of respondents from the Form 1 to From 3 education level group had played online games in the previous year, while the corresponding percentages in the other education level groups were respectively 30.8% and 12.1%. The survey finds that gender, age and education level differences are statistically significant to the activity of online game (Pearson X^2=0.000). This survey thus suggests that young men with age between 13-15 who are in Form 1 to Form 3 are more likely to online games. Table 6 below gives details of the breakdown.

  Table 6: Online gaming by sex, age and education

		Yes %	No %	No Opinion %
Sex				
	Male	50.3	47.3	2.4
	Female	28.5	68.4	3.2
Age				
	13-15	59.8	36.8	3.4
	16-18	30.8	65.2	4.0
	19-21	21.8	78.2	/
Education				
	F.1-F.3	66.0	28.9	5.1
	F.4-F.7	30.8	66.7	2.5
	University	12.1	87.9	/

- *Making new online friends*

  Statistically, there are significant differences between different age groups as well as between different education backgrounds of respondents in the activity of making online friends (Pearson X^2 =0.000 and 0.013). But there is no significant difference between male and female respondents. Specifically, 47.4% of respondents in Form 1 to Form 3 had made online friends in the previous year, while the percentage of the Form 4 to Form 7 group and the postsecondary/

university group is respectively 30.8% and 20.7%. As far as age is concerned, 44.4% of those aged 13-16 had made online friends in the previous year, while the percentage of their counterparts are respectively 32% and 24.8%. In short, younger respondents, those in the junior age range junior forms in schools, are more likely to use the internet to make online friends. Table 7 below gives details of the breakdown.

Table 7: Making online friends by sex, age and education

		Yes %	No %	No Opinion %
Sex				
	Male	35.9	58.7	5.4
	Female	32.0	64.2	3.8
Age				
	13-15	44.4	53.8	1.7
	16-18	32.0	61.7	6.3
	19-21	24.8	73.3	2.0
Education				
	F.1-F.3	47.4	49.5	3.1
	F.4-F.7	30.8	64.2	5.0
	University	20.7	79.3	/

- *Online Chat with friends or strangers*

There is slight statistical difference in education background of the respondents in terms of conducting online chat with friends and other unknown surfers (Pearson $X^2 = 0.003$). Specifically, 96.6% of respondents with postsecondary / university education background had conducted online chat with friends and other unknown surfers in the previous year, while the percentage in the lower education background groups are respectively 85% and 82.5%. There is no significant difference in gender and age of the respondents.

Table 8: Online chatting by sex, age and education

		Yes %	No %	No Opinion %
Sex				
	Male	81.4	16.2	2.4
	Female	87.3	10.8	1.9

		Yes %	No %	No Opinion %
Age				
	13-15	81.2	15.4	3.4
	16-18	85.0	12.6	2.4
	19-21	91.1	8.9	/
Education				
	F.1-F.3	82.4	13.5	4.1
	F.4-F.7	85.0	13.4	1.6
	University	96.6	3.4	/

- *Online research (including news updates and e-learning)*

Statistically, there are significant differences between different age groups as well as between respondents of different education backgrounds in the activity of online research (Pearson X^2 =0.000). But there is no significant difference between male and female respondents in this activity. Specifically, all the respondents in the 19-21 age group had done online research and read news online in the previous year, compared to 97.6% and 96.6% of their younger counterparts. As far as education background is concerned, all respondents in the postsecondary / university group had conducted this activity in the previous year, while the percentage is the Form 4 to Form 7 and Form 1 to Form 3 groups are respectively 98.4% and 94.8%. Although this activity is popular among all groups, it appears obvious that more respondents in the older age and higher education groups do this activity. Table 9 below gives the detailed breakdown.

Table 9: Reading information and news by sex, age and education

		Yes %	No %	No Opinion %
Sex				
	Male	97.6	1.2	1.2
	Female	97.5	1.6	0.9
Age				
	13-15	96.6	3.4	/
	16-18	97.6	1.2	1.2
	19-21	100	/	/
Education				
	F.1-F.3	94.8	4.1	1.0
	F.4-F.7	98.4	0.9	0.6
	University	100	/	/

■   *Sending and reading e-mails*

Statistically, there are significant difference between sex, age and education level of respondents in the activity of sending and reading e-mails (Pearson X^2 = 0.001, 0.000, and 0.000 respectively). Specifically, there are more female who used e-mails than male. In addition, the older the age of respondents, the higher the percentage of using e-mails could be seen. Besides, more postsecondary / university students used e-mails compared to the other counterparts. Table 10 below gives the breakdown details.

Table 10:   Sending and receiving e-mails by sex, age and education

		Yes %	No %	No Opinion %
Sex				
	Male	89.8	6.6	3.6
	Female	97.5	1.6	0.9
Age				
	13-15	93.2	6.8	/
	16-18	94.5	2.8	2.8
	19-21	99.0	1.0	/
Education				
	F.1-F.3	89.7	8.2	2.1
	F.4-F.7	96.0	2.5	1.6
	University	100	/	/

A4. Do your parents know which websites you visit?

Only 9.5% of the respondents indicated that their parents knew the websites that they visited, while 31.1% indicated the otherwise. On the other hand, 55.5% of the respondents disclosed that their parents only sometimes knew the websites that they visited but not all the time.

Table 11: Do your parents know the websites that you visit?

	Frequency	Valid Percent
Yes	46	9.5
Sometimes	268	55.5
No	150	31.1
No opinion	19	3.9
Total	483	100.0

Significant statistical difference exists between different age groups and education levels of the respondents (X^2 = 0.000), but there is no statistical difference between genders. Specifically, more respondents from the younger age group (13-15 years old) indicated that their parents knew which websites they visited than their older counterparts (16-18 years old and 19 years old and above). Likewise, more respondents from the Form 1 to Form 3 group expressed that their parents knew which website they visited than those in the higher education groups. Table 12 below shows the details of the breakdown.

Table 12:   Knowledge of parents by sex, age and education level

		Yes %	No %	Only sometimes %	No opinion %
Sex					
	Male	9.6	55.7	29.9	4.8
	Female	9.5	55.4	31.6	3.5
Age					
	13-15	17.9	57.3	18.8	6.0
	16-18	7.1	56.9	32.8	3.2
	19-21	6.9	49.5	41.6	2.0
Education					
	F.1-F.3	18.6	58.8	18.6	4.1
	F.4-F.7	7.8	54.8	34.0	3.4
	University	5.2	56.9	36.2	1.7

A5. Do your parents limit the amount of time you spend on the computer?

Deducting those who showed no opinion or those who claimed no online activity, there were 367 answers, among which 12.3% showed that their parents did limit the

amount of time they spent on the computer, while 7% revealed the otherwise. In addition, 68.9% indicated that their parents sometimes did but sometimes did not.

Table 13: Do your parents limit the amount of time you spend on the computer?

		Frequency	Valid Percent
Valid	Yes	45	12.3
	Sometimes	253	68.9
	No	34	7.0
	Total	367	9.2

There is statistical correlation between the age and education level of the respondents and the limit of computer use. Basically, the postsecondary and university group has the lowest limit, followed by the Form 1 to Form 3 group. The highest limit of computer use exists among the Form 4 to Form 7 group. This is probably due to the fact that this group has to face the highest schooling and examination demand and thus warranted the concern of parents. As far as age is concerned, there appeared a reduction of limit according to age. Table 14 below gives the details.

Table 14:   Limit of computer use by sex, age and education level

		Yes %	No %	Sometimes %	No opinion %
Sex					
	Male	14.9	5.7	70.0	18.4
	Female	8.8	9.5	61.2	20.5
Age					
	13-15	21.6	2.0	59.8	16.6
	16-18	8.8	0.5	68.8	21.9
	19-21	4.6	31.0	48.3	16.1
Education					
	F.1-F.3	23.8	0	59.5	16.7
	F.4-F.7	9.3	1.4	67.8	21.6
	University	0	57.7	32.7	9.6

*Total number of cases has discounted the inapplicable

A6. Do your parents know your e-mail accounts and passwords?

Majority of the respondent (84.7%) answered that their parents did not know their e-mail accounts and passwords, while 8.1% indicated that parents knew either the accounts or the passwords. This reflects that youth have been able to maintain a considerable personal space at least as far as communicating through e-mail is concerned.

Table 15: Do your parents know your e-mail accounts and passwords?

	Frequency	Valid Percent
Know both	18	3.7
Know either one	39	8.1
Know none	409	84.7
No opinion	17	3.5
Total	483	100.0

There is no gender difference as far as parents' knowledge of their e-mail address and password is concerned. However, respondents' age and education level are found to be correlated to parents' knowledge of their e-mail address and password (Pearson $X^2 =$ 0.000). Specifically, the younger the respondent and the lower forms they are in, the more likely their parents know their e-mail address and password. Refer to table 16 below for details.

Table 16: Parents' knowledge of e-mail address and password by sex, age and education level

		Yes %	No %	Sometimes %	No opinion %
Sex					
	Male	4.8	9.6	82.0	3.6
	Female	3.2	7.3	86.1	3.5
Age					
	13-15	5.1	16.2	74.4	4.3
	16-18	3.6	5.9	88.1	2.4
	19-21	3.0	4.0	91.1	2.0
Education					
	F.1-F.3	6.2	14.4	73.2	6.2
	F.4-F.7	2.8	6.5	88.8	1.9
	University	5.2	6.9	86.2	1.7

A7. Has a parent ever given you access to their credit card for online shopping or buy points for online games?

Majority of the respondents (79.3%) indicated that their parents did not provide credit card access for online purchase or buy points for online games, while 14.5% indicated the otherwise.

Table 17: Has a parent ever given you access to their credit card for online shopping or buy points for online games?

	Frequency	Valid Percent
Yes	70	14.5
No	383	79.3
Don't know	21	4.3
No opinion	9	1.9
Total	483	100.0

A8. How often do you download files from the Internet?

Downloading files from various Internet sites appears to have become a rather common activity among the youth in Hong Kong. This survey found that only 1.4% of the respondents never downloaded files from the Internet. On the other hand, about one tenth did everyday, while one third claimed that they always downloaded files from various sources from the Internet. About half of the respondents did so sometimes. No gender, age and education level differences are seen. Table 18 below shows the details of the distribution.

Table 18: How often do you download files from the internet?

	Frequency	Valid Percent
Everyday	47	9.7
Always	163	33.7
Sometimes	241	49.9
Never	7	1.4
Don't know	12	2.5
No opinion	13	2.7
Total	483	100.0

A9. Has your computer been infected by a virus in the past 6 months?

52.4% of the respondents said that their computer has been infected by a virus in the past 6 months, while 34.2% indicated the otherwise.

Table 19: Has your computer been infected by a virus in the past 6 months?

	Frequency	Valid Percent
Yes	253	52.4
No	165	34.2
Don't know	60	12.4
No opinion	5	1.0
Total	483	100.0

A10. Have you installed any security software in your computer?

Table 20 below showed that 81.6% of the respondents said that their computer at home has been installed with security software, while only 9.9% claimed the otherwise.

Table 20: Have you installed any security software in your computer?

	Frequency	Valid Percent
Yes	394	81.6
No	48	9.9
Don't know	36	7.5
No opinion	5	1.0
Total	483	100.0

A11. What kind of online risks are you most concerned about?

The top three online risks that respondents were most concerned about were respectively virus attack (75.8%), leakage of personal data (63.8%) and online fraud (34.6%). Besides, about one fifth of the respondents (20.7%) are concerned about internet addiction, while about one tenth concerned about making bad friends and the porn websites. Table 21 below gives details of the figures.

Table 21: What online risks are you most worried about?

	N	%
Virus attack	366	75.8
Data leakage	308	63.8
Fraud	167	34.6
Internet addiction	100	20.7
Being Offended or threatened by online strangers	65	13.5
Taking bad advice from online friends	52	10.8
Porn websites	51	10.6

*multiple selection with 3 options maximum

A12. How many people share the computer at home?

11.4% of the respondents answered that they had one computer for each person in the family, while 60.2% said they had one computer shared among members of the whole family. Another 22.4% answered that they had more than one computer for the whole family. In other words, the majority shared one computer for the whole family, according to the youth respondents.

Table 22: How many people share the computer at home?

	Frequency	Valid Percent
One for each	55	11.4
One for whole family	291	60.2
More than one for whole family	108	22.4
Don't know	7	1.4
No opinion	22	4.6
Total	483	100.0

B. The parent survey

B1. Profile of respondents

A total of 488 valid questionnaires were collected from the parent survey. Of the total respondents 39.1% are male and 60% are female. The majority of the respondents are 40-49 years old, about a quarter (28.5%) are between 50-59, while another one tenth (9.2%) of the respondents are between 30-39 years old. As far as the education level is concerned, the majority (33.4%) are between Form 4 and Form 7, 30.9% have the education level between Form 1 and Form 3, while 19.5% have primary school or lower education.   Table B1 below gives details of the respondents.

Table B1: Profile of the parent respondents

	N	Percent
Sex		
Male	191	39.1
Female	293	60.0
No comment	4	0.8
Age		
30-39	45	9.2
40-49	257	52.7
50-59	139	28.5
60 or above	14	2.9
No comment	33	6.8
Education level		
Primary school or below	95	19.5
F.1 – F.3	151	30.9
F.4 – F.7	163	33.4
University or College	42	8.6
Master or above	7	1.4
No comment	30	6.1
Economic Status		
Home Care	159	32.6
Full-time work	255	52.3
Part-time work	59	12.1
Unemployed	13	2.7
No answer	2	0.4
Occupation		
Commercial	112	23.0
Industrial	47	9.6
Service	108	22.1
Others	31	6.4
No Comment	190	38.9
Total	**488**	**100**

B2. Time spent online each day

Of the total respondents, 34.2% indicated that their children spent 1-3 hours online each day, while more than one fifth (23%) thought their children spent 3-5 hours online each day. On the other hand, respectively 12.7% and 8.4% of their children spent more than 5 hours and less than 1 hour online. Overall, the mode is 1-3 hours. Table B2 below gives details of the breakdown.

Table B2: How much time do your children spend on internet each day?

	Frequency	Valid Percent
None / very rare	18	3.7
Occasional	26	5.3
Below 1 hour	41	8.4
1-3 hour	167	34.2
3-5 hour	112	23.0
More than 5 hours	62	12.7
Don't know	57	11.7
No comment	5	1.0
Total	488	100.0

B3. Websites that children had visited in the previous year.

77.9% answered that their children had researched online (including updating news, researching for information and e-learning); 76.8% answered that their children had used the Internet for sending and reading e-mails, while another 76% had attempted online to chat with friends or other strangers. Apart from the above activities, 73.8% of the respondents revealed that their children had played online games; about two thirds (63.3%) of parents revealed that their children had made new online friends, while another 61.1% disclosed that their children had attempted online shopping. Table B3 gives the details below.

Table B3: Online activities of respondents' children

	Yes % (Number)		No % (Number)		No Comment % (Number)	
Online games	73.8	(360)	26.0	(127)	0.2	(1)
Online shopping or auction	61.1	(298)	38.3	(187)	0.6	(3)
Online chat with friends / strangers	76.0	(371)	23.4	(114)	0.6	(3)
Make new friends online	63.3	(309)	36.1	(176)	0.6	(3)
Send and read e-mails	76.8	(375)	23.0	(112)	0.2	(1)
Online research (including e-learning and news updates)	77.9	(380)	21.7	(106)	0.4	(2)

B4. Do you know which websites your children visit?

Only about 5% of the respondents indicated that they knew all the websites that children visited, while 16.4% indicated that they did not know at all. A further 22.5% of the respondents claimed that they knew most of the websites that their children visited, and another 18.2% disclosed that they knew half of them. 37.3% of the parents we interviewed showed that they only knew some of the websites that their children visited. Refer to table B4 below for detailed breakdown.

Table B4: Do you know which websites your children visit?

	Frequency	Valid Percent
Know all of them	24	4.9
Know most of them	110	22.5
Know half of them	89	18.2
Know only some of them	182	37.3
Don't know	80	16.4
No comment	3	.6
Total	488	100.0

A significant statistical difference exists between different age and education levels of the respondents (χ^2 = 0.000), but there is no statistical difference between genders. Specifically, more respondents from the younger age group indicated that they knew which websites their children visited than their older counterparts. Likewise, more respondents from the higher education groups expressed that they knew which website their children visited. Table B5 below shows the details of the breakdown.

Table B5:   Knowledge of parents by sex, age and education level

		All Know %	Most of them %	Half of them %	Only some of them %	All don't know %	No comment %
Sex							
	Male	3.7	24.1	17.8	34.6	18.3	1.6
	Female	5.8	21.8	18.4	38.9	15.0	/
Age							
	30-39	2.2	51.1	8.9	26.7	11.1	/
	40-49	7.8	26.5	23.7	34.2	7.0	0.8
	50-59	1.4	12.9	14.4	44.6	25.9	0.7
	60 or above	/	7.1	7.1	57.1	28.6	/
	Unknown	3.0	/	9.1	36.4	51.5	/
Education							
	Primary school or below	5.3	11.6	12.6	43.2	27.4	/
	F.1 – F.3	3.3	22.5	15.2	42.4	15.2	1.3
	F.4 – F.7	7.4	28.8	24.5	31.3	8.0	/
	University or College	4.8	35.7	23.8	28.6	7.1	/
	Master or above	/	28.6	28.6	42.9	/	/
	Unknown	/	3.3	6.7	36.7	50.0	3.3

B5. Do you limit the amount of time your children spend on the computer?

One third of the parents (33.1%) indicated that they did limit the amount of time their children spent on the computer, while 59.7% of the parents revealed otherwise.

Table B6: Do you limit the time your children spent playing on the computer?

	Frequency	Valid Percent
Yes	161	33.1
No	290	59.7
Don't know	28	5.8
No comment	9	1.8
Total	488	100.0

There is statistical correlation between the age and education level of the respondents and the limit of computer use. Basically, parents who have an education level of a Master's degree or above had imposed the least limit on their children's use of computer. The highest limit of computer use exists among the parents with only primary education or below. As far as age is concerned, there appears to be a reduction of limit according to age. Table B7 below gives the details.

Table B7: Limit of computer use by sex, age and education level

		Yes %	No %	Don't know %	No comment %
Sex					
	Male	29.8	62.3	6.3	1.6
	Female	35.4	58.1	5.2	1.4
Age					
	30-39	55.6	40.0	2.2	2.2
	40-49	42.2	55.5	1.6	0.8
	50-59	14.5	74.6	9.4	1.4
	60 or above	28.6	64.3	7.1	/
	Unknown	12.1	54.5	27.3	6.1
Education					
	Primary school or below	18.1	72.3	8.5	1.1
	F.1 – F.3	31.3	64.7	3.3	0.7
	F.4 – F.7	42.9	54.0	1.8	1.2
	University or College	47.6	45.2	7.1	/
	Master or above	42.9	28.6	14.3	14.3
	Unknown	13.3	53.3	26.7	6.7

B6. Do you know your children's e-mail accounts and passwords?

The majority of the parents we interviewed (72.9%) answered that they did not know their children's e-mail accounts and passwords at all, while 16% indicated that they knew either the accounts or the passwords. Only about one tenth (9.7%) knew both the e-mail accounts and the passwords of their children. This reflects that youth have been able to maintain a considerable personal space at least as far as communicating through e-mail is concerned.

Table B8: Do you know the e-mail accounts and passwords of your children?

	Frequency	Valid Percent
Know both	47	9.7
Know either one	78	16.0
Don't know	355	72.9
No comment	8	1.6
Total	488	100.0

There is no gender difference as far as parents' knowledge of their children's e-mail accounts and passwords are concerned. However, respondents' age and education level are found to be correlated to parents' knowledge of their e-mail accounts and passwords (Pearson χ^2 = 0.000).

Table B9: Parents' knowledge of e-mail address and password by sex, age and education level

		Both %	Either one %	Don't know %	No comment %
Sex					
	Male	6.8	18.8	72.8	1.6
	Female	11.6	14.3	72.7	1.4
Age					
	30-39	22.2	24.4	53.3	/
	40-49	11.3	21.0	67.7	/
	50-59	4.3	6.5	86.2	2.9
	60 or above	/	/	92.9	7.1
	Unknown	6.1	12.1	75.8	6.1
Education					
	Primary school or below	5.3	4.2	88.4	2.1
	F.1 – F.3	6.0	9.3	82.7	2.0
	F.4 – F.7	14.7	26.4	58.9	/
	University or College	19.0	31.0	47.6	2.4
	Master or above	14.3	28.6	57.1	/
	Unknown	/	6.7	90.0	3.3

B7. Have you ever provided your personal information to your children? (e.g. credit card number for them to purchase online game points)

The majority of the respondents (67.3%) indicated that they have not provided personal information to their children use in online purchases or for buying points for online games, while 13.2% indicated the otherwise.

able B10: Have you ever provided your personal information to your children

		Frequency	Valid Percent
	Yes	64	13.2
	No	327	67.3
	Don't know	88	18.1
	No comment	7	1.4
	Total	486	100.0
	Missing	2	
Total		488	

B8. Do you know how often your children download files from the Internet?

Downloading files from various Internet sites appears to have become a rather common activity among the youth in Hong Kong. This survey found that only 2.9% of the respondents thought that their children never downloaded files from the Internet. On the other hand, 38.1% thought that their children did that often, while 4.1% answered that their children downloaded files from various sources on the Internet everyday. Table B11 below shows the details of the distribution.

Table B11: Do you know how often your children download files from the internet?

		Frequency	Valid Percent
	Every day	20	4.1
	Frequently	74	15.2
	Often	185	38.1
	Never	14	2.9
	Don't know	184	37.9
	No comment	9	1.9
	Total	486	100.0
Missing	99	2	
Total		488	

B9. Has your computer been infected by a virus in the past 6 months?

38.4% of the respondents said that their computer had been infected by a virus in the past 6 months, while 32% indicated otherwise.

Table B12: Has your computer been infected by a virus in the past 6 months?

		Frequency	Valid Percent
	Yes	186	38.4
	No	155	32.0
	Don't know	144	29.7
	Total	485	100.0
	Missing	3	
Total		488	

B10. Have you installed any security software in your computer?

Table B13 below showed that 59.8% of the respondents said that their computer at home had been installed with security software, while only 10.3% claimed otherwise.

Table B13: Have you installed any security software in your computer?

		Frequency	Valid Percent
	Yes	291	59.8
	No	50	10.3
	Don't know	146	30.0
	Total	487	100.0
	Missing	1	
Total		488	

B11. What kind of online risks are you most concerned about?

The top three online risks that parents were most concerned about were respectively having their children offended or threatened by online strangers (92.8%), virus attack (83.2%), and online fraud (82.6%). More than 71% of the respondents indicated a concern over data leakage and 70.5% said they are concerned about children browsing pornography websites. In addition, slightly more than half of the respondents (52.5%) are concerned about online addiction, while about 41.2% are concerned about children making 'bad' friends. Table B14 below gives details of the figures.

Table B14: What online risks are you most concerned about?

	N	%
Having their children offended or threatened by online strangers	453	92.8
Virus attack	406	83.2
Fraud	403	82.6
Data leakage	347	71.1
Browsing porn websites	344	70.5
Online addiction	256	52.5
Taking bad advice from online friends	201	41.2

*multiple selection with 3 options maximum

B12. How many people share the computer at home?

14.3% of the respondents answered that they had one computer for each person in the family, while 56.4% said they had one computer shared among members of the whole family. Another 26.2% answered that they had more than one computer for the whole family.

Table B15: How many people share the computer at home?

	Frequency	Valid Percent
One for each	70	14.3
One for whole family	275	56.4
More than one for whole family	128	26.2
Don't know	7	1.4
No opinion	8	1.6
Total	488	100.0

C Comparison between parents and youth

C1. *Time spent on Internet each day*

It is interesting to note that there is a slight disparity between the time spent on the Internet among youth and the perceptions of parents. Specifically, there are more parents who thought that their children spend 1-3 hours on the Internet each day than the estimation of young people themselves. Interestingly, while 23% of youth respondents indicated that they spent 3-5 hours each day on the Internet, only 17% of parents indicated that their children spent that amount of time on the web. Likewise, 12.7% of our youth respondents indicated that they spent more than 5 hours each day on the Internet, but only 6.8% of parents thought that their children do so.

Although it is hard to conclude from this comparison that parents are generally not knowledgeable about the amount of time their children spent on the internet, it is nonetheless clear that parents in Hong Kong tend to underestimate the amount of time their children spent on the internet each day. It may not be difficult to comprehend because very few parents actually accompany their children when they are using the computer each and everyday.

Table C1: Comparison of time spent on internet each day

	Parents Knowledge		Youth	
	N	Percent %	N	Percent %
None / very rare	18	3.7	33	6.8
Occasional	26	5.3	80	16.6
Below 1 hour	41	8.4	41	8.5
1-3 hour	167	34.2	193	40.0
3-5 hour	112	23.0	82	17.0
More than 5 hours	62	12.7	33	6.8
Don't know	57	11.7	17	3.5
No comment	5	1.0	4	0.8
Total	488	100.0	483	100.0

Chart 1:

Comparison of time spent on internet each day

Categories: None / very rare, Occasional, Below 1 hour, 1-3 hour, 3-5 hour, More than 5 hours, Don't know, No comment

Legend: ☐ Parents Knowledge ■ Youth
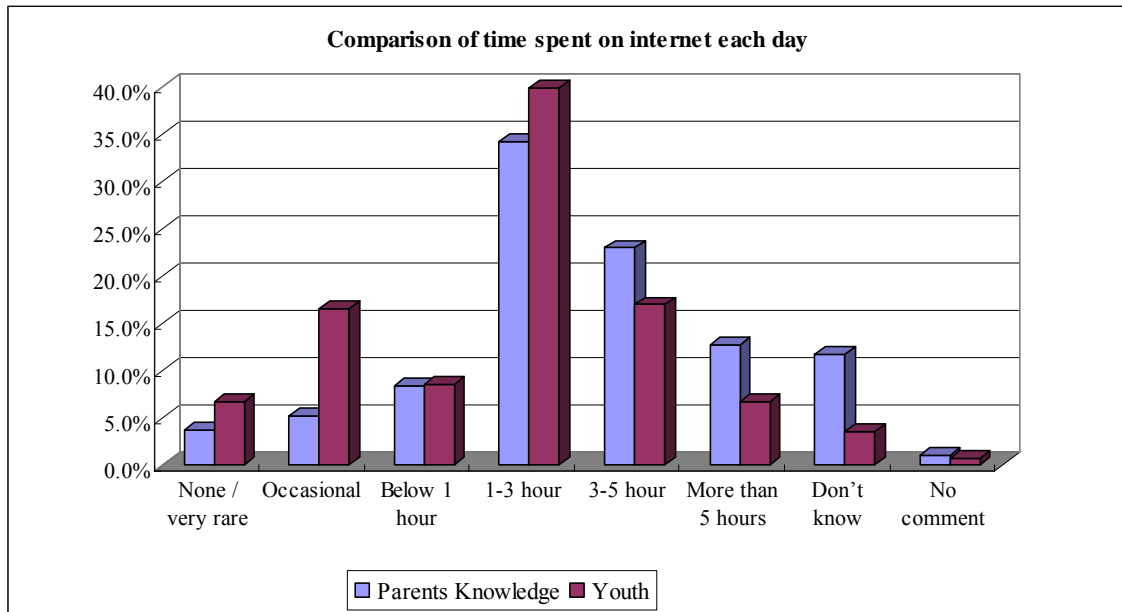
C2. *Online activities*

The top three most popular online activities reported by our youth respondents match exactly the same with the perceptions of the parents. They are, respectively, online research (including e-learning and news updates), sending and reading e-mails and online chat with friends or strangers. In this respect, by and large the parents appear to have quite good knowledge of what their children do online. However, there is still an obvious gap between the knowledge of parents and the actual report of youth. For example, while 97.5% of youth reported to have used the Internet for online research for information and news, only 77.9% of parents knew that their children had done so. In other words, the difference between the knowledge of adults and actual conduct of children is 20%. The same situation happens in other activities such as sending and reading e-mails, where the difference between the knowledge of adults and the actual conduct of children is 18%. Moreover, parents tend to over-estimate the amount of time youths spend in certain activities such as online games and online shopping. It appears there are more parents who believe that children are engaged in online activities for playful purposes than children actually reported. This may reflect a misunderstanding on the part of the parents in the online behaviour and activities of their children.

Table C2: Comparison of online activities of respondents

	Parents Knowledge	Youth
	Yes %	Yes %
Online game	73.8	36.0
Online shopping	61.1	28.6
Online chat with friends / strangers	76.0	85.3
Make new friends online	63.3	33.3
Send and read e-mails	76.8	94.8
Online research (including e-learning and news updates)	77.9	97.5

Chart 2:

Comparison of online activities of respondents
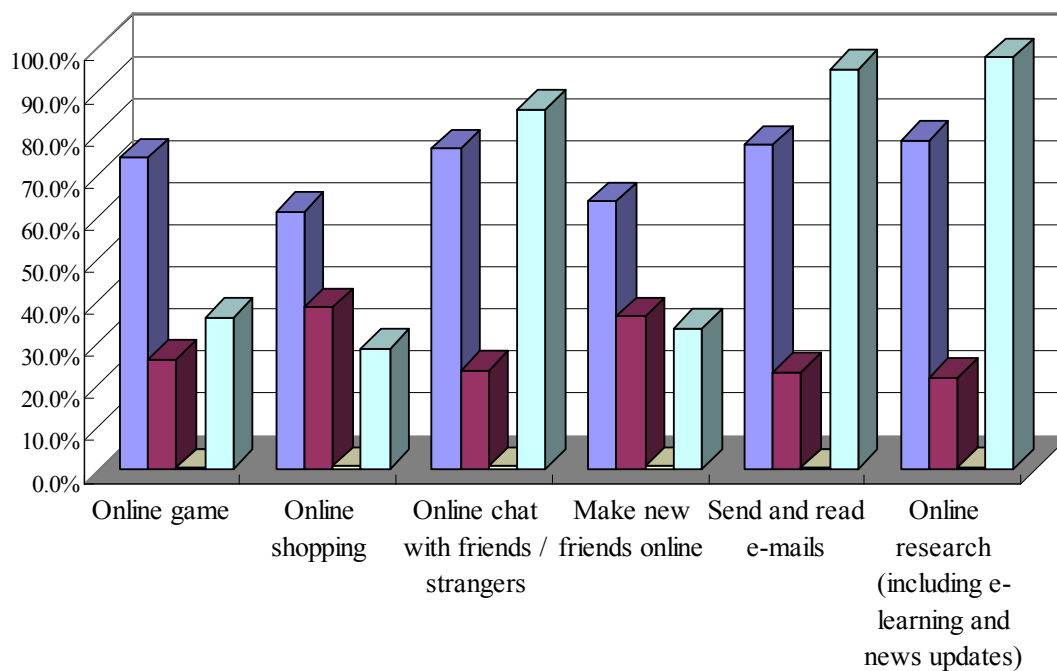
Legend: Parents Knowledge Yes · Parents Knowledge No · Parents Knowledge No comment · Youth Yes

C3. *Knowledge of e-mail accounts and passwords*

More parents indicated that they knew both the e-mail accounts and passwords of their children than the youth themselves reported. Specifically, the parents who claimed to know both the e-mail accounts and the passwords is double the percentage of that of

youth. Likewise, the percentage of parents who believed that they knew either the e-mail accounts of their children is also double the figure reported in the youth survey. On the contrary, more youth respondents believed that their parents knew none of their e-mail accounts and their passwords. Again, there is a perception gap here where either parents may have overstated their knowledge of their children's e-mail accounts and passwords, or youth underestimated what their parents really know. However, since e-mail accounts and passwords are rather private to the users and could be changed when necessary to maintain privacy, it seems more reliable to believe that there exists an overestimation on the side of the parents.

Table C3: Comparison of the knowledge of e-mail accounts and passwords

|	Parents %	Youth %
Know both	9.7	3.7
Know either one	16.0	8.1
Know none	72.9	84.7
No comment / opinion	1.6	3.5

Chart 3:
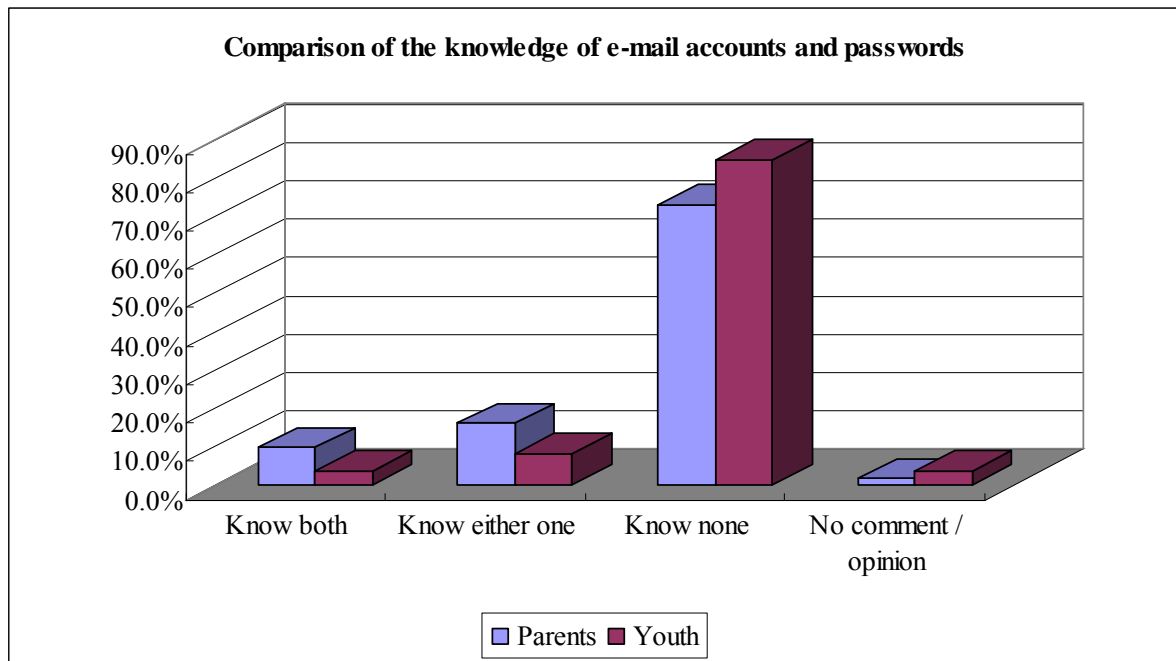
C4. *Provision of personal information to children*

In this respect the parents' view is similar to the view of the youths. This reflects that parents tend to be more mindful of giving their personal information, including credit card numbers, for their children's online activities such as online shopping. On the other hand, this may also reflect some of the attitudes of the parents – they may not exercise as much control over the online activities of their children as they do over spending money online.

Table C4: Comparison of provision of personal information

|	Parents %	Youth %
Yes	13.2	14.5
No	67.3	79.3
Don't know	18.1	4.3
No opinion / comment	1.4	1.9

Chart 4:
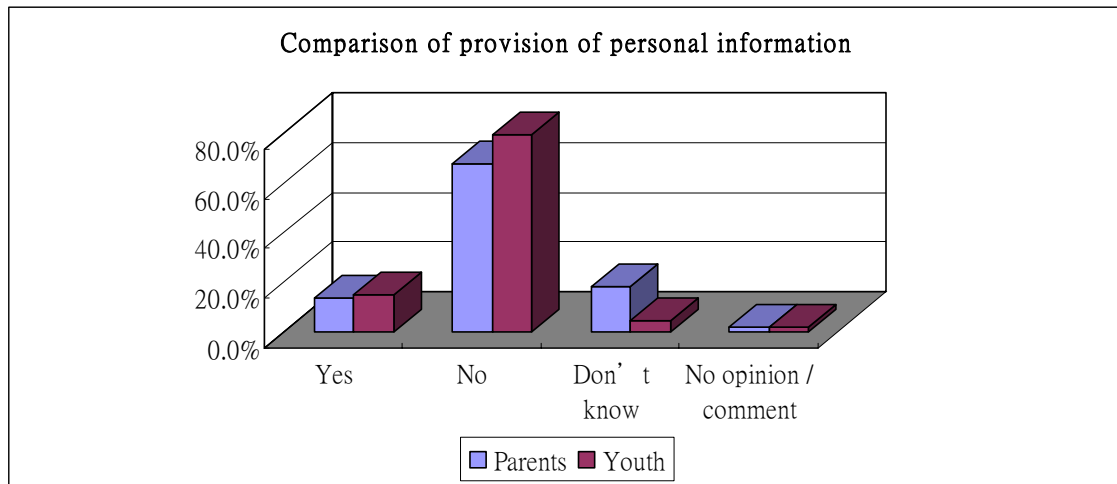
C5. *Downloading files from the Internet*

This item once again shows that parents are not particularly familiar with the online activities of their children. While more than one third (37.9%) of the parents we interviewed indicated they did not know how often their children downloaded files from the Internet, many also underestimated the frequency of this activity by their children.

Table C5: Comparison of downloading files from the Internet

	Parents %	Youth %
Every day	4.1	9.7
Frequently	15.2	33.7
Often	38.1	49.9
Never	2.9	1.4
Don't know	37.9	2.5
No comment	1.9	2.7

Chart 5:

Comparison of downloading files from the Internet
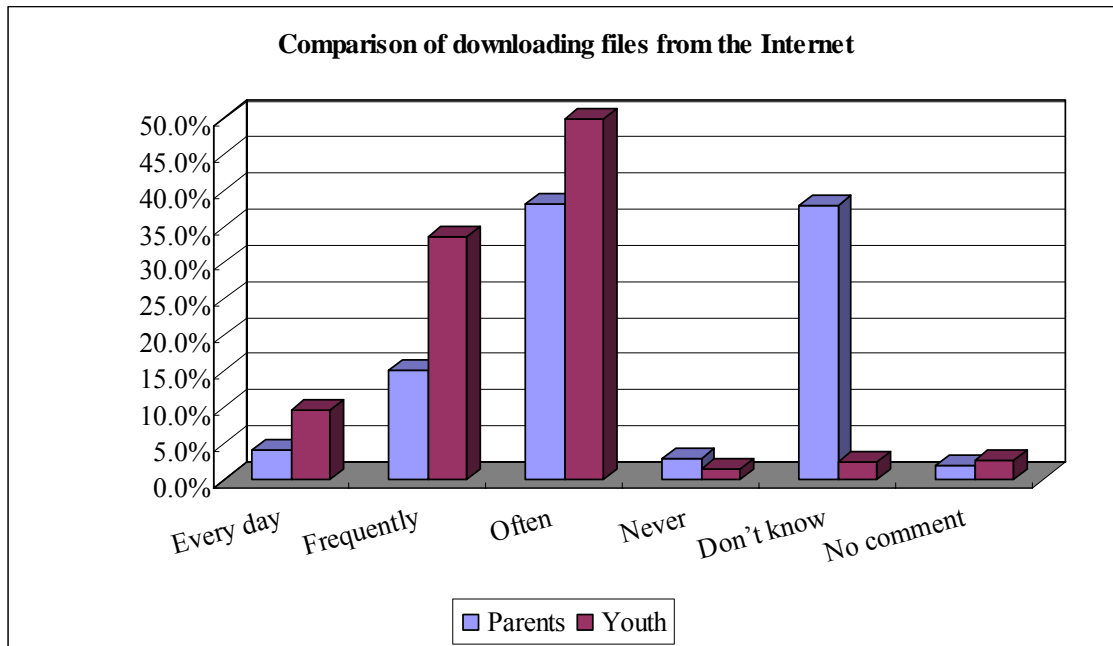
C6. Virus infection

There is also some disparity between parental experience and knowledge and that of children as the percentage of youth who had experienced a virus infection on their computer in the past six months outnumbers that of the parents by 14%. On the other hand, parents who did not know whether their computer at home had been infected by a virus in the past 6 months was also outnumbered by the findings in the youth survey by 17%. This may perhaps reflect that the younger generation is the primary user of the home computer and their knowledge and experience of virus infections are more valid.

Table C6: Comparison of computer infection by a virus in the past 6 months

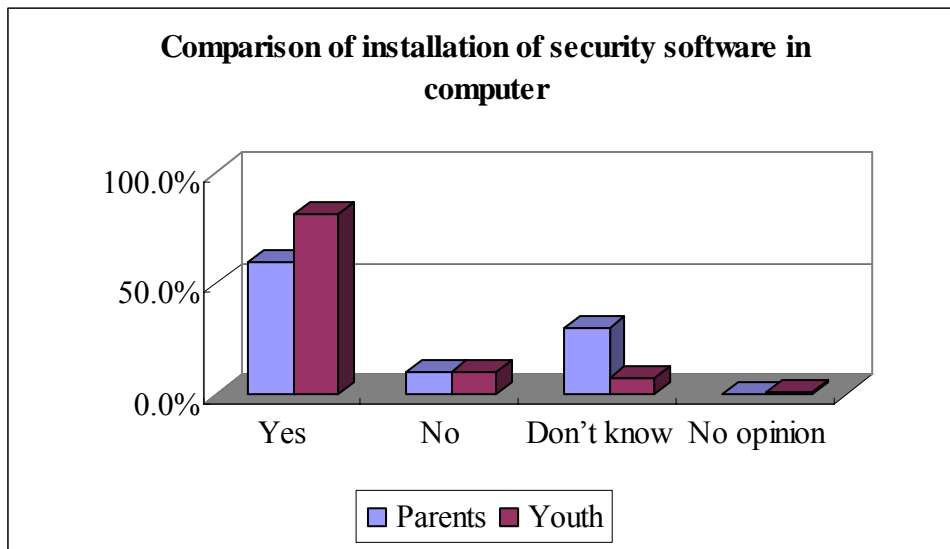|	Parents %	Youth %
Yes	38.4	52.4
No	32.0	34.2
Don't know	29.7	12.4
No opinion	/	1.0

Chart 6:
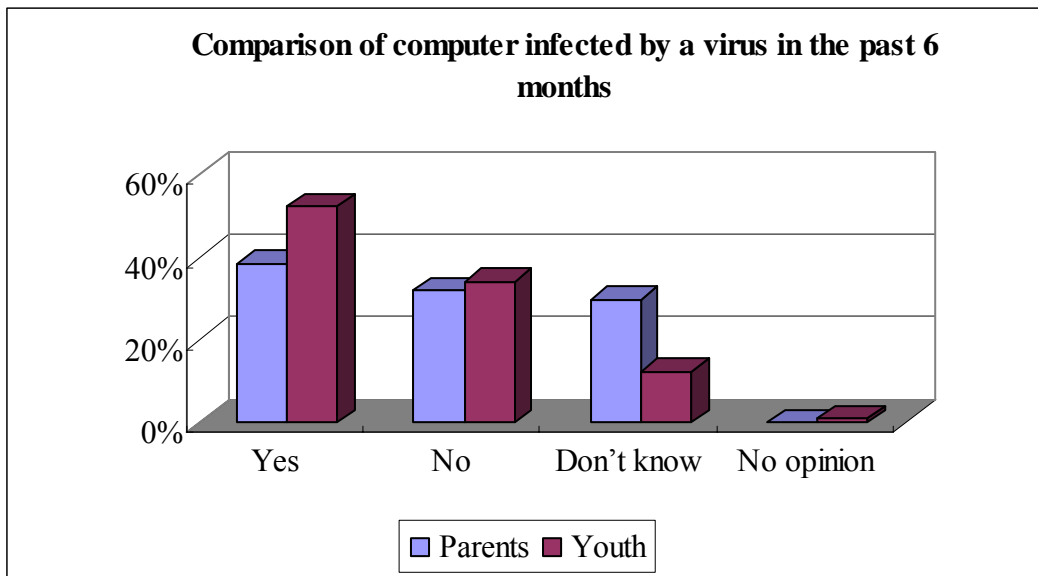
C7. Installation of security software

In this aspect parent's view appears to be similar to that of the youth, as far as the installation of security software is concerned.   However, as many as 30% of parents we interviewed did not know whether their home computer has security software installed, whereas only 7.5% their youth counterparts didn't know this. This may again reflect that parents are not as tech savvy as their youth counterparts.

Table C7: Comparison of installation of security software in computer

	Parents %	Youth %
Yes	59.8	81.6
No	10.3	9.9
Don't know	30.0	7.5
No opinion	/	1.0

Chart 7:

C8. Online risks of most concern

There are two important observations from the findings: First, parents generally show more concern about online risks compared to youth. Put another way, youths appear to be less mindful of the possible risks that may appear online.

Secondly, apart from the possible risks of virus attack and data leakage, the primary concern of parents appears to be very different from that of their children. For example, as many as 92.8% of parents we interviewed are concerned about their children being offended or threatened by online strangers, whereas a comparatively minor 13.5% of youths indicated the same concern. Also, 70.5% of our parent sample are concerned about children browsing pornography websites, but this was only of concern to 10.6% of the youth sample.

It is hard to assess simply from the data of this study whether it is parents who have some sort of "internet panic" or whether it is youth who are less sensitive to the possible online risks. However, from the theory of disproportionality (meaning that the farther the distance, the more panic one will get), it may be possible to understand the worries of the parents.

According to this theory, moral panic is disproportional to social distance. In other words, the more frequent and the closer the contact with the subject, the less panicked one becomes. By the same logic, the less contact and the further the social distance with the subject, the more panicked one will become. This helps explain why parents are more cautious and mindful of the possible online risks compared with their youth counterparts, because compared with youth, parents are the ones who are less frequently and less intensively involved in the online world.

To many parents, the online world appears to be a strange social space full of mysteries and risks. But to their youth counterparts, because the online world has become part of their daily lives, it is not as fearful to them as their parents estimate.

Table C8: Comparison of online risks of most concern

	Parents %	Youth %
Being offended or threatened by online strangers	**92.8**	13.5
Virus attack	83.2	**75.8**
Fraud	82.6	34.6
Data leakage	71.1	63.8
Browsing porn websites	70.5	10.6
Online addiction	52.5	20.7
Taking bad advice from online friends	41.2	10.8

Chart 8:

Comparison of online risks of most concern to parents and their children