

Case Number: NCCT109008

Broadband Usage Survey

Report Commissioned by:

National Communications Commission

Taiwan Institute of Economic Research

February 2021

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I. Purpose

The rapid development in information and communications technologies has driven the overall digital economy to flourish. With the trend toward convergence, the communications industry is vital to the national economy and development. In particular, how consumers use communications services in the communications market is not only closely related to business operations and technological development in the overall communications industry, but its impact is also expanding to numerous other industries.

A survey on the communications provides an overview of the national development and consumer behavior. A mechanism of surveys and investigations on the market and consumer behavior has been established for a long time in many developed countries worldwide, such as Ofcom, the communications regulator in the UK, the Ministry of Internal Affairs and Communications in Japan, KCC in Korea and IMDA in Singapore. In these countries, related information is regularly collected and documented to provide important statistics about the communications industry. A regular survey can serve as a key indicator of overall national development on one hand and offer an understanding of the consumer behavior and the market on the other.

The National Communications Commission (NCC) of Taiwan conducted its first comprehensive communications market survey in 2017. The survey aims to obtain first-hand objective and detailed data on consumer behavior and the status of innovative applications through a comprehensive and in-depth investigation of the demand side. In addition, the obtained information obtained will serve as an indicator of the development of Taiwan's digital economy, as well as the basis for the development of future policies and regulations.

II. Survey Methods

A. Questionnaire Design

The questionnaires used in this survey are designed with reference to the way Ofcom, the British communications regulator, has surveyed consumer behavior and trends in the communications market, and are modified based on the latest development of Taiwan's convergence.

B. Population and Sampling Strategy

1. Survey population

The survey was conducted in Taiwan proper, Penghu, Kinmen and Matsu proper with people aged 16 and over (those who were born on and before December 31, 2004) being approached.

2. Sampling method

Using the principle of PPS (probabilities proportional to size) sampling, sampling was performed in three stages. In the first and second stages, samples were allocated based on the proportion of the population in the area; while in the third stage, samples were selected using convenience sampling.

The stratified sampling used in this research is based on the classifications established by Peichun Hou et al. (2008), where villages, towns, cities and districts are grouped into seven levels based on the development. Thus, Taiwan's 358 townships and districts are divided into seven levels. They are city cores, commercial and industrial areas, emerging cities and townships, traditional industry townships, less-developed townships, established townships and remote townships. The primary sampling units were townships, the secondary sampling units were villages, and the third sampling units were gathering places in the townships where an interview point was set up.

Table 1 Levels of Townships and Districts

Level Code	Names of Districts and Townships
1	Songshan District of Taipei City, Xinyi District of Taipei City, Da'an District of Taipei City, Zhongzheng District of Taipei City, Datong District of Taipei City, Wanhua District of Taipei City, Yonghe District of New Taipei City, Central District of Taichung City, West District of Taichung City, North District of Taichung City, East District of Tainan City, West Central District of Tainan City, Yancheng District of Kaohsiung City, Sanmin District of Kaohsiung City, Xinxing District of Kaohsiung City, Qianjin District of Kaohsiung City, Lingya District of Kaohsiung City
2	Zhongshan District of Taipei City, Wenshan District of Taipei City, Nangang District of Taipei City, Neihu District of Taipei City, Shilin District of Taipei City, Beitou District of Taipei City, Banqiao District of New Taipei City, Sanchong District of New Taipei City, Zhonghe District of New Taipei City, Xinzhuang District of New Taipei City, Tamsui District of New Taipei City, Luzhou District of New Taipei City, Linkou District of New Taipei City, Taoyuan City of Taoyuan County, Zhongli City of Taoyuan County, Zhubei City of Hsinchu County, East District of Hsinchu City, North District of Hsinchu City, South District of Taichung City, Xitun District of Taichung City, Nantun District of Taichung City, Beitun District of Taichung City, North District of Tainan City, Gushan District of Kaohsiung City, Zuoying District of Kaohsiung City,

	Fengshan District of Kaohsiung City
3	Xindian District of New Taipei City, Shulin District of New Taipei City, Yingge District of New Taipei City, Sanxia District of New Taipei City, Xizhi District of New Taipei City, Tucheng District of New Taipei City, Taishan District of New Taipei City, Yangmei City of Taoyuan County, Luzhu Township of Taoyuan County, Dayuan Township of Taoyuan County, Guishan Township of Taoyuan County, Bade City of Taoyuan County, Longtan Township of Taoyuan County, Pingzhen City of Taoyuan County, Zhudong Township of Hsinchu County, Hukou Township of Hsinchu County, Xinfeng Township of Hsinchu County, Qionglin Township of Hsinchu County, Baoshan Township of Hsinchu County, Xiangshan District of Hsinchu City, Zhunan Township of Miaoli County, Toufen Township of Miaoli County, Fengyuan District of Taichung City, Shalu District of Taichung City, Wuqi District of Taichung City, Tanzi District of Taichung City, Daya District of Taichung City, Wuri District of Taichung City, Longjing District of Taichung City, Taiping District of Taichung City, Dali District of Taichung City, Shanhua District of Tainan City, Rende District of Tainan City, Guiren District of Tainan City, Yongkang District of Tainan City, Annan District of Tainan City, Anping District of Tainan City, Nanzi District of Kaohsiung City, Xiaogang District of Kaohsiung City, Daliao District of Kaohsiung City, Dashe District of Kaohsiung City, Renwu District of Kaohsiung City, Niasong District of Kaohsiung City, Gangshan District of Kaohsiung City
4	Zhongzheng District of Keelung City, Qidu District of Keelung City, Nuannuan District of Keelung City, Renai District of Keelung City, Zhongshan District of Keelung City, Anle District of Keelung City, Xinyi District of Keelung City, Wugu District of New Taipei City, Shengkeng District of New Taipei City, Bali District of New Taipei City, Miaoli City of Miaoli County, East District of Taichung City, Changhua City of Changhua County, Yuanlin Township of Changhua County, Douliu City of Yunlin County, East District of Chiayi City, West District of Chiayi City, Xinying District of Tainan City, South District of Tainan City, Qianzhen District of Kaohsiung City, Qijin District of Kaohsiung City, Pingtung City of Pingtung County, Yilan City of Yilan County, Luodong Township of Yilan County, Hualien City of Hualien County, Ji'an Township of Hualien County
5	Ruifang District of New Taipei City, Sanzhi District of New Taipei City, Shimen District of New Taipei City, Jinshan District of New Taipei City, Wanli District of New Taipei City, Daxi Township of Taoyuan County, Xinwu Township of Taoyuan County, Guanyin Township of Taoyuan County, Xinpu Township of Hsinchu County, Guanxi Township of Hsinchu County, Hengshan Township of Hsinchu County, Beipu Township of Hsinchu County, Yuanli Township of Miaoli County, Tongxiao Township of Miaoli County, Houlong Township of Miaoli County, Gongguan Township of Miaoli County, Tongluo Township of Miaoli County, Touwu Township of Miaoli County, Sanyi Township of Miaoli County, Zaoqiao Township of Miaoli County, Sanwan Township of Miaoli County, Dajia District of Taichung City, Qingshui District of Taichung City, Houli District of Taichung City, Shengang District of Taichung City, Shigang District of Taichung City, Waipu District of Taichung City, Da'an District of Taichung City, Dadu District of Taichung City, Wufeng District of Taichung City, Lugang Township of Changhua County, Hemei Township of Changhua

	County, Xianxi Township of Changhua County, Shengang Township of Changhua County, Fuxing Township of Changhua County, Xiushui Township of Changhua County, Huatan Township of Changhua County, Fenyuan Township of Changhua County, Xihu Township of Changhua County, Tianzhong Township of Changhua County, Datsuen Township of Changhua County, Puyan Township of Changhua County, Puxin Township of Changhua County, Yongjing Township of Changhua County, Shetou Township of Changhua County, Beidou Township of Changhua County, Pitou Township of Changhua County, Nantou City of Nantou County, Puli Township of Nantou County, Caotun Township of Nantou County, Dounan Township of Yunlin County, Huwei Township of Yunlin County, Linnei Township of Yunlin County, Taibao City of Chiayi County, Minxiong Township of Chiayi County, Shuishang Township of Chiayi County, Zhongpu Township of Chiayi County, Yanshui District of Tainan City, Liuying District of Tainan City, Madou District of Tainan City, Xiaying District of Tainan City, Liujia District of Tainan City, Guantian District of Tainan City, Jiali District of Tainan City, Xuejia District of Tainan City, Xigang District of Tainan City, Qigu District of Tainan City, Jiangjun District of Tainan City, Beimen District of Tainan City, Xinhua District of Tainan City, Xinshi District of Tainan City, Anding District of Tainan City, Shanshang District of Tainan City, Guanmiao District of Tainan City, Linyuan District of Kaohsiung City, Dashu District of Kaohsiung City, Qiaotou District of Kaohsiung City, Yanchao District of Kaohsiung City, Alian District of Kaohsiung City, Luzhu District of Kaohsiung City, Hune District of Kaohsiung City, Jiading District of Kaohsiung City, Yongan District of Kaohsiung City, Mituo District of Kaohsiung City, Ziguan District of Kaohsiung City, Chaozhou Township of Pingtung County, Donggang Township of Pingtung County, Hengchun Township of Pingtung County, Wandan Township of Pingtung County, Changzhi Township of Pingtung County, Linluo Township of Pingtung County, Jiuru Township of Pingtung County, Neipu Township of Pingtung County, Xinyuan Township of Pingtung County, Su'ao Township of Yilan County, Toucheng Township of Yilan County, Jiaoxi Township of Yilan County, Zhuangwei Township of Yilan County, Yuanshan Township of Yilan County, Dongshan Township of Yilan County, Wujie Township of Yilan County, Taitung City of Taitung County
6	Shiding District of New Taipei City, Pinglin District of New Taipei City, Pingxi District of New Taipei City, Shuangxi District of New Taipei City, Gongliao District of New Taipei City, Emei Township of Hsinch County, Zhuolan Township of Miaoli County, Dahu Township of Miaoli County, Nanzhuang Township of Miaoli County, Xihu Township of Miaoli County, Shitan Township of Miaoli County, Tai'an Township of Miaoli County, Dongshi District of Taichung City, Xinshe District of Taichung City, Heping District of Taichung City, Ershui Township of Changhua County, Erlin Township of Changhua County, Tianwei Township of Changhua County, Fangyuan Township of Changhua County, Dacheng Township of Changhua County, Zhutang Township of Changhua County, Xizhou Township of Changhua County, Zhushan Township of Nantou County, Jiji Town of Nantou County, Mingjian Township of Nantou County, Lugu Township of Nantou County, Zhongliao Township of Nantou County, Yuchi Township of Nantou County, Guoshing Township of Nantou County, Shuili Township of Nantou County, Xinyi Township of Nantou County, Xiluo Township of Yunlin County, Tuku Township of Yunlin County,

	Beigang Township of Yunlin County, Gukeng Township of Yunlin County, Dapi Township of Yunlin County, Citong Township of Yunlin County, Erlun Township of Yunlin County, Lunbei Township of Yunlin County, Dongshi Township of Yunlin County, Baozhong Township of Yunlin County, Taixi Township of Yunlin County, Yuanchang Township of Yunlin County, Sihua Township of Yunlin County, Kouhu Township of Yunlin County, Shuilin Township of Yunlin County, Puzi City of Chiayi County, Budai Township of Chiayi County, Dalin Township of Chiayi County, Xikou Township of Chiayi County, Xingang Township of Chiayi County, Liujiao Township of Chiayi County, Dongshi Township of Chiayi County, Yizhu Township of Chiayi County, Lucao Township of Chiayi County, Zhuqi Township of Chiayi County, Meishan Township of Chiayi County, Fanlu Township of Chiayi County, Baihe District of Tainan City, Houbi District of Tainan City, Dongshan District of Tainan City, Danei District of Tainan City, Yujing District of Tainan City, Nanxi District of Tainan City, Nanhua District of Tainan City, Zuozhen District of Tainan City, Longqi District of Tainan City, Tianliao District of Kaohsiung City, Qishan District of Kaohsiung City, Meinong District of Kaohsiung City, Liugui District of Kaohsiung City, Jiaxian District of Kaohsiung City, Shanlin District of Kaohsiung City, Neimen District of Kaohsiung City, Ligang Township of Pingtung County, Yanpu Township of Pingtung County, Gaoshu Township of Pingtung County, Wanluan Township of Pingtung County, Zhutian Township of Pingtung County, Xinpi Township of Pingtung County, Fangliao Township of Pingtung County, Kanding Township of Pingtung County, Linbian Township of Pingtung County, Nanzhou Township of Pingtung County, Jiadong Township of Pingtung County, Checheng Township of Pingtung County, Manzhou Township of Pingtung County, Fangshan Township of Pingtung County, Huxi Township of Penghu County, Baisha Township of Penghu County, Xiyu Township of Penghu County, Wangan Township of Penghu County, Qimei Township of Penghu County, Sanxing Township of Yilan County, Fenglin Township of Hualien County, Yuli Township of Hualien County, Shoufeng Township of Hualien County, Guangfu Township of Hualien County, Fengbin Township of Hualien County, Ruisui Township of Hualien County, Fuli Township of Hualien County, Chenggung Township of Taitung County, Guanshan Township of Taitung County, Beinan Township of Taitung County, Luye Township of Taitung County, Chishang Township of Taitung County, Donghe Township of Taitung County, Changbin Township of Taitung County, Taimaili Township of Taitung County
7	Wulai District of New Taipei City, Fuxing Township of Taoyuan County, Jianshi Township of Hsinchu County, Wufeng Township of Hsinchu County, Renai Township of Nantou County, Mailiao Township of Yunlin County, Dapu Township of Chiayi County, Alishan Township of Chiayi County, Maolin District of Kaohsiung City, Taoyuan District of Kaohsiung City, Namaxia District of Kaohsiung City, Liuqiu Township of Pingtung County, Sandimen Township of Pingtung County, Wutai Township of Pingtung County, Majia Township of Pingtung County, Taiwu Township of Pingtung County, Laiyi Township of Pingtung County, Chunri Township of Pingtung County, Shizi Township of Pingtung County, Mudan Township of Pingtung County, Magong City of Penghu County, Datong Township of Yilan County, Nan'ao Township of Yilan County, Xincheng Township of Hualien County, Xiulin Township of Hualien County, Wanrong Township of Hualien County, Zhuoxi Township of Hualien County, Dawu Township of Taitung County, Ludao Township of Taitung County

	County, Haiduan Township of Taitung County, Yanping Township of Taitung County, Jinfeng Township of Taitung County, Daren Township of Taitung County, Lanyu Township of Taitung County
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Table 2 Geographic Stratifications

Geographic Area	Level Code	Combined Level Code
Taipei City, New Taipei City, Keelung, Yilan	1	1
	2	2
	3, 4	3
	5, 6, 7	4
Taoyuan, Hsinchu, Miaoli	1, 2	1
	3, 4	2
	5, 6, 7	3
Taichung, Changhua, Nantou	1, 2	1
	3, 4	2
	5	3
	6, 7	4
Yunlin, Chiayi, Tainan	1, 2, 3	1
	4, 5	2
	6, 7	3
Kaohsiung, Pingtung, Penghu	1, 2	1
	3, 4	2
	5, 6, 7	3
Hualien, Taitung	4, 5	1
	6, 7	2

(1) Pilot Test

A stratified three-stage probability proportional to size sampling was adopted for the pre-test interviews. Since few completed samples were expected during the pretest, the stratification system used in this project's formal survey was adjusted in order to meet the project deadline and save survey costs. With the Hualien and Taitung area excluded, only one geographic stratum was sampled within each of the five geographic areas: "Taipei City, New Taipei City, Keelung, Yilan," "Taoyuan, Hsinchu, Miaoli," "Taichung, Changhua, Nantou," "Yunlin, Chiayi, Tainan," and "Kaohsiung, Pingtung, Penghu." Once the proportions of population in the geographic areas were calculated based on the demographic data provided by the Ministry of the Interior at the end of December 2019, the numbers of samples for all geographic areas were determined based on the proportions, with the numbers of townships and the expected number of

completed samples within each township adjusted. The actual number of successful samples was 30.

(2) Formal survey

Prior to conducting the formal survey, the proportions of population in the geographic areas were calculated based on demographic data provided by the Ministry of the Interior at the end of December 2019, and the number of samples for all geographic areas were determined based on the proportions, with the number of townships and the expected number of completed samples within every township adjusted. Consequently, a total of 1,100 samples were expected to be completed in each of the four investigations. In view of the small population and extremely uneven distribution of population in the Hualien and Taitung area, stratified two-stage PPS (probabilities proportional to size) sampling was actually used, while stratified three-stage PPS sampling was used in other areas. During the third stage, a survey point was set up at gathering places (such as village office, activity center, and market) in the townships selected to conduct the survey with local residents.

The sampling units in each stage are explained as below.

- During two-stage sampling, the primary sampling units were “township” and then “people.” All of the “districts and townships” in the geographic stratum were included.
- During three-stage sampling, the primary sampling units were “townships,” and the second sampling units were “villages.” The last sampling units were “people.”

During the implementation of the survey, the gender and age structures of all communities were strictly controlled with the view to ensuring that the structure of the survey results is similar to that of the target population. In case of any inconsistency between obtained samples and the population, the results were weighted based on variables like gender, age, and community. The weighted sample number in every age group could not exceed the original sample number by 60 percent.

(3) Allocation of samples

To meet the request of the agency that commissioned this project, at least 1,160 valid samples were investigated in each questionnaire with a sampling error of within ± 3 percent at a 95 percent confidence level.

Table 3 Plan for Allocation of Samples at Survey Sites in All Communities

Geographic stratum	Level	No. of People Aged 16 and above	Population Percentage	Planned Allocation of Samples	No. of Townships and Districts Selected	No. of Villages Selected	Expected No. of Samples by Village	Total No. of Samples by Village
Taipei City, New Taipei City, Keelung, Yilan	Level 1	1,221,392	18.82%	66	3	2	11	6
	Level 2	3,205,432	49.40%	174	7	2	12	14
	Level 3	1,658,774	25.56%	90	4	2	11	8
	Level 4	403,164	6.21%	22	1	2	11	2
	Subtotal	6,488,762	32.06%	353	14			30
Taoyuan, Hsinchu, Miaoli	Level 1	1,176,640	36.79%	64	3	2	11	6
	Level 2	1,499,522	46.89%	82	3	2	14	6
	Level 3	521,746	16.32%	28	1	2	14	2
	Subtotal	3,197,908	15.80%	174	7			14
Taichung, Changhua, Nantou	Level 1	923,773	23.57%	50	2	2	13	4
	Level 2	1,283,279	32.74%	70	3	2	12	6
	Level 3	1,279,001	32.63%	70	3	2	12	6
	Level 4	433,564	11.06%	24	1	2	12	2
	Subtotal	3,919,617	19.37%	213	9			18
Yunlin, Chiayi, Tainan	Level 1	930,101	31.90%	51	2	2	13	4
	Level 2	1,214,657	41.65%	66	2	2	17	4
	Level 3	771,364	26.45%	42	2	2	10	4
	Subtotal	2,916,122	14.41%	159	6			12
Kaohsiung, Pingtung, Penghu	Level 1	1,134,075	35.00%	62	2	2	15	4
	Level 2	993,762	30.67%	54	2	2	14	4
	Level 3	1,111,938	34.32%	60	2	2	15	4
	Subtotal	3,239,775	16.01%	176	6			12
Hualien, Taitung	Level 1	251,969	53.14%	14	1	1	14	1
	Level 2	222,160	46.86%	12	1	1	12	1
	Subtotal	474,129	2.34%	26	2			2
Total		20,236,313	100.00%	1,100	44			88

Since the original allocation of the survey site sampling is based on proportions of the entire population, calculated decimal numbers had to be rounded to the nearest integers when the survey was actually performed. Moreover, to meet a specific requirement this year that the number of weighted samples in every age group must not exceed the original number of samples by 60 percent, the samples were allocated and adjusted accordingly in this project. The adjusted allocation of survey site sampling is shown in the table below.

Table 4 Plan for Allocation of Samples at Survey Sites in All Communities after Adjustment by Age

				Originally Planned Allocation of Samples at Survey Sites						Adjustment of Site Allocation Based on Age Distribution in the Population (Expected No. by Site)							
Geographic stratum	Level	No. of People Aged 16 and above	Population Percentage	Planned Allocation of Samples	No. of Townships and Districts Selected	No. of Villages Selected	Expected No. of Samples by Village	Total No. of Samples by Village	Expected No. of Samples by Level	Expected No. of Samples with Ages 16-25	Expected No. of Samples with Ages 26-35	Expected No. of Samples with Ages 36-45	Expected No. of Samples with Ages 46-55	Expected No. of Samples with Ages 56-65	Expected No. of Samples with Ages 66 and Above	Expected No. of Samples by Village	Expected No. of Completed Samples in Each Level by Age Group
Taipei City, New Taipei City, Keelung, Yilan	Level 1	1,221,392	18.82%	66	3	2	11	6	66	1	2	2	2	2	2	11	66
	Level 2	3,205,432	49.40%	174	7	2	12	14	168	2	2	2	2	2	2	12	168
	Level 3	1,658,774	25.56%	90	4	2	11	8	88	2	2	2	2	2	1	11	88
	Level 4	403,164	6.21%	22	1	2	11	2	22	2	2	2	2	2	1	11	22
	Subtotal	6,488,762	32.06%	353	14			30	344	7	8	8	8	8	6	45	344
Taoyuan, Hsinchu, Miaoli	Level 1	1,176,640	36.79%	64	3	2	11	6	66	2	2	2	2	2	1	11	66
	Level 2	1,499,522	46.89%	82	3	2	14	6	84	3	3	2	2	2	2	14	84
	Level 3	521,746	16.32%	28	1	2	14	2	28	2	2	2	3	2	1	12	24
	Subtotal	3,197,908	15.80%	174	7			14	178	7	7	6	7	6	4	37	174
Taichung, Changhua, Nantou	Level 1	923,773	23.57%	50	2	2	13	4	52	2	2	2	3	2	2	13	52
	Level 2	1,283,279	32.74%	70	3	2	12	6	72	2	2	2	2	2	2	12	72
	Level 3	1,279,001	32.63%	70	3	2	12	6	72	2	2	2	2	2	2	12	72
	Level 4	433,564	11.06%	24	1	2	12	2	24	2	3	2	2	2	1	12	24
	Subtotal	3,919,617	19.37%	213	9			18	220	8	9	8	9	8	7	49	220
Yunlin, Chiayi, Tainan	Level 1	930,101	31.90%	51	2	2	13	4	52	3	3	2	2	2	1	13	52
	Level 2	1,214,657	41.65%	66	2	2	17	4	68	2	3	3	3	3	3	17	68
	Level 3	771,364	26.45%	42	2	2	10	4	40	1	1	2	2	2	2	10	40
	Subtotal	2,916,122	14.41%	159	6			12	160	6	7	7	7	7	6	40	160
Kaohsiung, Pingtung, Penghu	Level 1	1,134,075	35.00%	62	2	2	15	4	60	3	3	2	3	2	2	15	60
	Level 2	993,762	30.67%	54	2	2	14	4	56	2	3	3	2	2	2	14	56
	Level 3	1,111,938	34.32%	60	2	2	15	4	60	3	3	3	2	2	2	15	60
	Subtotal	3,239,775	16.01%	176	6			12	176	8	9	8	7	6	6	44	176
Hualien, Taitung	Level 1	251,969	53.14%	14	1	1	14	1	14	2	3	3	3	2	1	14	14
	Level 2	222,160	46.86%	12	1	1	12	1	12	2	3	2	2	2	1	12	12
	Subtotal	474,129	2.34%	26	2			2	26	4	6	5	5	4	2	26	26
Total		20,236,313	100.00%	1,100	44			88	1,104						0		1,100

3. Survey period

The interviews took place in the selected areas between April 15 and June 5, 2020.

Table 5 Implementation of Formal Sampling

Sampling Frame		Selected	By Survey Site	
Area	Level	District or Township for Survey	No. of Expected Samples (1,160 samples in total)	No. of Completed Samples (1,169 samples in total)
Taipei City, New Taipei City, Keelung, Yilan	Level 1	Xinyi District of Taipei City	22	22
		Zhongzheng District of Taipei City	22	22
		Datong District of Taipei City	22	22
	Level 2	Wenshan District of Taipei City	24	24
		Banqiao District of New Taipei City	24	24
		Xinzhuang District of New Taipei City	24	24
		Nangang District of Taipei City	24	24
		Tamsui District of New Taipei City	24	24
		Luzhou District of New Taipei City	24	24
		Linkou District of New Taipei City	24	24
	Level 3	Xindian District of New Taipei City	22	22
		Ren'ai District of Keelung City	22	22
		Zhongshan District of Keelung City	22	22
		Yilan City of Yilan County	22	22
	Level 4	Yuanshan Township of Yilan County	22	22
	Subtotal		344	344
Taoyuan, Hsinchu, Miaoli	Level 1	Taoyuan District of Taoyuan City	22	22
		East District of Hsinchu City	22	22
		North District of Hsinchu City	22	22
	Level 2	Hukou Township of Hsinchu County	28	28
		Longtan District of	28	28

Sampling Frame		Selected	By Survey Site	By Survey Site
Area	Level	District or Township for Survey	No. of Expected Samples (1,160 samples in total)	No. of Completed Samples (1,169 samples in total)
		Taoyuan City		
		Bade District of Taoyuan City	28	28
	Level 3	Dahu Township of Miaoli Count	24	24
		Subtotal	174	174
Taichung, Changhua, Nantou	Level 1	Xitun District of Taichung City	26	26
		South District of Taichung City	26	26
	Level 2	Changhua City of Changhua County	24	24
		Taiping District of Taichung City	24	24
		Longjing District of Taichung City	24	24
	Level 3	Nantou City of Nantou County	24	24
		Puxin Township of Changhua County	24	24
		Puli Township of Nantou County	24	24
	Level 4	Mingjian Township of Nantou County	24	24
		Subtotal	220	220
Yunlin, Chiayi, Tainan	Level 1	Yongkang District of Tainan City	26	26
		West Central District of Tainan City	26	26
	Level 2	West District of Chiayi City	34	34
		Douliu City of Yunlin County	34	35
	Level 3	Xingang Township of Chiayi County	20	20
		Puzi City of Chiayi County	20	20
		Subtotal	160	161
Kaohsiung, Pingtung, Penghu	Level 1	Yancheng District of Kaohsiung City	30	30
		Gushan District of Kaohsiung City	30	30
	Level 2	Xiaogang District of Kaohsiung City	28	29

Sampling Frame		Selected	By Survey Site	By Survey Site
Area	Level	District or Township for Survey	No. of Expected Samples (1,160 samples in total)	No. of Completed Samples (1,169 samples in total)
		Pingtung City of Pingtung County	28	28
	Level 3	Meinong District of Kaohsiung City	30	32
		Baisha Township of Penghu County	30	31
		Subtotal	176	180
Hualien, Taitung	Level 1	Ji'an Township of Hualien County	14	14
	Level 2	Chenggong Township of Taitung County	12	12
		Subtotal	26	26
Kinmen, Matsu		Kinmen County	30	30
		Lianjiang County	30	34
		Subtotal	60	64
Grand total			1,160	1,169

The differences between the actual number of completed samples and the planned number of samples at survey sites are explained as below:

- (1) This survey was completely implemented as planned in terms of sites and allocation of samples. However, due to reasons like age control and people's willingness to be interviewed at different sites, fewer survey samples were completed than expected at several sites.
- (2) Although fewer samples were collected than planned at some sites, samples of all areas were verified to represent the population in terms of distribution, through a test prior to weighting (See Table 6).
- (3) Table 6 shows the planned numbers of samples and the actual numbers of valid samples completed by interviewers at selected sites. These numbers are representative prior to weighting. However, the survey analysis and results adopted by this report were tested and weighted based on the registered domicile of interviewees and the data of the entire population. Since the survey did not limit the interviewees to those with their domicile registered where they received the interview and the survey was simultaneously conducted in Taiwan proper, Kinmen and Matsu this year, all the data were consolidated, tested, weighted and grouped based on the registered domicile of the interviewees.

Table 6 Contingency Table for Broadband Usage Survey Site before Weighting

Allocation of Survey Site No.	Allocation of Samples		No. of Samples before Weighting		Chi-Square Test before Weighting
	No. of People	Percentage	No. of People	Percentage	
Total	1,100	100.0%	1,117	100.0%	The chi-square value is 0.231, and p-value (= 0.999) is below the accepted significance level of 5%, meaning no significant difference between the distribution of samples and the original allocation of samples.
Survey Site					
Taipei City, New Taipei City, Keelung, Yilan	344	31.5%	344	31.2%	
Taoyuan, Hsinchu, Miaoli	174	15.6%	174	15.8%	
Taichung, Changhua, Nantou	220	19.6%	220	19.9%	
Yunlin, Chiayi, Tainan	160	14.9%	161	14.6%	
Kaohsiung, Pingtung, Penghu	176	16.0%	180	16.3%	
Hualien, Taitung	26	2.4%	26	2.4%	

C. Implementation of Survey

1. Timeline

Before the survey was formally launched, preparations for questionnaires and related affairs were undertaken from February. After the questionnaires were modified based on the conclusions from the meeting with the agency that commissioned this study, the survey formally began on April 15, 2020. The timeline was:

(1) Preparation period: February 20 to April 14, 2020

(2) Survey period:

Phase 1: April 2 to April 10, 2020.

Phase 2: April 15 to June 5, 2020.

(3) Review period: June 5 to June 14, 2020

2. Survey method

Face-to-face interviews were employed for this survey; a computer-assisted interview survey system was used during the interview, and was supplemented with printed questionnaires.

3. Statistical analysis method

(1) Sample representativeness and weighting

After the survey results were reviewed, the NPAR chi-square test was used to examine the difference between the allocation of samples and the structure of the population in terms of age, gender, and population percentage, to enhance the representativeness and reliability of the survey so that these samples could reflect the population structure. In case a significant difference in structure was identified between the samples and the population. Weighting was used to make the sample structure identical to that of the population.

About weighting, the raking method was used to adjust the sampling weights based on variables in the order of gender, age and area of registered household until no significant difference existed between the allocation of samples and the population in every variable.

All the data in the results were multiplied by the adjustment weight. $\frac{N_i}{N} / \frac{n'_i}{n}$, N_i and n'_i represent the number of the population and the number of sample population weighted in the Cross Group i , while N and n represent the number of the total population and the number of the total sample population weighted. This way, the sampling distribution was completely the same as the population distribution after weighting. The last weight was gained by multiplying all the adjustment weights.

(2) Reliability analysis

Reliability refers to trustworthiness or consistency of a survey. Namely, when the survey is performed under the same or similar conditions, consistent or stable results can be obtained. Cronbach's (1951) α reliability coefficient is currently the most used reliability indicator. Nunnally (1967) suggests that a reliability of 0.7 or higher, also known as high reliability, is acceptable.

(3) Frequency

How people understand and rate each of the aspects can be realized through the data presented in allocation of frequencies and percentages in all questions.

(4) Cross analysis and Chi-square test

A cross analysis table was established with the basic data for "all the issues" to realize whether a difference existed between the respondents with different backgrounds in all the issues. Pearson's Chi-square test was used in the cross table. The chi-square test value (W) is defined as below:

$$W = \sum_{i=1}^r \sum_{j=1}^c \frac{(O_{ij} - E_{ij})^2}{E_{ij}} \sim \chi^2((r-1)(c-1))$$

, wherein

O_{ij} is the observed frequency from Row j, Column i, and

E_{ij} is the expected frequency from Row j, Column i.

When p-value in the chi-square test is less than 0.05, the two variables are not independent at a 95% confidence level. That is, a significant statistic difference exists between the respondents with different backgrounds in the issue.

(5) Analysis of variance (ANOVA)

The total variation can be divided into the variation between groups and the variation within groups. Analysis of variance is used to calculate the rate of variation between groups to variation within groups. If the variation between groups is significantly greater than the variation within groups, significant differences among group means exist between two or more groups. If the variation between groups is not highly different from the variation within groups, few differences exist among groups. The ANOVA F-test calculations are as below.

$$F = \frac{MS_b}{MS_w} = \frac{SS_b / k - 1}{SS_w / n - k}$$
, where n represents the number of samples and k represents the number of groups,

$$SS_b = n \sum_{i=1}^k (\bar{X}_i - \bar{X})^2$$
 is the total sum of squared deviations of group means from grand mean, and

$$SS_w = \sum_{i=1}^k \sum_{j=1}^{n_i} (X_{ij} - \bar{X}_i)^2$$
 is the total sum of the squared deviations within groups.

4. Sample structure

As of June 14, 2020, the survey for this research has been implemented and reviewed by the research team, with 1,105 questionnaires completed¹ as valid samples. The sample structure is shown in Table 7.

¹ This survey was conducted in Taiwan, Penghu, Kinmen and Matsu. Since Kinmen's and Matsu's populations are too small for analysis, the samples of Taiwan proper (including Penghu) were separated from those of Kinmen and Matsu. The numbers were weighted by city or county, and samples were regrouped according to where interviewees register their domicile. (Namely, an interviewee who registered his domicile in Kinmen or Matsu and received the interview in Taiwan would be classified as a valid sample of Kinmen and Matsu; while an interviewee who registered his domicile in Taiwan proper and received the interview in Kinmen or Matsu would be processed as a valid sample of Taiwan proper.) This led to a slight difference between the final numbers of valid samples and the numbers of completed samples shown in Tables 5 & 6, which were sorted by "survey site."

Table 7 Contingency Table for Broadband Usage Survey Samples

Population variables	Population		No. of Samples before Weighting		No. of Samples after Weighting		Chi-Square Test before Weighting	Chi-Square Test after Weighting
	No. of People	Percentage	No. of People	Percentage	No. of People	Percentage		
Total	20,236,313	100.0%	1,105	100.0%	1,105	100.0%		
Gender							The Chi-square value is 0.118, and p-value (= 0.731) is below the accepted significance level of 5%, meaning no significant difference between samples and the target population in distribution of gender.	The Chi-square value is 0.000, and p-value (= 0.999) is below the accepted significance level of 5%, meaning no significant difference between samples and the target population in distribution of gender.
Male	9,957,272	49.2%	538	48.7%	544	49.2%		
Female	10,279,041	50.8%	567	51.3%	561	50.8%		
Age							The Chi-square value is 19.294, and p-value (= 0.001) is below the accepted significance level of 5%, meaning significant difference between samples and the target population in distribution of age.	The Chi-square value is 0.000, and p-value (= 1.000) is below the accepted significance level of 5%, meaning no significant difference between samples and the target population in distribution of age.
Age 16-25	2,848,953	14.1%	187	16.9%	156	14.1%		
Age 26-35	3,226,276	15.9%	194	17.6%	176	15.9%		
Age 36-45	3,901,910	19.3%	209	18.9%	213	19.3%		
Age 46-55	3,581,873	17.7%	196	17.7%	196	17.7%		
Age 56-65	3,389,119	16.7%	184	16.7%	185	16.7%		
Age 66 and above	3,288,182	16.2%	135	12.2%	180	16.2%		
City or County							The Chi-square value is 305.293, and p-value (=0.000) is below the accepted significance level of 5%, meaning significant difference between samples and the target population in distribution of city and county.	The Chi-square value is 0.000, and p-value (=1.000) is below the accepted significance level of 5%, meaning no significant difference between samples and the target population in distribution of city and county.
New Taipei City	3,496,771	17.3%	166	15.0%	191	17.3%		
Taipei City	2,268,067	11.2%	115	10.4%	124	11.2%		
Taoyuan City	1,891,291	9.3%	78	7.1%	103	9.3%		
Taichung City	2,386,347	11.8%	86	7.8%	130	11.8%		
Tainan City	1,637,097	8.1%	55	5.0%	89	8.1%		
Kaohsiung City	2,420,482	12.0%	114	10.3%	132	12.0%		
Yilan County	396,287	2.0%	44	4.0%	22	2.0%		
Hsinch County	466,323	2.3%	34	3.1%	25	2.3%		
Miaoli County	473,111	2.3%	26	2.4%	26	2.3%		
Changhua County	1,096,893	5.4%	65	5.9%	60	5.4%		
Nantou County	436,377	2.2%	58	5.2%	24	2.2%		
Yilan County	597,967	3.0%	42	3.8%	33	3.0%		
Chiayi County	452,239	2.2%	50	4.5%	25	2.2%		
Pingtung County	725,792	3.6%	33	3.0%	40	3.6%		
Taitung County	189,642	0.9%	25	2.3%	10	0.9%		
Hualien County	284,487	1.4%	14	1.3%	16	1.4%		
Penghu County	93,501	0.5%	30	2.7%	5	0.5%		
Keelung City	327,637	1.6%	17	1.5%	18	1.6%		
Hsinch City	367,183	1.8%	27	2.4%	20	1.8%		
Chiayi City	228,819	1.1%	26	2.4%	12	1.1%		

Note: The source of the population data is the 2019 December Demographic Data of Households in Each Village provided on the Open Data platform by the Ministry of the Interior.

Note: The numbers of samples by county or city shown in Table 7 were weighted based on the registered domicile and the consistency between numbers of samples before and after weighting was tested.

The change rate of the numbers of sample in all age groups after weighting is shown in Table 8. They are all in compliance with the requirement that no number of sample in any age group shall increase or reduce by more than 60% after weighting.

Table 8 Change Rate of the Numbers of Sample by Age Group after Weighting

Population variables	No. of Samples before Weighting		No. of Samples after Weighting		Change Rate of the No. of Sample by Age Group after Weighting
	No. of People	Percentage	No. of People	Percentage	
Total	1,105	100.0%	1,105	100.0%	
Age					
Age 16-25	187	16.9%	156	14.1%	0.83
Age 26-35	194	17.6%	176	15.9%	0.91
Age 36-45	209	18.9%	213	19.3%	1.02
Age 46-55	196	17.7%	196	17.7%	1.00
Age 56-65	184	16.7%	185	16.7%	1.01
Age 66 and above	135	12.2%	180	16.2%	1.33

D. Research Limitations

To keep on top of how Taiwanese people use communications in the digital economic era, a survey on the Broadband Usage trends in the communications industry was implemented by means of interviews with people aged 16 and over (those who were born on and before December 31, 2004) in Taiwan proper (exclusive of Kinmen County and Lian jiang County), at the request of the NCC. However, the following study limitations exist when actually performing the survey:

1. Sample frame limitations

Based on the requirements of the NCC, at least 1,100 successful samples were to be completed with the allocation of samples proportional to the population of every county or city.

In order to undertake rigorous sampling, research was conducted with reference to the sample structure used in the Taiwan Social Change Survey by Academia Sinica. Nonetheless, it may be worth noting that this research differed from the Taiwan Social Change Survey, where household registrations are used as a sampling frame. With no access to Taiwan's household registration database, a household survey seemed impossible. Instead, interviews were carried out at gathering places in townships or cities.

2. Sample recovery restrictions

The survey questionnaires contained 103 questions. In order to meet the

requirement of at least 1,100 successful sample responses, groups of two interviewers were arranged at busy locations, such as parks and crossroads, to perform interviews.

During this survey, the average number of those who did not comply was 9.54. Among the aged 55 and over groups, the average number of refusals was 12.48, making it much harder to achieve the planned number of interviews when compared with young people. Even so, the interviewers were urged to obtain the required number of samples by gender and age, so the weighted number of all age groups would not exceed the original number of samples by more than 60%.

3. Sample Inference Restrictions

After weighting, the sample number of young people, such as ages 16-25, was 0.83 times greater; the sample number of ages 26-35 was 0.91 times greater; the sample number of ages 36-45 was 1.02 times greater; the sample number of middle-aged people such as ages 46-55 was 1.0 times greater; the sample number of ages 56-65 was 1.01 times greater; and the sample number of ages 66 and over was 1.33 times greater.

Non-probability sampling was employed in this research; therefore, care should be taken when using the resulting statistical inferences.

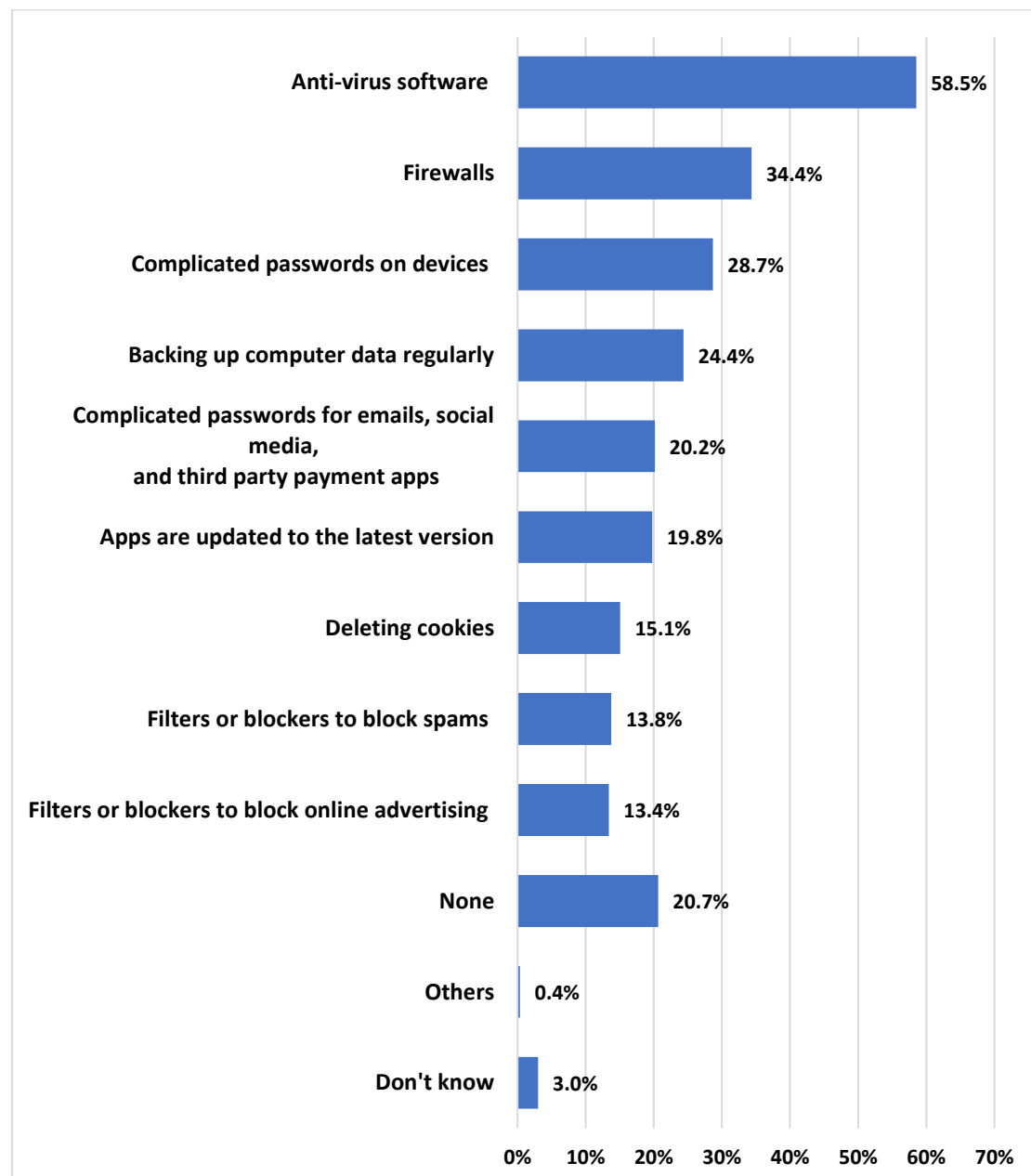
III. Results

A. Online Behaviors

Measures taken for internet security Q7

1. Overall analysis

The most used measure to protect internet security by those surveyed was anti-virus software (58.5%), followed by firewalls (34.4%) and complicated passwords on devices they use (28.7%); while 20.7% did not take any measures (See Figure 1).



Base: N=932, multiple-choice (Those who was online)

Figure 1 Which Measures Do You Take for Internet Security

2. Comparative analysis

(1) Analysis on regional differences

The cross analysis suggests that the most popular measures taken for online security by respondents from all areas was anti-virus software with the percentages higher than 60% in all areas except for Taipei City, New Taipei City, and Keelung where the percentage was 41% and the highest percentage among those from Kaohsiung, Pingtung, Penghu (72%).

(2) Analysis on basic differences

When analyzed by gender, most men (60.8%) and women (56.3%) used anti-virus software to protect online security; men reported a larger proportion in all protective answers than women except filter or blocking functions, which was used by more women to prevent spam; while a larger proportion of women (23%) did not take any protective actions compared to men (18.2%).

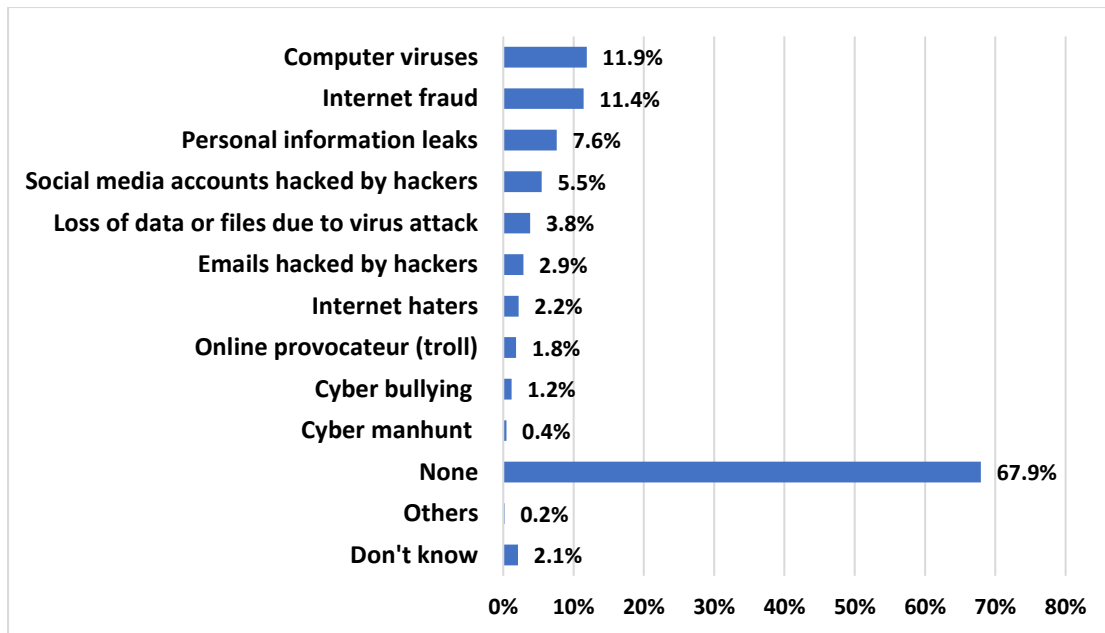
When analyzed by age, respondents of all ages anti-virus software was most popular, except for those aged 66 and over, most of whom did not take any protective measures” (63.9%). Those aged 26-35 reported the highest percentage (71.7%) for using anti-virus software; while those aged 56-65 reported the lowest (48.4%).

When analyzed by marital status, most of those unmarried (70.2%), married (53.1%) and widowed/separated (40%) used anti-virus software for online security, but almost 40% (37.4%) used none.

Situations encountered online in past 12 months Q8

1. Overall analysis

Most of the respondents did not encounter situations online (67.9%) in the past 12 months, and among those who did, computer viruses were the most popular (11.9%), followed by internet fraud (11.4%) (See Figure 2).



Base: N=932, multiple-choice (Those who was online)

Figure 2 Which Situations Have You Encountered Online in the Past 12 Months

2. Comparative analysis

(1) Analysis on regional differences

The cross analysis suggests that a larger proportion of respondents from all areas (all exceeding 60%) did not encounter any situation online in the past 12 months, with the highest proportion reported in Taipei City, New Taipei City, and Keelung (77.1%) and the lowest in Kaohsiung, Pingtung, and Penghu (60%). Amid the situations encountered, computer viruses were the most common in almost all areas except in Taichung, Changhua, and Nantou, and Yilan, Hualien, and Taitung, where “Internet fraud” made up the largest percentage (16.8% and 18.9% respectively).

(2) Analysis on basic differences

When analyzed by gender, the majority of men (65.4%) and women (70.4%) did not encounter any situation online in the past 12 months. For those who did, computer viruses were the most common situation for both men (14.1%) and women (9.8%).

When analyzed by age, a larger proportion of respondents of all ages (exceeding 60%) did not encounter any situation online in the past 12 months with the lowest proportion seen among those aged 66 and over (77.3%) and those aged 26-35 (62.7%). Amid the situations encountered, computer viruses were the most common in almost all age groups except among those aged 46-55 and those aged 56-65, where “Internet fraud” made up the largest percentage (13.6% and 12.6% respectively).

When analyzed by marital status, a larger proportion of respondents regardless of marital status (all exceeding 60%) did not encounter any situation online than those who did in the past 12 months, with the highest proportion reported among those married (72.2%) and the lowest among those unmarried (61.8%). For the situations encountered, “Computer viruses” were the most common for those unmarried (14.6%), “Internet fraud” made up the highest percentage (11.1%) of those married; while “Personal information leaks” accounted for the largest percentage of those widowed/separated (11.8%).

Confidence in Internet Use Q12 Q13 Q14 Q15

1. Overall analysis

Overall, the respondents recorded an average of 6.51 confidence level in using the internet (1 indicates no confidence and 10 indicates total confidence). Among all options, they showed the highest average confidence level in “Determining whether the online information was advertising or not” (6.61), followed by "Writing blogs, sharing photos online and uploading videos to the web" (5.63) and “Control of personal information published online” (5.04) (See Table 9).

Table 9 How Much Confidence Do You Have in Internet Use

Online Behaviors	Confidence Level (Average)
Determining whether the online information is advertising or not	6.61
Writing blogs, sharing photos online and uploading videos to the web	5.63
Control of personal information published online	5.04
Internet usage as a whole	6.51

Base: N=932 (Those who was online)

Source: Results from this research

2. Comparative analysis

(1) Analysis on regional differences

The one-way ANOVA suggests that whether one has confidence in "Writing Blogs, sharing photos online and uploading videos to the web," “Control of personal information published online,” and “Determining whether online information is advertising or not” is significantly related to area where one lived.

When analyzed by area, respondents from Yilan, Hualien, and Taitung have the highest average confidence level (6.31) in "Writing blogs, sharing photos online and uploading videos to the web"; while those from Kaohsiung, Pingtung, and Penghu have

the lowest (4.92). When it comes to “Control of personal information published online,” those from Yilan, Hualien, and Taitung have the most confidence (5.67); while those from Taichung, Changhua, and Nantou have the least (4.61). As for “Determining whether the online information is advertising or not,” those from Yilan, Hualien, and Taitung have the highest confidence level (7.24); while those from Kaohsiung, Pingtung, Penghu have the lowest (5.98). In terms of “Internet usage as a whole”, those from Yilan, Hualien, and Taitung again showed the highest confidence level (6.99); while those from Kaohsiung, Pingtung, and Penghu showed the least (5.96).

(2) Analysis on basic differences

The one-way ANOVA suggests that whether one has confidence in “Control of personal information published online,” “Determining whether the online information is advertising or not” and “Internet usage as a whole” is significantly related to gender; whether one has confidence in “Writing blogs, sharing photos online and uploading videos to the web,” “Control of personal information published online” is significantly related to age; whether one has confidence in “Writing blogs, sharing photos online and uploading videos to the web” is significantly related to marital status.

When analyzed by gender, men have more confidence in “Writing blogs, sharing photos online and uploading videos to the web” (5.65), “Control of personal information published online” (5.25), “Determining whether the online information is advertising or not” (6.85), and “Internet usage as a whole” (6.66) than women (5.62, 4.85, 6.38, 6.36 respectively).

When analyzed by age, respondents’ confidence in “Writing blogs, sharing photos online and uploading videos to the web,” “Control of personal information published online” and “Internet usage as a whole” decreased with age. Those aged 16-25 have the highest confidence level (6.65) in “Writing blogs, sharing photos online and uploading videos to the web,” while those aged 66 and over have the least (3.7). Those aged 16-25 have the highest confidence level (6.15) in “Control of personal information published online,” while those aged 66 and over have the least confidence (3.48). Again, those aged 16-25 have the highest confidence level (7.37) in “Internet usage as a whole,” while those aged 66 and over have the lowest (4.7). Respondents’ confidence in “Determining whether the online information is advertising or not” also decreased with age. Those aged 26-35 have the highest confidence level (7.26); while those aged 66 and over have the lowest (4.83).

When analyzed by marital status, unmarried respondents have the highest confidence levels in “Writing blogs, sharing photos online and uploading videos to the web” (6.18), “Control of personal information published online” (5.7), “Determining whether the online information is advertising or not” (7.01) and “Internet usage as a whole” (7.21); while those widowed/separated have the lowest confidence level in all these activities (4.83, 4.16, 5.87 and 5.59 respectively).

(3) Analysis on differences in social and economic status

One-way ANOVA suggests that whether one has confidence in “Control of personal information published online,” “Determining whether the online information is advertising or not” and “Internet usage as a whole” is significantly related to residence and education level; whether one has confidence in “Writing blogs, sharing photos online and uploading videos to the web” is significantly related to residence, education level, profession, and income.

When analyzed by residence, house renters have a higher confidence level in “Writing blogs, sharing photos online and uploading videos to the web” (6.28), “Control of personal information published online” (5.54), “Determining Whether the online information is advertising or not” (7.14), and “Internet usage as a whole” (7.1) than house owners (5.42, 4.88, 6.44 and 6.32 respectively).

When analyzed by education level, respondents’ confidence level decreased with age. Master’s and higher degree holders have the highest confidence level (6.73) in “Writing blogs, sharing photos online and uploading videos to the web” and those with elementary education or lower have the lowest (2.72). With regard to “Control of personal information published online,” master’s and higher degree holders also have the highest confidence (5.75); while those with elementary education or lower have the lowest (2.44). As for “Determining whether the online information is advertising or not,” master’s and higher degree holders also have the highest confidence (7.71), while those with elementary education or lower have the lowest (3.43). When it comes to “Internet usage as a whole,” once again master’s and higher degree holders saw the highest confidence (8.05), while those with elementary education or lower have the lowest (3.33).

When analyzed by profession, those in the art/entertainment and recreation industries have the highest confidence (7.33) in “Writing blogs, sharing photos online and uploading videos to the web, while those in the agricultural/forestry/fishery/

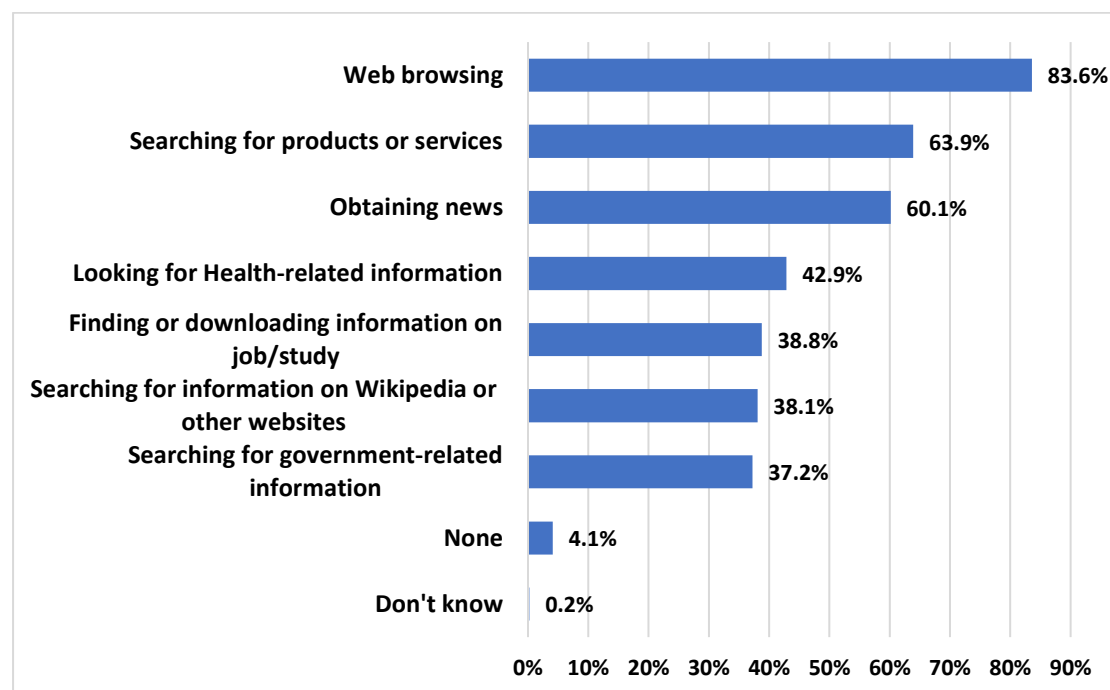
husbandry industries saw the lowest (4.01).

When analyzed by average monthly income, those who earned NT60,000 and more have the highest confidence (6.78) in “Writing blogs, sharing photos online and uploading videos to the web,” while those who earned less than NT10,000 and those who earned NT10,000-NT19,999 have the lowest (5.06).

Activities Engaged In Online Q18 Q19

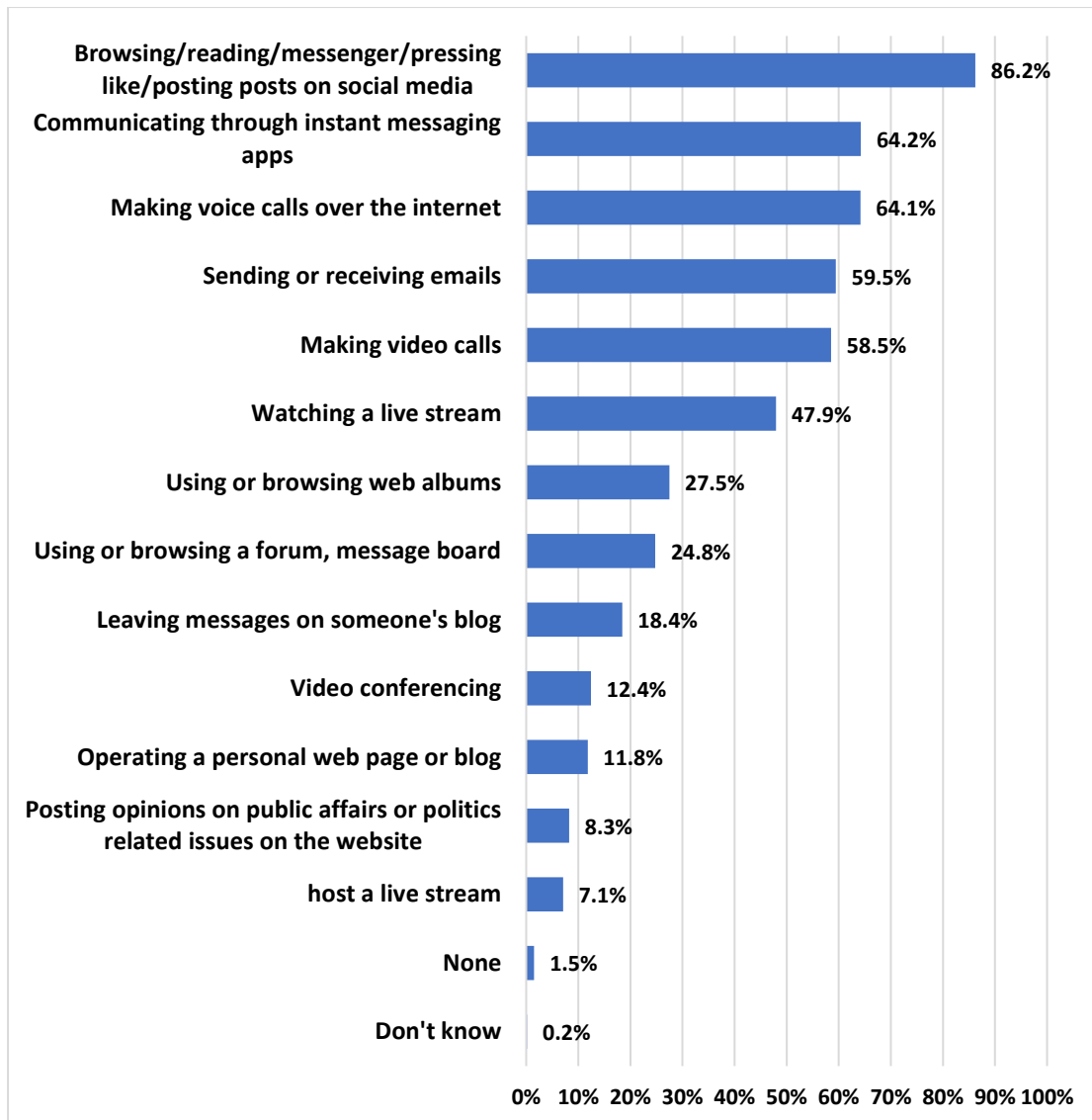
1. Overall analysis

The survey shows that the most commonly engaged activity online for respondents was “Web browsing” (83.6%), followed by “Searching for products or services” (63.9%) and “Obtaining news” (60.1%) (See figure 3). Among the online social networking or communication activities, browsing/reading/messenger/pressing like/posting posts on social media (e.g. Facebook, LINE, Instagram, etc.) accounted for the largest bulk (86.2%), followed by communicating through instant messenger apps (e.g. Facebook Messenger, LINE, Skype, WhatsApp, WeChat, Telegram, etc.) (64.2%) and voice calls (e.g. Facebook Messenger, LINE, Skype, FaceTime, Telegram, etc.) (64.1%) (See Figure 4).



Base: N=932, multiple-choice (Those who was online)

Figure 3 Which Searching Activities Have You Been Engaged in Online



Base: N=932, multiple-choice (Those who was online)

Figure 4 Which Social Networking or Communication Have You Been Engaged in Online

2. Comparative analysis

(1) Analysis on regional differences

The cross analysis suggests that the most commonly engaged activity online was “Web browsing,” with the highest percentage seen among those from Yilan, Hualien, and Taitung (91.2%) and the lowest among those from Taipei City, New Taipei City, and Keelung (79.8%). For respondents from all areas, the most commonly engaged social or communication activity was browsing/reading/leaving messages/pressing like/posing posts on social media, at more than 80% except for those from Taoyuan, Hsinchu, and Miaoli (79.8%). The highest proportion was seen among those from Taipei City, New Taipei City, and Keelung (94.6%).

(2) Analysis on basic differences

When analyzed by gender, “Web browsing” was the most popular online searching activity for both men (82.8%) and women (84.3%). For both men and women the predominant social or communication activity online was browsing/reading/leaving messages/pressing likes/posing posts on social media with the rates of 85.6% and 86.8% respectively.

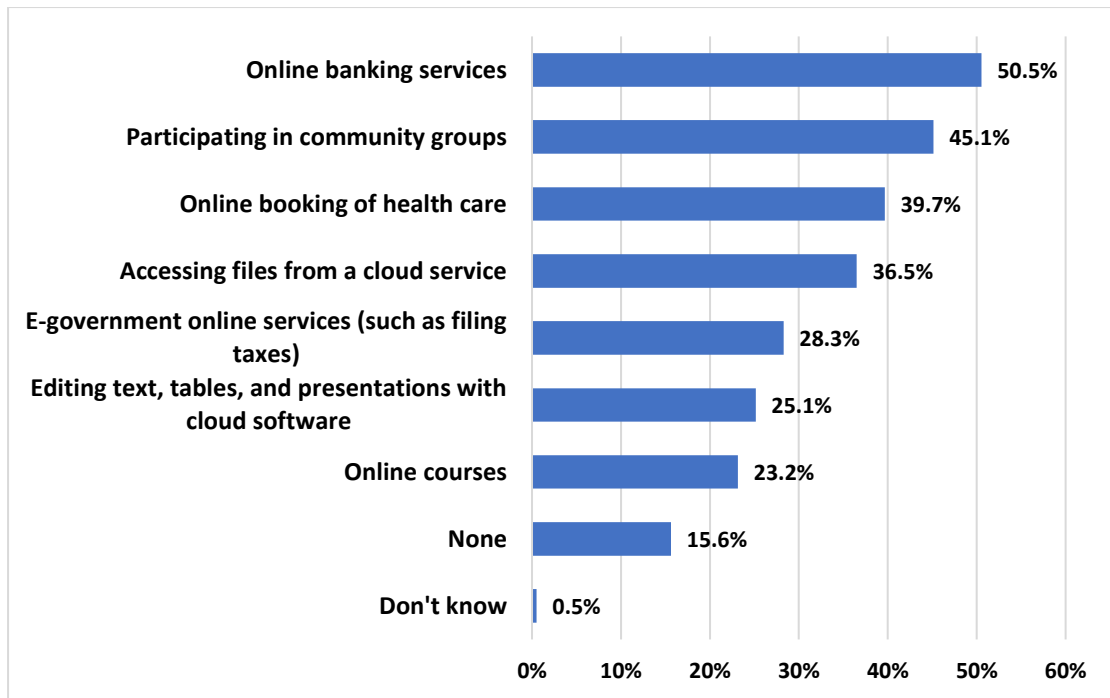
When analyzed by age, the most popular searching activity online for respondents of all ages was “Web browsing,” with the highest proportion seen among those aged 26-35 (93.8%) and the lowest among those aged 66 and over (58.5%). The predominant social or communication activity online for respondents of all ages was browsing/reading/leaving messages/pressing likes/posing posts on social media, and the percentage decreased with age, with the highest rate of 92.7% seen among those aged 26-35 and the lowest rate 72.2% among those aged 66 and over.

When analyzed by marital status, the most popular searching activity online for respondents regardless of marital status was “Web browsing,” with the highest proportion among those unmarried (90.1%) and the lowest among those widowed/separated (67%). The predominant social or communication activity online for respondents regardless of marital status was browsing/reading/leaving messages/pressing likes/posing posts on social media with the highest proportion 89% among those unmarried and the lowest 83.7% among those widowed/separated.

Use of online services and activities Q20 Q21

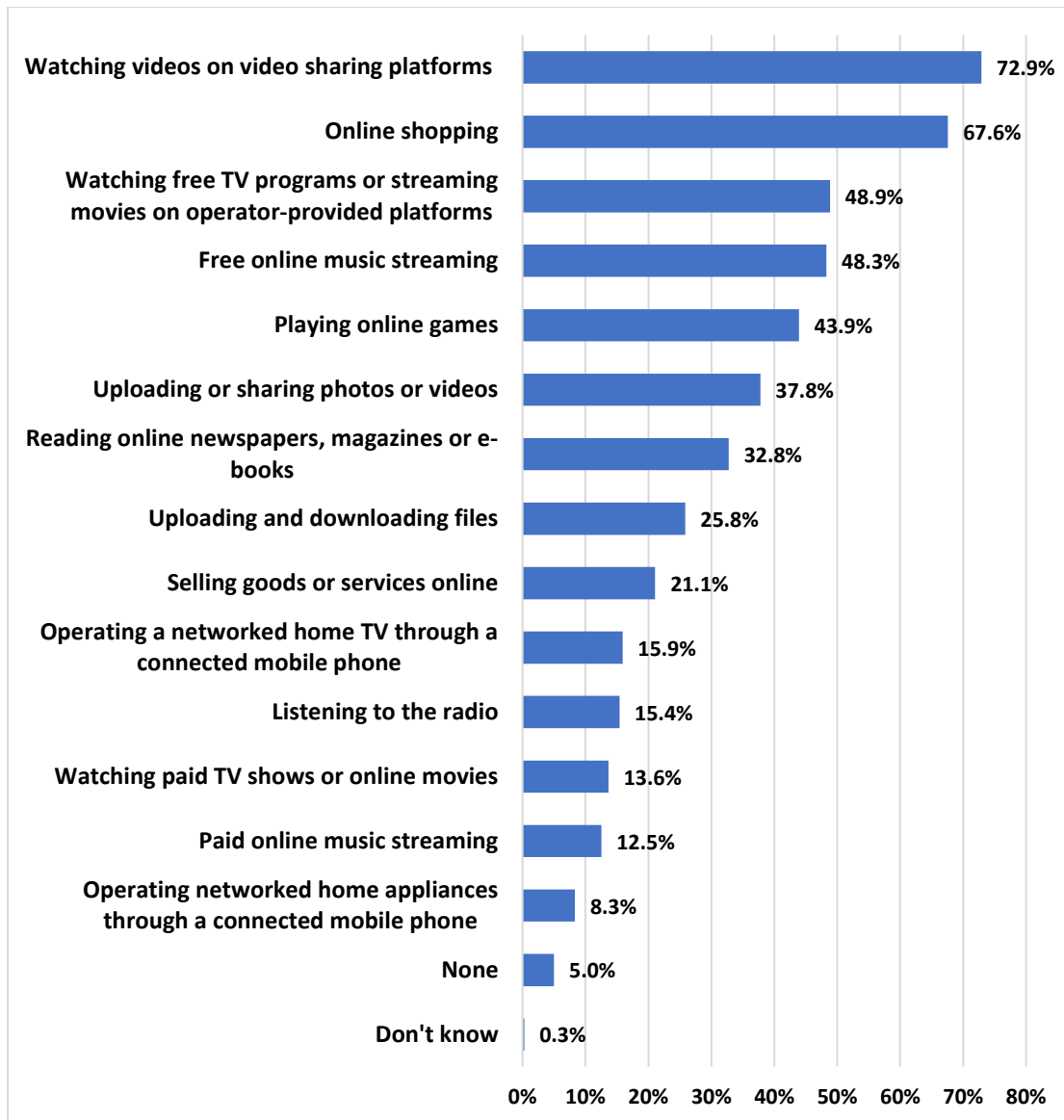
1. Overall analysis

The most commonly used online service for all respondents was “Online banking services”(50.5%), followed by “Participating in community groups” (45.1%) and “Online booking of health care” (39.7%) (See Figure 5). The most popular online activity of all was “Watching videos on video sharing platforms (such as YouTube, Facebook, etc.) with a rate as high as 72.9%, followed by “Online shopping” (such as purchasing various products, services and tickets) (67.6%) and “Watching free TV programs or streaming movies on operator-provided platforms” (48.9%) (See Figure 6).



Base: N=932, multiple-choice (Those who was online)

Figure 5 Which Services Have You Ever Used Online



Base: N=932, multiple-choice (Those who was online)

Figure 6 Which Activities Have You Been Engaged In Online

2. Comparative analysis

(1) Analysis on regional differences

The cross analysis suggests that the most commonly used online service was banking services for those from Taipei City, New Taipei City and Keelung (47.3%), Taoyuan, Hsinchu, and Miaoli (55.1%), Yunlin, Chiayi, Tainan (52.8%), and Kaohsiung, Pingtung, Penghu (52.5%), while “Participating in community groups” was the most popular online service for those from Taichung, Changhua, and Nantou (46.9%) and Yilan, Hualien, and Taitung (62.2%). The predominant online activity for respondents from all areas was “Watching videos on video sharing platforms,” with the highest proportion among those from Taoyuan, Hsinchu, and Miaoli (81.1%) and the lowest

among those from Taichung, Changhua, and Nantou (73.5%), except those from Taipei City, New Taipei City, and Keelung, and Yilan, Hualien, and Taitung, where “Online shopping” accounted for the largest share (64.2% and 78.8% respectively).

(2) Analysis on basic differences

When analyzed by gender, the most common online service for both men and women was “Banking services” with rates of 50.1% and 50.9% respectively. The most popular online activity for men was “Watching videos on video sharing platforms” (74.1%) and for women, it was “Online shopping” (73.6%).

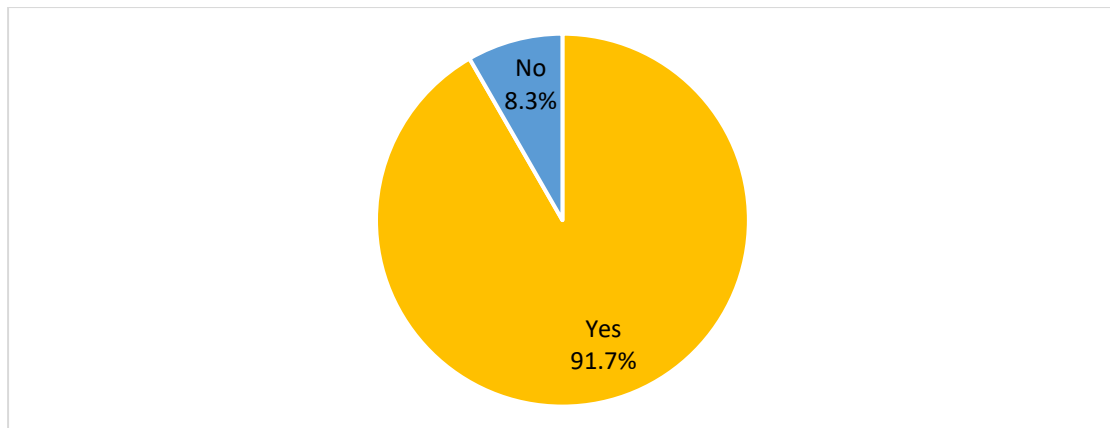
When analyzed by age, banking services were the most widely used online service for those aged 26-35 (69%), 36-45 (67.7%), and 46-55 (49.7%). For those aged 16-25, the most popular was “Accessing files from a cloud service” (55.2%); for those aged 56-65, it was “Participating in community groups” (40.5%); while a majority of those aged 66 and over (38.7%) didn’t use such services. The predominant online activity for respondents of all ages was “Watching videos on video sharing platforms,” with the highest proportion among those aged 36-45 (81.6%) and the lowest among those aged 66 and over (48.4%), except those aged 16-25 and 26-35, where “Online shopping” accounted for the largest share (85.5% and 84.2% respectively).

When analyzed by marital status, the predominant online service for those unmarried (52.6%) and married (51%) was banking services, while “Online booking of health care” was the most popular for those widowed/separated (44.6%). The most widely used online activity for those unmarried was “Online shopping” (80.6%), while for those married and those widowed/separated, “Watching videos on video sharing platforms” answers made up the bulk (70.4% and 72.7% respectively).

Internet access at places other than home Q22 Q23

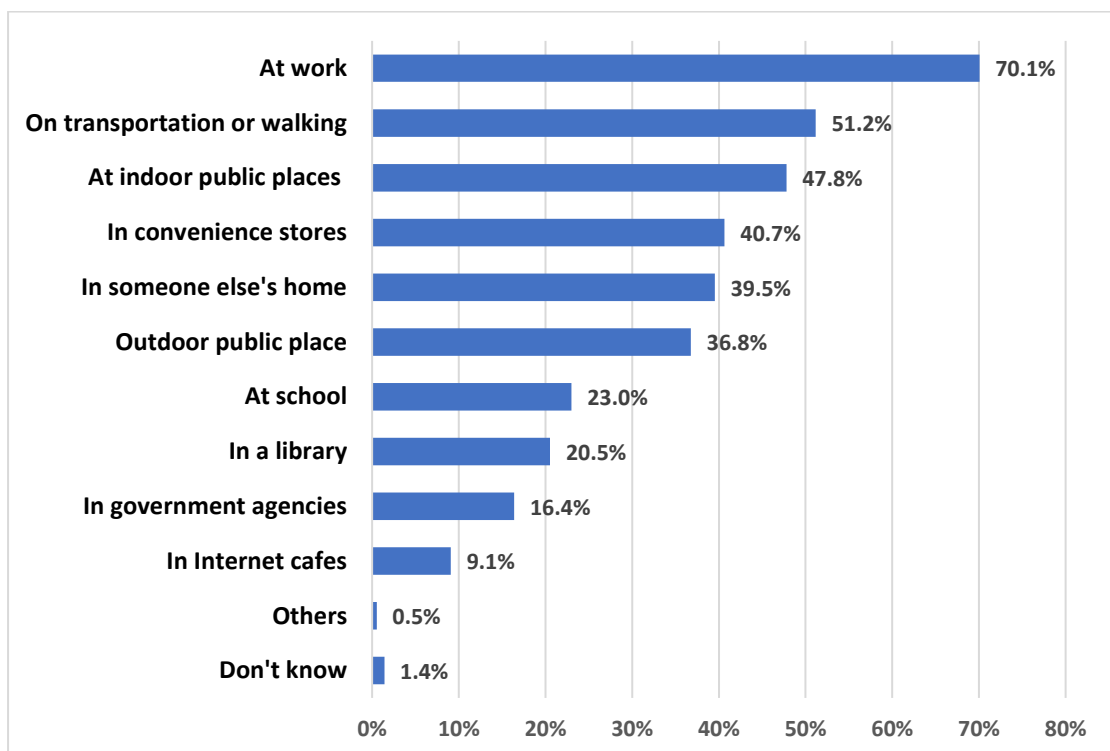
1. Overall analysis

Up to 91.7% of the respondents accessed the internet at places other than home (See Figure 7). When not at home, up to 70.1% of people accessed the internet at work (the largest share). The answers that followed are “On transportation or walking” (51.2%) and “At indoor public places (such as restaurants movie theaters shopping malls)” (47.8%) (See Figure 8).



Base: N=932, single-choice (Those who was online)

Figure 7 Do You Access the Internet at Places Other than Home



Base: N=855, multiple answers allowed (Those who accessed the Internet at places other than home)

Figure 8 Where Do You Access the Internet besides Home

2. Comparative analysis

(1) Analysis on regional differences

The chi-square test suggests that whether one accesses the internet at places other than home is significantly related to where one lives.

According to the cross analysis, it is found that a larger proportion of respondents from all areas access the internet at places other than their home, with the highest proportion among those from Kaohsiung, Pingtung, Penghu (98.2%) and the lowest among those from Yunlin, Chiayi, Tainan (86.3%). More than 60% of respondents from

all areas accessed the internet at workplace when not at home, with the highest rate in Yunlin, Chiayi, Tainan (80.4%), except those from Yilan, Hualien, and Taitung (57.3%). What was striking was the rate of those from Taoyuan, Hsinchu, and Miaoli who accessed the internet on transportation or walking (63.1%) and the rate of those from Kaohsiung, Pingtung, Penghu who accessed the internet at government agencies (30.7%), and the rate of those from Yilan, Hualien, and Taitung who accessed the internet at school (36.7%) were significantly higher than those from other areas. The rates of those who accessed the internet at school (17.6%), indoor public places (37.8%), convenience stores (29%) and government agencies (7.2%) in Taipei City, New Taipei City, and Keelung were much lower than in other areas.

(2) Analysis on basic differences

The chi-square test suggests that whether one accesses the internet at places other than home is significantly related to area, gender, age, marital status, and education level.

When analyzed by gender, a vast majority of men (93.7%) and women (89.8%) access the internet at places other than home, and the workplace was the most common place for both men and women to access the internet when not at home. A larger proportion of men (73.4%) access the internet at work than women (66.7%).

When analyzed by age, a larger percentage of the respondents of all ages access the internet at places other than home than those who don't. The rates decrease with age, with the highest percentage among those aged 16-25 (98.7%) and the lowest among those aged 66 and over (73.5%). When not at home, most respondents of all ages access the internet at work, with the highest percentage among those aged 26-35 (90.6%) and the lowest among those aged 56-65 (56.4%), except those aged 16-25 (73.2%), most of whom accessed the internet at school, and those aged 66 and over, most of whom used the internet in outdoor open places (73.2%).

When analyzed by marital status, those who accessed the internet at places other than home made up a larger proportion in interviewees regardless of marital status, with the highest percentage (96.9%) among those unmarried and the lowest (87.1%) among those widowed/separated. When not home, a larger proportion of respondents regardless of marital status connected while at work, with the highest percentage among those unmarried (71.6%) and the lowest among those widowed/separated (66.8%). A larger percentage of those unmarried went online at places other than their home

compared to those married and those widowed/separated, except at government agencies and outdoor public places.

(3) Analysis on differences in social and economic status

The chi-square test suggests that whether one accesses the internet at places other than home is significantly related to education level.

When analyzed by education level, a larger proportion of respondents of various education levels access the internet at places other than home. The rates increase with education level, with the highest percentage among master's and higher degree holders (96.5%) and the lowest among those with elementary education or lower (67.6%).

Average time spent on Internet at places other than home Q25 Q26

1. Overall analysis

The respondents spent an average of 20.79 hours on the internet at work or school every week (N=855, those who accessed the internet at places other than home); and they spent an average of 11.39 hours on the internet at other places (places other than home, workplace or school) every week (N=855, those who accessed the internet at places other than home).

2. Comparative analysis

(1) Analysis on regional differences

When analyzed by area, respondents from all areas spent on average more than 20 hours on the internet at work or school per week, with those from Yunlin, Chiayi, and Tainan spending the longest time (27.2 hours), except those from Taipei City, New Taipei City, and Keelung (16.58 hours) and Yilan, Hualien, and Taitung (16.41 hours) (See Table 10). Respondents from all areas connected on average for more than 10 hours at other places, with those from Yunlin, Chiayi, and Tainan spending the longest time (15.78 hours), except those from Taipei City, New Taipei City, and Keelung (9.63 hours) and Yilan, Hualien, and Taitung (7.84 hours) (See Table 11).

Table 10 Average Time Spent Online at Work or School (by area)

Unit: Hour

Area	Average Number of Hours
Taipei City, New Taipei City, and Keelung	16.58
Taoyuan, Hsinchu, and Miaoli	22.25
Taichung, Changhua, and Nantou	20.69
Yunlin, Chiayi, and Tainan	27.20
Kaohsiung, Pingtung, and Penghu	21.36
Yilan, Hualien, and Taitung	16.41
Total Average	20.79

Source: Results from this research

Table 11 Average Time Spent Online at Other places (Non-home, Workplace, or School)

Unit: Hour

Area	Average Number of Hours
Taipei City, New Taipei City, and Keelung	9.63
Taoyuan, Hsinchu, and Miaoli	10.63
Taichung, Changhua, and Nantou	11.99
Yunlin, Chiayi, and Tainan	15.78
Kaohsiung, Pingtung, and Penghu	11.55
Yilan, Hualien, and Taitung	7.84
Total Average	11.39

Source: Results from this research

(2) Analysis on basic differences

When analyzed by gender, men spent longer (22.62 hours) online at work or school per week than women (18.88 hours); likewise, men (11.52 hours) on average spent longer online at other places per week than women (11.25 hours).

When analyzed by age, those aged 26-35 spent the longest time online at work or school per week (25.98 hours), while those aged 66 and over spent the shortest time (8.94 hours). Those aged 26-35 spent the longest time online at other places per week (13.7 hours), while those aged 66 and over spent the shortest time (4.93 hours).

When analyzed by marital status, those unmarried spent on average the longest time on the internet at work or school per week (24.82 hours), and those married spent the shortest time (17.68 hours). Similarly, those unmarried spent on average the longest time online at other places per week, (13.93 hours); while those married spent the shortest time (9.62 hours) per week.

(3) Analysis on differences in social and economic status

The one-way ANOVA suggests that the average time spent online at work or school every week is significantly related to average monthly individual income; while the average time spent online at other places every week is significantly related to education level.

When analyzed by education level, the time spent online at other places each week by those surveyed increased with education level, with master's and higher degree holders spending the longest time (14.67 hours) and those with elementary education or lower spending the shortest (6.68 hours).

When analyzed by average monthly individual income, those earning NT60,000 and more spent on average the longest time (25.52 hours) online at work or school every week; while those earning NT1-NT9,999 spent the shortest time (13.6 hours).

Average time spent on the internet at home per week Q28

1. Overall analysis

Those surveyed spent an average of 27.17 hours on the internet at home every week (N=924, those who knew the time they spent on the internet at home).

2. Comparative analysis

(1) Analysis on regional differences

When analyzed by area, interviewees from Yunlin, Chiayi, and Tainan spend on average the longest time, 31.96 hours, on the internet at home per week, while those from Taoyuan, Hsinchu, and Miaoli spend the shortest time, 22.41 hours (See Table 12).

Table 12 How Much Time Do You Spend on Average on the Internet at Home per Week (by area)

Unit: Hour

Area	Average Number of Hours
Taipei City, New Taipei City, and Keelung	31.03
Taoyuan, Hsinchu, and Miaoli	22.41
Taichung, Changhua, and Nantou	25.77
Yunlin, Chiayi, and Tainan	31.96
Kaohsiung, Pingtung, and Penghu	23.83
Yilan, Hualien, and Taitung	28.37
Total Average	27.17

Source: Results from this research

(2) Analysis on basic differences

The one-way ANOVA suggests that the average time spent online at home each week is significantly related to marital status.

When analyzed by gender, men and women on average spend almost the same time on the internet at home every week (27.03 and 27.3 hours respectively).

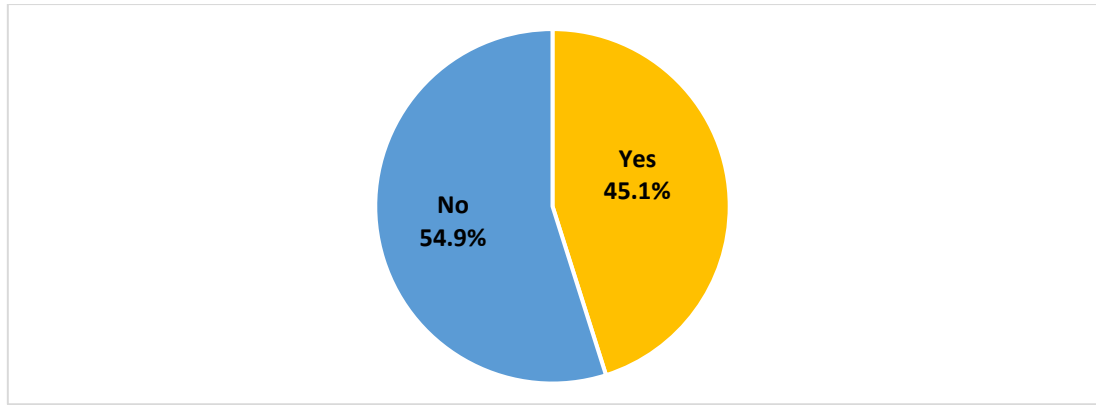
When analyzed by age, the time on average spent online at home per week by those surveyed decreased with age. Those aged 26-35 spend the longest time, 32.09 hours, on the internet; while those aged 66 and over spend the shortest, 18.86 hours.

When analyzed by marital status, those unmarried on average spend the longest time (31.1 hours) on the internet at home, while those widowed/separated spend the shortest time (23.69 hours).

Concerns about internet use Q29 Q30

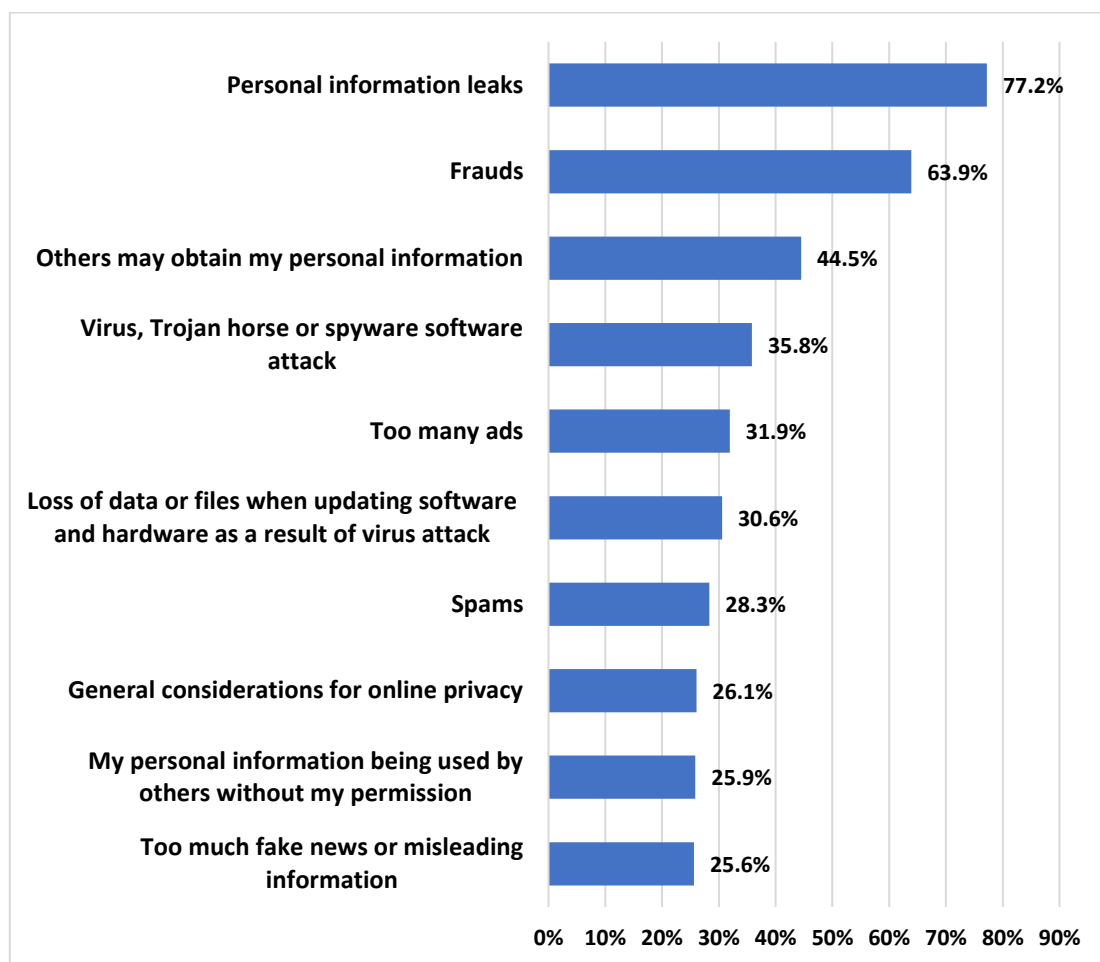
1. Overall analysis

When asked whether they have concerns about going online, over 50% (54.9%) of those surveyed gave a negative reply, while 45.1% said yes (See Figure 9). For those with concerns, “Personal information leaks” answers accounted for the largest proportion (77.2%), followed by “Frauds” (63.9%) and “Others may obtain my personal information” (44.5%) (See Figure 10).



Base: N=1,105, single-choice

Figure 9 Do You Have Concerns about Going Online



Base: N=499, multiple answers allowed (Those who have concerns)

Figure 10 What Are Your Concerns about Internet Use (Top 10)

2. Comparative analysis

(1) Analysis on regional differences

The chi-square test suggests that whether one has concerns about internet use is significantly related to the area where one lives.

According to the cross analysis, a larger proportion of respondents from all areas

have no concerns about internet use than those who have, with the highest proportion among those from Yilan, Hualien, and Taitung (62.6%) and the lowest in Yunlin, Chiayi, Tainan (54.2%), except in Kaohsiung, Pingtung, and Penghu, where those answered positively made up the bulk (57.1%). Among those who have concerns, “Personal information leaks” answers accounted the largest percentage in all areas with the rates all surpassing 70%, and the highest proportion among those from Yunlin, Chiayi, and Tainan (84.5%) and the lowest in Taipei City, New Taipei City, and Keelung (72.7%), except in Kaohsiung, Pingtung, and Penghu, and Yilan, Hualien, and Taitung, where the predominant concern was “Frauds” (72.3% and 84% respectively). In addition, it was noticeable that a larger proportion of those from Yilan, Hualien, and Taitung have concerns about indecent photographs of children posted online (24.8%) than those from any other area; a smaller percentage of those from Taipei City, New Taipei City, and Keelung have concerns about everything than those from other areas.

(2) Analysis on basic differences

The chi-square test suggests that whether one has concerns about internet use is significantly related to age.

When analyzed by gender, a larger proportion of both men (57.9%) and women (52%) have concerns about internet use than those who hadn't. Among those with concerns, “Personal information leaks” was the most popular concern, with a smaller rate in men (76.8%) than in women (77.6%).

When analyzed by age, a larger proportion of respondents of all ages have no concerns about internet use than those who have, with the highest proportion among those aged 66 and over (67%) and the lowest among those aged 46 -55 (51.8%), except those aged 56-65, where those have no concerns made up the bulk (50.4%). Among those with concerns, the predominant concern was “Personal information leaks” with the highest rate seen among those aged 36-45 (85.2%) and the lowest in those aged 56-65 (74.6%), except those aged 66 and over, where “Frauds” was the most given answer (67%).

When analyzed by marital status, a larger proportion of the respondents regardless of marital status have concerns about going online than those who have not, with the highest rate among those widowed/separated (59.2%) and the lowest among those married (53.7%). Among those who have concerns about internet, “Personal information leaks” was the predominant concern for those unmarried (81%) and married (76%), and “Frauds” were the most common concern for those

widowed/separated (76.4%).

(3) Analysis on differences in social and economic status

The chi-square test suggests that whether one has concerns about internet use is significantly related to one's education level, profession, and average monthly income.

When analyzed by education level, a larger proportion of respondents of all education levels have no concerns about internet use than those who have, with the highest proportion seen among those with elementary education or lower (67.4%) and the lowest among those with junior college education (50.4%), except the master's and higher degree holders, where those have concerns made up the bulk (55.2%).

When analyzed by profession, a larger share of those regardless of profession have no concerns about going online than those who have, with the highest percentage among the publication, audio-video production, mass communication, and information and communications industries (77.7%), except those in the agricultural/forestry/fishery/ husbandry industries (69.1%), wholesale and retail industries (51%), finance and insurance industries (53.5%), education industry (50.9%), public administration and national defense/mandatory social security industries (62.6%), healthcare and social work services (67.5%), art/entertainment and recreation industries (50.7%), where the percentage of those with concerns represented a larger proportion.

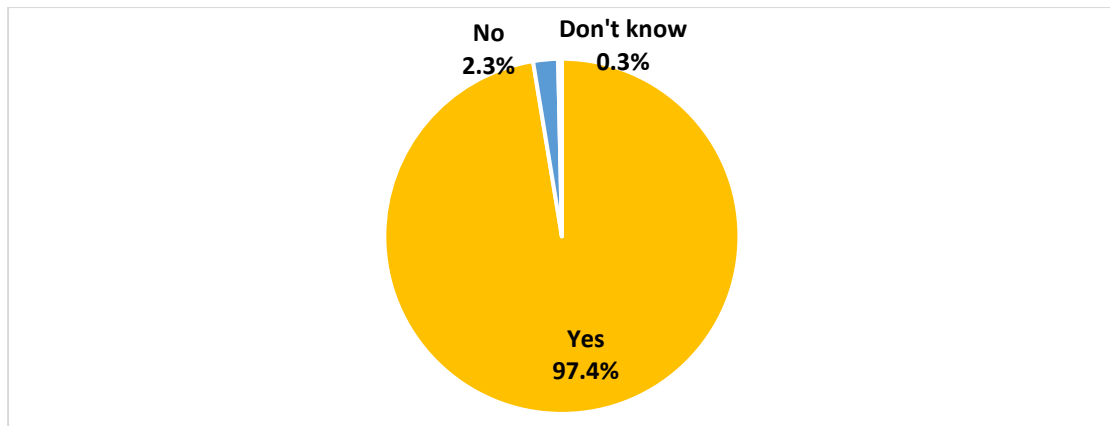
When analyzed by average monthly individual income, a larger proportion of respondents of various incomes have no concerns about internet use than those who have, with those with no income giving the highest proportion (63.1%), except those who earned NT30,000-39,999 and NT60,000 and over, where those have concerns made up the bulk (52.6% and 55.8% respectively).

B. Use of Social Media

Social Media or Instant Messaging App Account Q31

1. Overall analysis

Up to 97.4% of those surveyed had at least a social media (e.g. Facebook, Instagram, and Twitter) or instant messenger account (e.g. Facebook, Messenger, LINE, Skype, WhatsApp, WeChat, Telegram, etc.) (See Figure 11).



Base: N=932, single-choice (Those who was online)

Figure 11 Do You Have Any Social Media or Instant Messaging App Accounts

2. Comparative analysis

(1) Analysis on regional differences

According to the cross analysis, it is found that more than 90% of those surveyed had at least one social media or instant messenger account, with those from Taichung, Changhua, and Nantou having the highest percentage (98.9%) and those from Yilan, Hualien, and Taitung having the lowest (95.3%).

(2) Analysis on basic differences

When analyzed by gender, both men and women have very close rates for owning social media or instant messenger accounts, which were 97.7% and 97.1% respectively.

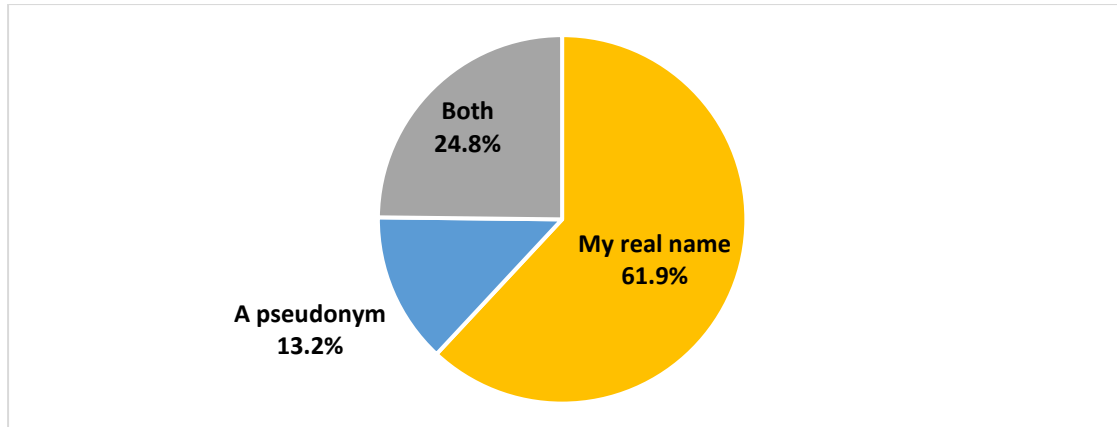
When analyzed by age, more than 90% of those surveyed of all ages had at least one social media or instant messenger account, with those aged 16-25 giving the highest percentage (99.7%) and those aged 46-55 giving the lowest (95%).

When analyzed by marital status, more than 90% of those surveyed had at least one social media or instant messenger account regardless of marital status, with those unmarried with the highest proportion (98%) and those widowed/separated having the lowest (96.5%).

Do you use your real name on social media Q32

1. Overall analysis

Up to 61.9% of those surveyed use their real name on social media (e.g. Facebook, Instagram, Twitter) or instant messaging apps (e.g. Facebook, Messenger, LINE, Skype, WhatsApp, WeChat, Telegram); 13.2% use a pseudonym, while 24.8% use both. (See Figure 12).



Base: N=908, multiple answers allowed (Those who have any social media or instant messaging accounts)

Figure 12 Do You Use Your Real Name or Pseudonym on Social Media or Instant Messaging Account

2. Comparative analysis

(1) Analysis on regional differences

The chi-square test suggests that whether one uses one's real name or pseudonym on social media or instant messaging apps is significantly related to the area where one lives.

The cross analysis suggests that the majority of those surveyed from all areas use their real name on social media or instant messengers, with the rates all greater than 50% except for those from Kaohsiung, Pingtung, and Penghu (46.8%). Those from Yilan, Hualien, and Taitung have the highest percentage, which is 71.6%. When it comes to using a pseudonym on social media, those from Kaohsiung, Pingtung, and Penghu have the highest share (19.2%); while those from Yilan, Hualien, and Taitung have the lowest (5%). When it comes to using both a real name and pseudonym, those from Kaohsiung, Pingtung, and Penghu have the highest share (34%); while those from Taipei City, New Taipei City, and Keelung have the lowest (18.6%).

(2) Analysis on basic differences

The chi-square test suggests that whether one uses one's real name or pseudonym on social media or instant messaging apps is significantly related to age and marital status.

When analyzed by gender, those with their real name account for a higher percentage of both men (63%) and women (60.9%) respondents. And both genders share the same proportion (24.8%) to use a combination of both.

When analyzed by age, most of the interviewees among all age groups choose the

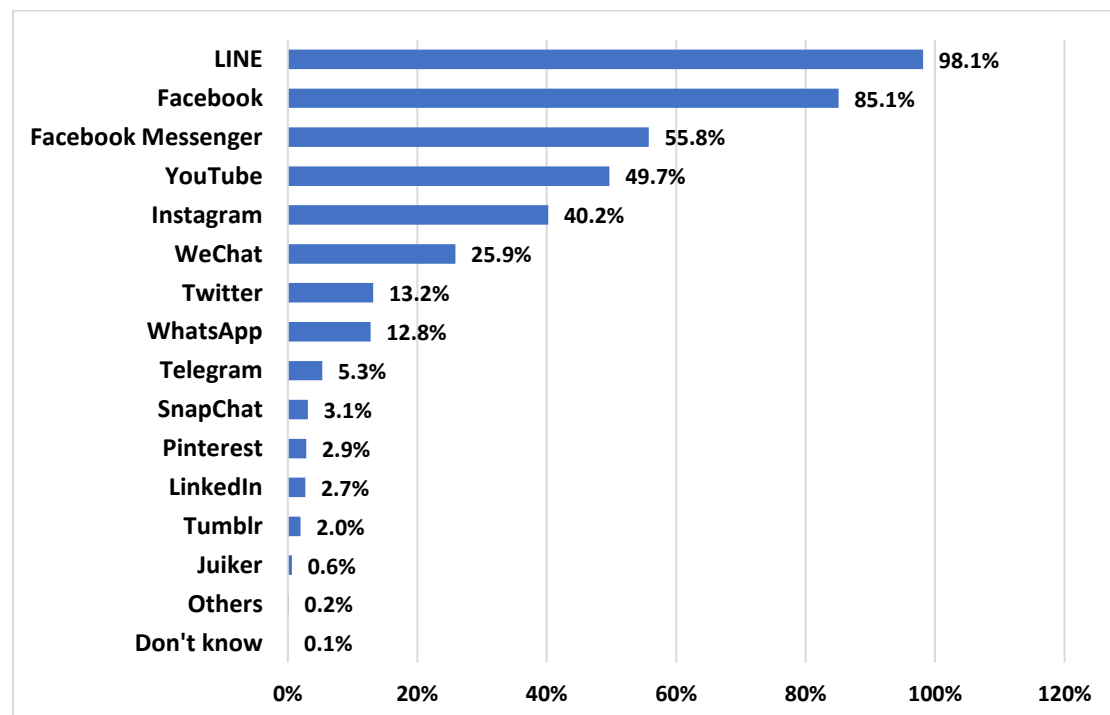
real name, and the percentage rises with age. Those surveyed aged 16-25 have the lowest percentage (44.7%); while respondents aged 66 and over have the highest (85.4%). Besides, the percentage of those surveyed with a combination of both decreases with age. Interviewees aged 16-25 have the highest rate (39.5%); while those aged 66 and over have the lowest (8%).

When analyzed by marital status, the majority of interviewees regardless of marital status use their real name. Among them, married respondents have the highest share (71.1%); while those unmarried have the lowest (48.2%). In addition, those unmarried interviewees (35.5%) have a significantly higher proportion to use a combination of both than those married (18%) and those widowed/separated (16.9%).

Active Social Media or Instant Messaging App Accounts Q33

1. Overall analysis

Up to 98.1% of those surveyed had at least one social media or instant messenger account, and LINE was the most common app (98.1%), followed by Facebook (85.1%) and Facebook Messenger (55.8%) (See Figure 13).



Base: N=908, multiple answers allowed (Those who have any social media or instant messenger accounts)

Figure 13 Which Social Media or Instant Messenger Account Do you Have That Are Still in Use

2. Comparative analysis

(1) Analysis on regional differences

According to the cross analysis, LINE is the most popular social media or instant messenger account in use for those surveyed from all areas, with rates all greater than 95%. And, in Taichung, Changhua, and Nantou and Yilan, Hualien, and Taitung, the rates were as high as 100%. Active Facebook users accounted for more than 80% in all areas except in Taipei City, New Taipei City, and Keelung, where the proportion was 76.5%. Among all areas, “YouTube” account owners (64.6%) outnumbered those with “Facebook Messenger” accounts (56.5%) only in Yilan, Hualien, and Taitung.

(2) Analysis on basic differences

When analyzed by gender, a larger proportion of both men (98.6%) and women (97.7%) have a LINE account than those with any other account. Also, more than 80% of both genders have an active Facebook account.

When analyzed by age, LINE was the most common social media or instant messenger for respondents of all ages, with rates all greater than 95%. Furthermore, the proportion to use Facebook, Facebook Messenger, Instagram, and YouTube decreased with age.

When analyzed by marital status, LINE was the predominant social media or instant messenger for respondents regardless of marital status, with rates all greater than 95%. Among them, those widowed/separated (98.7%) and those married (98.8%) have similar percentages; while those single have a smaller percentage (97.1%). Further, a larger percentage of those unmarried used other social media or instant messengers in addition to LINE than those married or those widowed/separated.

How much time do you spend on average on social media per week Q35

1. Overall analysis

Those surveyed spend on average a total of 17.1 hours browsing/reading/pressing like/posting posts on social media (e.g. Facebook, LINE, Instagram) per week. (N = 907, those who answered they have any social media or instant messenger accounts)

2. Comparative analysis

(1) Analysis on regional differences

When analyzed by area, interviewees from Yilan, Hualien, and Taitung spend on average the most time, 24.06 hours, browsing/reading/pressing like/posing posts on social media per week; while those from Taipei City, New Taipei City, and Keelung

spend the least, 12.65 hours, on social media (See Table 13).

Table 13 How Much Time Do You Spend on Average on Social Media per Week (by Area)

Unit: Hour

Area	Average Number of Hours
Taipei City, New Taipei City, Keelung	12.65
Taoyuan, Hsinchu, Miaoli	15.95
Taichung, Changhua, Nantou	16.83
Yunlin, Chiayi, Tainan	23.23
Kaohsiung, Pingtung, Penghu	17.87
Yilan, Hualien, Taitung	24.06
Total Average	17.10

Source: Results from this research

(2) Analysis on basic differences

When analyzed by gender, men spend on average slightly more time (17.62 hours) on browsing/reading/pressing like/posing posts on social media per week than women (16.59 hours).

When analyzed by age, the average time spent on social media per week by those surveyed decreases with age. Interviewees aged 16-25 spend the most time, 20.9 hours, on social media; while those aged 66 and over spend the least, 9.52 hours.

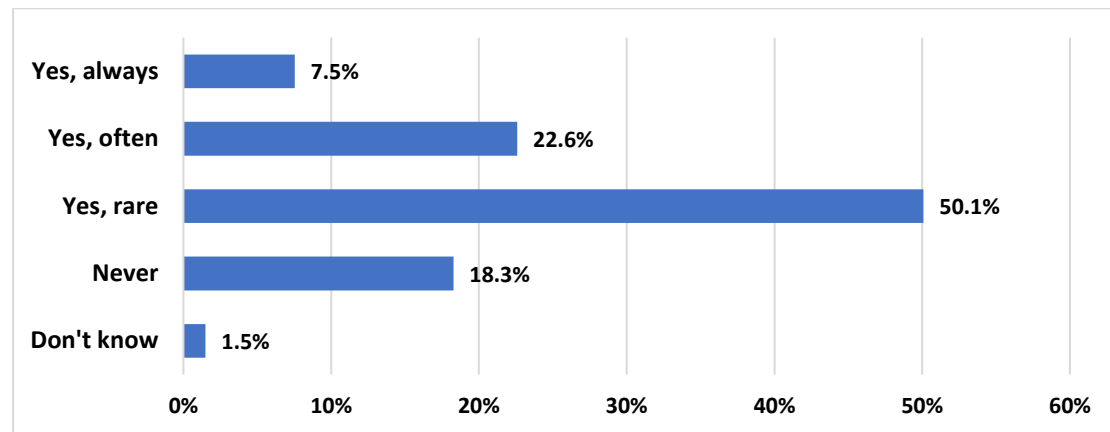
When analyzed by marital status, unmarried interviewees (20.4 hours) spend on average significantly more time on social media per week than those married (15.03 hours) and those widowed/separated (16.03 hours).

Content they found inappropriate or offensive on social media Q37 Q38

1. Overall analysis

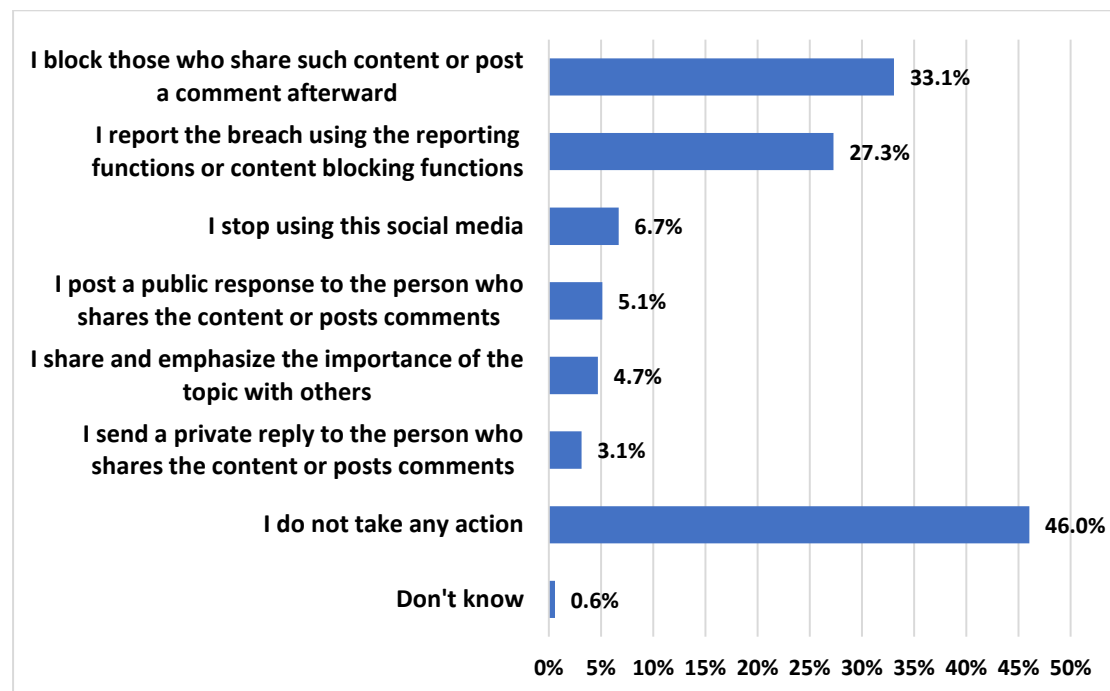
During the past 12 months, more than 80% (80.2%) of those surveyed indicated they had viewed content they found inappropriate or offensive on social media (including “Always,” “Often” and “Rare” answers), and only 18.3% said they hadn’t seen any (See Figure 14). As for the actions after they saw content they found inappropriate, the largest proportion of those surveyed (46%) did not take any action, followed by those (33.1%) blocking people for sharing or publishing content they found inappropriate or offensive, and those reporting through the report or block function (See

Figure 15).



Base: N=908, single-choice (Those who have any social media or instant messenger accounts)

Figure 14 Did You See Any Content You Found Inappropriate or Offensive in the Past 12 Months



Base: N=728, multiple choices allowed (Those who watched content they found inappropriate or offensive on social media)

Figure 15 Which Action Did You Take after Seeing Content You Found Inappropriate or Offensive

2. Comparative analysis

(1) Analysis on regional differences

The chi-square test suggests that whether one saw any content one found inappropriate or offensive in the past 12 months is significantly related to where one lives.

According to the cross analysis, a larger proportion of respondents from all areas

didn't see any content they found inappropriate or offensive in the past 12 months than those who did, with the highest proportion given by those from Kaohsiung, Pingtung, Penghu (55.9%) and the lowest by those from Yunlin, Chiayi, Tainan (42.1%). A larger proportion of those surveyed didn't take any action after having seen something they found inappropriate or offensive, with the highest share given by those from Taipei City, New Taipei City, and Keelung (49.4%) and the lowest by those from Yilan, Hualien, and Taitung (42.1%), except those from Taoyuan, Hsinchu, and Miaoli, where those blocking people for sharing or publishing content they found inappropriate or offensive (39.4%) and those taking no action (39.9%) accounted for similar proportions.

(2) Analysis on basic differences

The chi-square test suggests that whether one saw any content one found inappropriate or offensive in the past 12 months is significantly related to age.

When analyzed by gender, a larger proportion of both genders (both 50.1%) rarely saw content they found inappropriate or offensive on social media in the past 12 months, but a higher proportion of men replied "Yes, always" (9.3%) and "Yes, often" (24%) compared women (5.8% and 21.2% respectively); while a larger percentage of women (20.5%) replied "Never" than men (16%). After seeing content one found inappropriate or offensive, a larger proportion of both genders didn't take any action, with a higher proportion among women (46.4%) than men (45.7%).

When analyzed by age, those who rarely saw content they found inappropriate or offensive in the past 12 months made up the bulk of respondents of all ages, with the highest proportion given by those aged 16 -25 (58.3%) and the lowest by those aged 66 and over (36.5%). After seeing content one found inappropriate or offensive, a larger proportion of respondents of all ages didn't take any action compared to those who did, with the highest proportion given by those aged 66 and over (59.4%). The proportion decreased with age, except those aged 16-25, where those reporting through report or block function accounted for the largest share (45.8%).

When analyzed by marital status, those who rarely saw content they found inappropriate or offensive in the past 12 months made up the bulk of respondents regardless of marital status, with the highest proportion given by those single (53.7%) and the lowest by those married (47.6%). After seeing content one found inappropriate or offensive, a larger proportion of those surveyed didn't take any action regardless of marital status, with the highest proportion of those widowed/separated (56.8%) and the

lowest among those single (39.5%).

(3) Analysis on differences in social and economic status

The chi-square test suggests that whether one saw any content one found inappropriate or offensive in the past 12 months is significantly related to average monthly individual income.

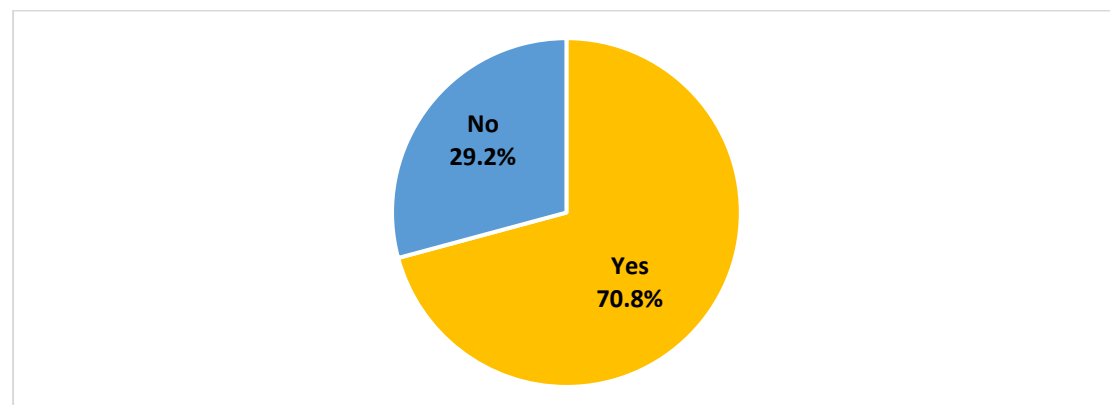
When analyzed by education level, “Yes, rarely” was given by the largest part of respondents of all education levels, with the highest percentage given by bachelor’s degree holders (54.4%) and the lowest by those with junior high education (41.5%), except those with elementary education and lower, where “Never” was given most (44.6%). In addition, “Yes, always” was given by a significantly larger proportion of master’s and higher degree holders (17.8%) than those of other education levels.

When analyzed by average monthly income, “Yes, rarely” was given by the largest proportion of respondents of all incomes, with the highest proportion given by those who earned NT20,000-29,999 (54.7%) and the lowest by those who earned NT10,000-19,999 (44.1%), except those who earned NT50,000-59,999, where those who often did make up the largest share (35.5%).

Sharing article links on social media Q42 Q43

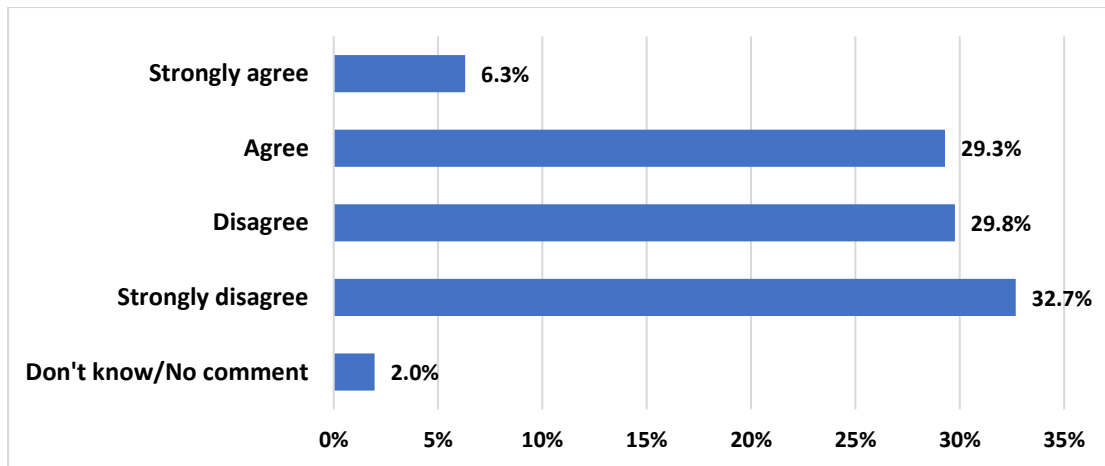
1. Overall analysis

More than 70% (70.8% to be specific) of those surveyed agreed that they had shared article links on social media (such as Facebook, LINE, Instagram, etc.) (See Figure 16). Among them, 35.6% agreed that they often share article links on social media without reading through the whole article (including the responses “Strongly agree” and “Agree” hereinafter); while 62.4% disagreed (including “Strongly disagreed” and “Disagreed” hereinafter) (See Figure 17).



Base: N=908, single-choice (Those who have any social media or instant messenger accounts)

Figure 16 Have You Shared Article Links on Social Media



Base: N=643, single-choice (Those who shared article links on social media)

Figure 17 Do You Often Share Article Links on Social Media without Reading through the Whole Article

2. Comparative analysis

(1) Analysis on regional differences

The chi-square test suggests that whether one shares article links on social media and shared them without reading through the whole articles is significantly related to where one lives.

The cross analysis suggests that more than 70% of respondents from all areas shared article links on social media, with the highest proportion given by those from Kaohsiung, Pingtung, and Penghu (80.3%), except those from Taipei City, New Taipei City, and Keelung (57.6%) and Taichung, Changhua, and Nantou (66.7%). And, a larger percentage of those from all areas disagreed that they often share article links on social media without reading through the whole articles than those who agreed, with the highest proportion given by those from Yilan, Hualien, and Taitung (45%) and the lowest by those from Taoyuan, Hsinchu, and Miaoli (22.5%).

(2) Analysis on basic differences

The chi-square test suggests that whether one shared article links on social media is significantly related to age and marital status.

When analyzed by gender, a larger proportion of both genders (67.2% of men and 74.3% of women) share article links on social media, but those who didn't share article links on social media without reading through the whole article accounted for a larger share than those who did, with men a slightly lower percentage (34.7%) than women (36.4%).

When analyzed by age, a larger proportion of those surveyed of all ages shared

links to articles on social media, with the highest proportion recorded among those aged 16-25 (85.4%) and the lowest among those aged 56-65 (57.6%), except those aged 66 and over, where those who didn't accounted for the largest share (59.1%). And, a larger percentage of those of all ages disagreed that they often share article links on social media without reading through the whole article than those who agreed, with the highest proportion given by those aged 56-65 (67.2%) and the lowest given by those aged 66 and over (52.8%).

When analyzed by marital status, a larger proportion of those surveyed regardless of marital status shared links to articles on social media, with the highest proportion reported among those unmarried (80.7%) and the lowest among those widowed/separated (59.9%). Also, a larger percentage of those regardless of marital status disagreed that they often share article links on social media without reading through the whole articles than those who agreed, with the highest rate reported among those married (64.6%) and the lowest among those widowed/separated (60.7%).

(3) Analysis on differences in social and economic status

The chi-square test suggests that whether one shares links to articles on social media is significantly related to residence, education level and profession, and that whether one shared article links on social media without reading through the whole articles is significantly related to education level.

When analyzed by residence, a larger proportion of house owners (68.5%) and renters (80.5%) shared links to articles on social media, with a higher rate among the latter.

When analyzed by education level, a larger proportion of respondents of all education levels shared links to articles on social media than those who didn't, with the highest proportion reported in bachelor's degree holders (81%) and the lowest among those with senior high and higher vocational education (66.6%), except those with elementary education and lower (60.5%) and those with junior high education (53.9%), most of whom didn't. Also, a larger percentage of those of all education levels disagreed that they often share links to articles on social media without reading through the whole article than those who agreed, with the highest rate reported in master's and higher degree holders (74.3%) and the lowest among those with junior high education (54.4%), except those with elementary education or lower, most of whom agreed (63.1%).

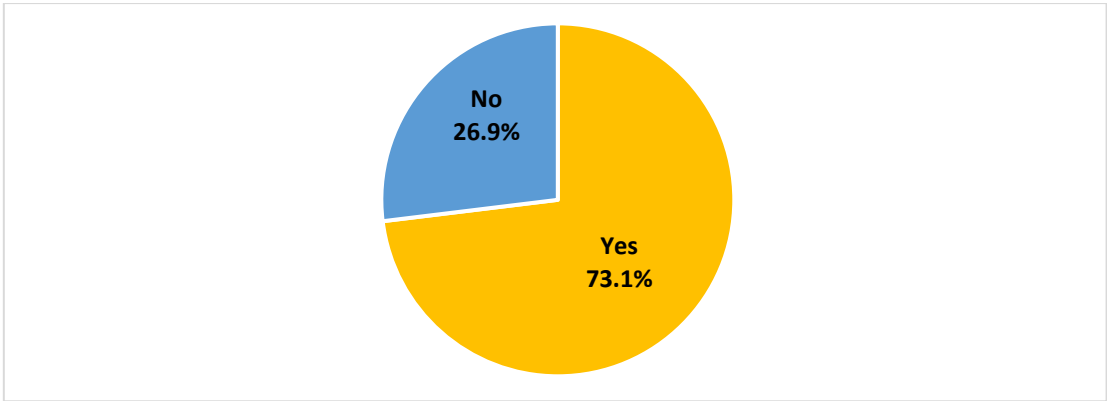
When analyzed by profession, a larger proportion of respondents of all professions

shared links to articles on social media than those who didn't, with the highest proportion given of those in the art/entertainment and recreation industries (93.5%) and the lowest of those in the publication, audio-video production, mass communication, and information and communications industries (55.1%), except retirees, most of whom agreed (59.9%).

Authenticity of information from social media Q44 Q45

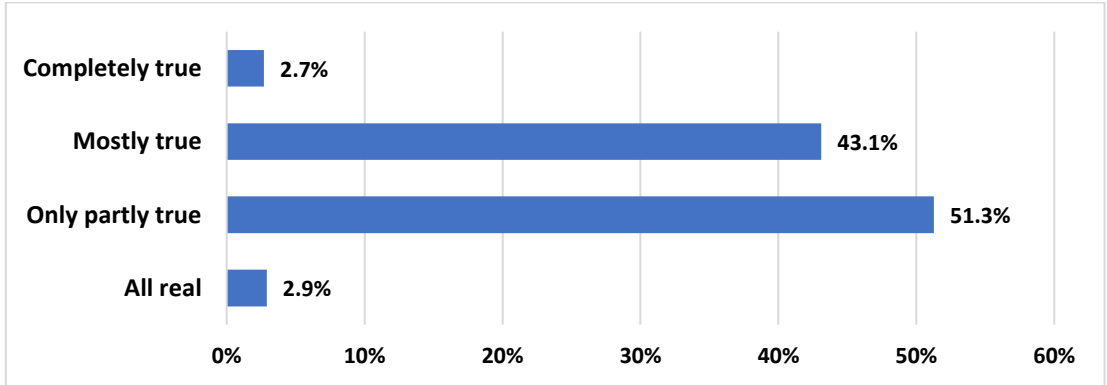
1. Overall analysis

Over 70% (73.1%) of respondents said they had thought about the authenticity of the information published on social media websites or apps (such as Facebook, LINE, Instagram, etc.) when using these media and 26.9% said they hadn't (See Figure 18). Among those who replied positively, those who thought it was partly true accounted for the largest part (51.3%), and 43.1% thought it was mostly true, and 2.7% thought it was all real (See Figure 19).



Base: N=908, single-choice (Those who have any social media or instant messenger accounts)

Figure 18 Have You Ever Thought about the Authenticity of the Information Published on Social Media Websites or Apps When Using these Media



Base: N = 663, single-choice (Those who thought about the authenticity of the information published on social media websites or apps)

Figure 19 How True Do You Think Is the Information Published on these Websites or Apps

2. Comparative analysis

(1) Analysis on regional differences

The chi-square test suggests that whether one thought about the authenticity of the information published on social media websites or apps when using these media is significantly related to area where one lives.

The cross analysis suggests that a larger share of those from all areas thought about the authenticity of the information published on social media or apps when using these media than those who didn't, with the highest proportion reported among those from Yilan, Hualien, and Taitung (83.3%) and the lowest among those from Taipei City, New Taipei City, and Keelung (61.6%). Among those who thought about the authenticity of the information, a larger proportion of respondents from all areas thought it was partly real compared to those who thought otherwise, with the highest percentage reported among those from Taoyuan, Hsinchu, and Miaoli (60.8%) and the lowest among those from Yunlin, Chiayi, and Tainan, and Yilan, Hualien, and Taitung (55.1% for both), except those from Taipei City, New Taipei City, and Keelung, and Kaohsiung, Pingtung, and Penghu, where the majority (50.8% for both) thought the information was mostly true.

(2) Analysis on basic differences

The chi-square test suggests that whether one thought about the authenticity of the information published on social media websites or apps when using these media is significantly related to age and marital status.

When analyzed by gender, most men (75%) and women (71.3%) thought about the authenticity of the information published on social media websites or apps when using these media. And among those who did, a majority of men (54.9%) and almost half of women (47.6%) thought the information was partly true.

When analyzed by age, most of the respondents of all ages have thought about the authenticity of the information published on social media websites and the proportion decreased with age, with the highest percentage reported among those aged 16-25 (82.7%) and the lowest among those aged 56-65 (59.1%), except those aged 66 and over, where those who thought about it (50.3%) and those who didn't (49.7%) accounted for similar rates. Among those who thought about the authenticity of the information, a larger proportion of respondents of all ages thought it was partly real than those who thought otherwise, with the highest percentage reported among those

aged 66 and over (56.3%) and the lowest among those aged 46-55 (50.1%), except those aged 36-45, where the majority (47.5%) thought the information was mostly real.

When analyzed by marital status, those who have thought about the authenticity of the information published on social media websites made up a larger proportion among all interviewees regardless of marital status, with the highest percentage (79.2%) reported among those unmarried and the lowest (65.4%) among those widowed/separated. Among those who thought about the authenticity of the information, “It is partly true” was most given by respondents regardless of marital status, with the highest percentage reported among those unmarried (53.2%) and the lowest among those married (49%), except the widowed/separated, where “It is mostly true” was given most (50.4%).

(3) Analysis on differences in social and economic status

The chi-square test suggests that whether one thought about the authenticity of the information published on social media websites or apps when using these media is significantly related to education level and profession.

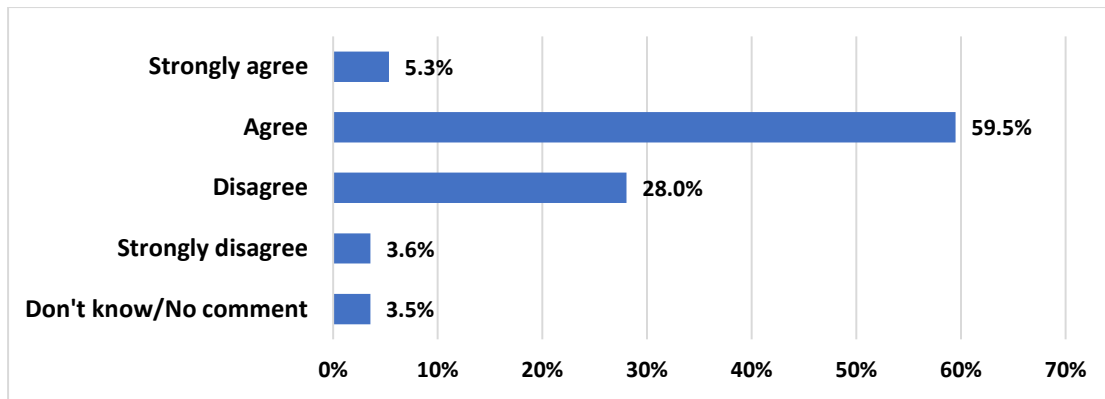
When analyzed by education level, most of the respondents of all education levels thought about the authenticity of the information published on social media websites and the percentage increased with education level, with the lowest percentage reported among those with junior high education (58.7%) and the highest in master’s and higher degree holders (86.1%), except those with elementary education or lower, where those who didn’t (68.6%) accounted for the bulk.

When analyzed by profession, those who have thought about the authenticity of the information published on social media websites make up a larger proportion of all professions, with the highest percentage among the professional/scientific and technical services (95.8%) and the lowest among those retired (54%).

Believing in what one reads or sees on social media Q46

1. Overall analysis

Over 60% (64.8% to be specific) of the interviewees agreed (including “Strongly agree” and “Agree”) that they tended to believe what they read or saw on social media (such as Facebook, LINE, Instagram, etc.), and 31.6% disagreed (including “Strongly disagree” and “Disagree”) (See Figure 20).



Base: N=908, single-choice (Those who have any social media or instant messenger accounts)

Figure 20 I Tend to Believe What I Read or See on Social Media

2. Comparative analysis

(1) Analysis on regional differences

The chi-square test suggests that whether one tends to believe what one reads or sees on social media is significantly related to area.

The cross analysis suggests that those who tend to believe what they read or see on social media make up the largest percentage of interviewees from all areas. Interviewees from Taipei City, New Taipei City, and Keelung reported the highest percentage (73.5%); while those from Kaohsiung, Pingtung, and Penghu reported the lowest (50%).

(2) Analysis on basic differences

When analyzed by gender, most men (65%) and women (64.7%) tend to believe what they read and see on social media.

When analyzed by age, more than 60% of respondents of all ages tend to believe what they read and see on social media compared to those who don't, with the highest proportion reported among those aged 56 -65 (69.1%) and the lowest among those aged 66 and over (61.3%).

When analyzed by marital status, those who tend to believe what they read and see on social media made up the largest proportion of interviewees regardless of marital status, with the highest percentage (71.9%) reported among those widowed/separated and the lowest (64.1%) among those married.

(3) Analysis on differences in social and economic status

The chi-square test suggests that whether one tends to believe what one reads or sees on social media is significantly related to education level.

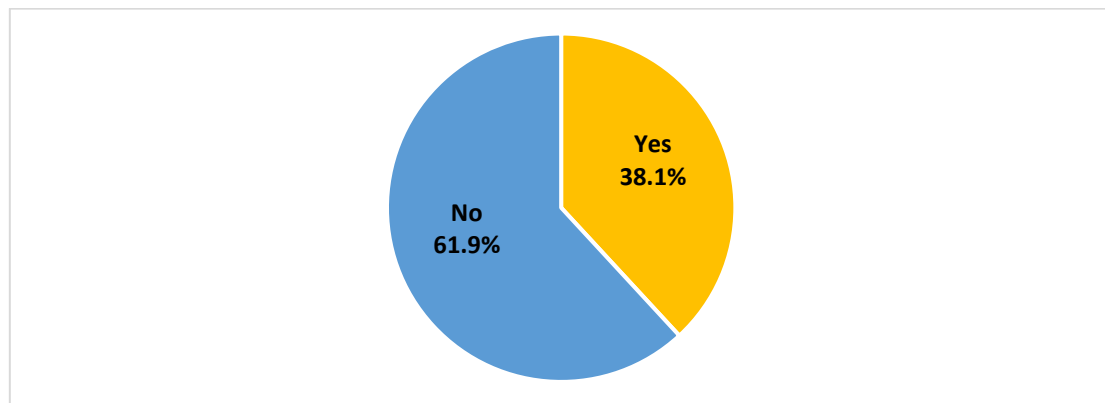
When analyzed by education level, a larger proportion of respondents of all

education levels tend to believe what they read and see on social media than those who don't, with the highest proportion seen among those with junior college education (75.4%) and the lowest among those with elementary education and lower (61.1%), except master's and higher degree holders, where those who didn't make up the bulk (49.2%).

Sharing opinions on social media Q48 Q49

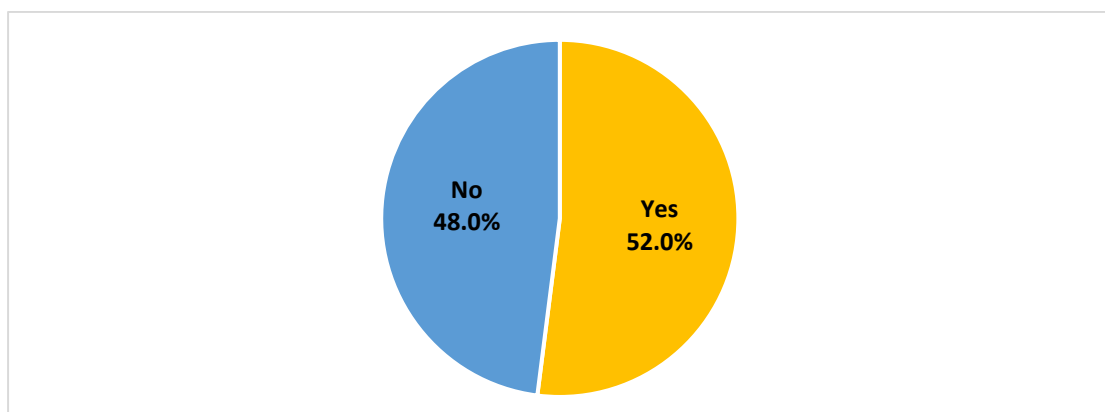
1. Overall analysis

Nearly 40% (38.1%) of those surveyed share opinions with people they don't know on social media (such as Facebook, LINE, Instagram, etc.), and 61.9% don't (See Figure 21). When there was a choice, 52% will share opinions with their real name (See Figure 22).



Base: N=908, single-choice (Those who have any social media or instant messenger accounts)

Figure 21 Have You Ever Shared Opinions with People You Don't Know on Social Media



Base: N=908, single-choice (Those who have any social media or instant messenger accounts)

Figure 22 Will You Share Opinions with Your Real Name When There Is a Choice

2. Comparative analysis

(1) Analysis on regional differences

The chi-square test suggests that whether one shares opinions with people they don't know on social media and whether they will share opinions with their real name are significantly related to area.

The cross analysis suggests that most of the interviewees from all areas share opinions with people they don't know on social media, with the highest rate reported among those from Taipei City, New Taipei City, and Keelung (70.1%) and the lowest among those from Kaohsiung, Pingtung, and Penghu (48%). A larger proportion of those from Taipei City, New Taipei City and Keelung (54.9%), Taichung, Changhua, and Nantou (50.5%), Kaohsiung, Pingtung, and Penghu (52.6%) won't share opinions with their real name compared to those who will when there is a choice; a larger proportion of those from Taoyuan, Hsinchu, and Miaoli (54.1%), Yunlin, Chiayi, and Tainan (63.1%), and Yilan, Hualien, and Taitung (78.9%) will than those who won't.

(2) Analysis on basic differences

The chi-square test suggests that whether one shares opinions with people they don't know on social media is significantly related to gender, age and marital status, and whether they share opinions with their real name when there is a choice is significantly related to gender.

When analyzed by area, most men (57.5%) and women (66%) don't share opinions with people they don't know on social media. A larger proportion of men (54.3%) will share opinions with their real name when there is a choice compared to women; while "No" (50.2%) and "Yes" (49.8%) are given by similar percentages of women.

When analyzed by age, a larger proportion of respondents of all ages didn't share opinions with people they didn't know on social media than those who did, with the highest proportion seen among those aged 66 and over (92.5%) and the lowest among those aged 36-45 (55.8%), except those aged 16-25 (52.9%) and 26-35 (52.3%), where those who did made up the bulk. A majority of respondents of all ages wouldn't share opinions with their real name when there was a choice, with the highest proportion seen among those aged 46-55 (58.1%) and the lowest among those aged 66 and over (51.6%), except those aged 16-25 and 36-45, where those who would accounted for the largest share (54.2% and 54.3% respectively).

When analyzed by marital status, a larger proportion of those married (70.3%) and

widowed/separated (64.1%) didn't share opinions with people they didn't know on social media than those who did, except those single, where those who did (49.3%) and those who didn't (50.7%) made up similar percentages. A larger percentage of those regardless of marital status would share opinions with their real name when there was a choice than those who wouldn't, with the highest proportion seen among the widowed/separated (59.7%) and the lowest among those unmarried (50.6%).

(3) Analysis on differences in social and economic status

The chi-square test suggests that whether one shares opinions with people they don't know on social media is significantly related to residence, education level, and profession, and that whether they would share opinions with their real name when there is a choice is significantly related to profession and average monthly individual income.

When analyzed by residence, a larger proportion of house owners (64.6%) and renters (52.8%) don't share opinions with people they don't know on social media compared to those who do, with a higher proportion in house owners than in renters.

When analyzed by education level, most of those surveyed of all education levels didn't share opinions with people they didn't know on social media, with the highest rate seen among those with elementary education and lower (94.8%) and the lowest in bachelor's degree holders (53.8%).

When analyzed by profession, a larger share of respondents of all professions don't share opinions with people they don't know on social media compared to those who did, with the highest percentage among those retirees (88.7%) and the lowest among students (50.2%), except those in the agricultural/forestry/fishery/husbandry industries (52.2%), transportation and warehousing industries (51.4%), publication, audio-video production, mass communication, and information and communications industries (58.6%), finance and insurance industries (64.3%), art/entertainment and recreation industries (60%), and job seekers and those waiting to return to work with no pay (50.4%), where those who do make up a larger proportion. The majority of interviewees from all professions don't share opinions with their real name, with the highest rate among those in the healthcare and social work services (79%) and the lowest among housekeepers (52.6%), except those in the agricultural/forestry/fishery/ husbandry industries (62.1%), manufacturing industry (55.7%), transportation and warehousing industries (66.3%), hospitality industry (62.6%), publication, audio-video production, mass communication, and information and communications industries (64.1%),

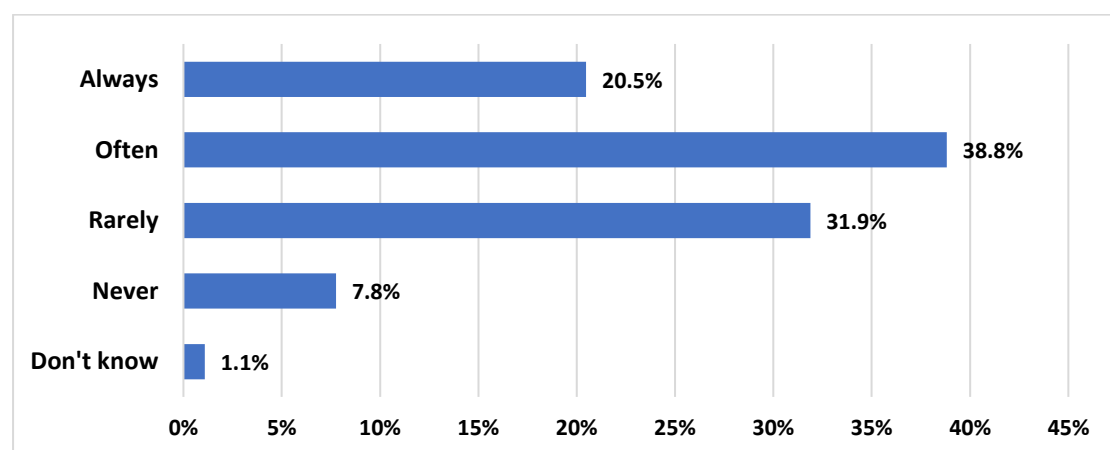
professional/scientific and technical services (54.4%), public administration and national defense/mandatory social security industries (57.8%), students (58.7%), where those who don't accounted for a larger proportion, and construction engineering industry, where those who do and those who don't constituted the same share (50%).

When analyzed by average monthly individual income, most interviewees of all incomes would share opinions with their real name when there is a choice, with the highest rate among those who earned NT10,000-19,999 (59.3%) and the lowest among those without no income (50.6%), except those who earned less than NT10,000, where those who wouldn't made up the bulk (65.3%), and those who earned NT20,000-NT29,999, where those who would (49.8%) and those who wouldn't (50.2%) constituted similar rates.

Considering privacy or safety when posting photographs or tagging others in photographs Q50 Q51

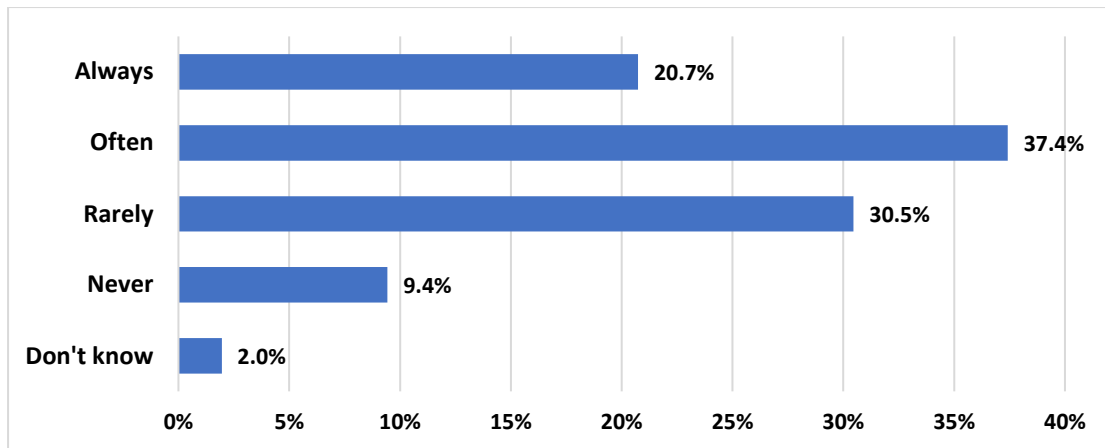
1. Overall analysis

Around 60% (59.3%) of the interviewees considered (including “Always” and “Often” answers hereinafter) privacy or safety when they posted photographs; while 39.7% didn't (including “Rarely” and “Never” answers hereinafter) (See Figure 23). Likewise, almost 60% (58.1%) considered privacy or safety when tagging others in photographs; while 39.9% didn't (See Figure 24).



Base: N=908, single-choice (Those who have any social media or instant messenger accounts)

Figure 23 How Often Do You Consider Privacy or Safety When Posting Photographs



Base: N=908, single-choice (Those who have any social media or instant messenger accounts)

Figure 24 How Often Do You Consider Privacy or Safety When Tagging People in Photographs

2. Comparative analysis

(1) Analysis on regional differences

The chi-square test suggests that whether one considered privacy or safety when posting photographs or tagging friends in photographs is significantly related to the area where one lives.

According to the cross analysis, it is found that a larger share of respondents from all areas consider privacy or safety when posting photographs, with the highest proportion among those from Kaohsiung, Pingtung, and Penghu (72.7%) and lowest among those from Taichung, Changhua, and Nantou (58.2%), except those from Taipei City, New Taipei City and Keelung, where those who don't constituted a larger part (53.2%). Likewise, those who consider privacy or safety when tagging others in photographs make up a larger share of respondents from all areas, with the highest proportion reported among those from Kaohsiung, Pingtung, and Penghu (70.6%) and the lowest among those from Taoyuan, Hsinchu, and Miaoli (60.2%), except those from Taipei City, New Taipei City and Keelung, where those who don't represent the largest part (53.9%).

(2) Analysis on basic differences

The chi-square test suggests that whether one considered privacy or safety when posting photographs or tagging friends in photographs is significantly related to marital status.

When analyzed by gender, most men (60.1%) and women (58.5%) consider privacy or safety when posting photographs, and similarly, a majority of men and women consider privacy or safety when tagging others in photographs (57.8% and

58.6% respectively).

When analyzed by age, a larger share of respondents of all ages consider privacy or safety when posting photographs than those who don't, with the highest rate seen among those aged 16-25 (65.2%) and the lowest among those aged 56-65 (56.9%), except those aged 66 and over, where those who don't accounted for the largest share (62.6%). A majority of those surveyed of all ages consider privacy or safety when tagging others in photographs, with the highest rate seen among those aged 36-45 (70.2%) and the lowest among those aged 46-55 (57.2%), except those aged 66 and over, where those who didn't accounted for the largest share (64.7%).

When analyzed by marital status, a larger proportion of those surveyed regardless of marital status considered privacy or safety when posting photographs than those who don't, with the highest proportion among those unmarried (63.2%) and the lowest among those widowed/separated (53%). A majority of those surveyed regardless of marital status consider privacy or safety when tagging others in photographs, with the highest proportion seen among those unmarried (61.2%) and the lowest among those widowed/separated (51.7%).

(3) Analysis on differences in social and economic status

The chi-square test suggests that whether one considers privacy or safety when posting photographs is significantly related to education level and average monthly individual income, and that whether one considers privacy or safety when tagging others in photographs is significantly related to education level.

When analyzed by education level, a larger share of respondents of all education levels consider privacy or safety when posting photographs than those who don't, with the highest proportion seen among those with master's and higher degree level of education (77.1%) and the lowest among those with junior high education (50.3%), except those with elementary education and lower, where those who don't accounted for the largest share (56.9%). A majority of those surveyed of all education levels consider privacy or safety when tagging others in photographs, with the highest proportion seen among those with master's and higher degree level of education (76.8%) and the lowest among those with senior high and higher vocational education (55.3%), except those with elementary education and lower (59.1%) and with junior high education (57.7%), where those who don't account for the largest share.

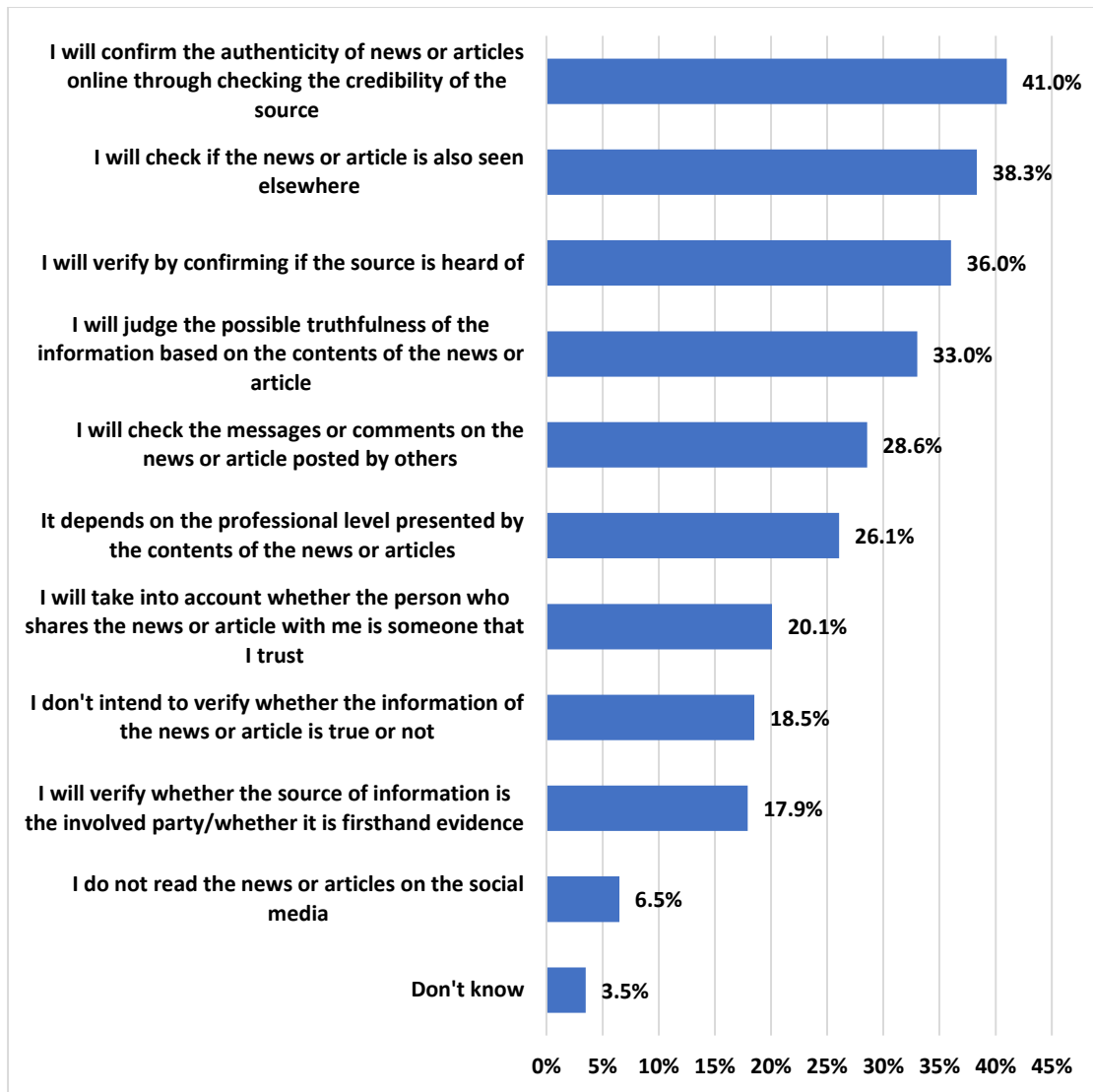
When analyzed by average monthly individual income, a larger share of

respondents of all incomes considered privacy or safety when posting photographs than those who didn't, with the highest proportion seen among those who earned NT50,000-NT59,999 (70.9%) and the lowest among those who earned NT10,000-19,999 (51.4%), except those who earned NT20,000-29,999, where those who didn't accounted for the largest share (49.9%).

Actions taken to verify the authenticity of information from news reports or articles Q55

1. Overall analysis

In respect to actions to verify the authenticity of information from news reports of articles, the largest proportion of respondents checked if it came from a credible institute (41%), followed by those who checked whether the information from news reports/articles also appeared elsewhere (38.3%), and those who confirmed whether it came from an institute they had heard of (36%) (See Figure 25).



Base: N=908, multiple answers allowed (Those who have any social media or instant messenger accounts)

Figure 25 Which Actions Do You Take to Verify the Authenticity of Information from News Report or Articles

2. Comparative analysis

(1) Analysis on regional differences

The cross analysis suggests that most of respondents from all areas verified the authenticity of information from news reports or articles by checking if it came from an institute they found credible, with the highest proportion seen among those from Kaohsiung, Pingtung, and Penghu (50.8%) and the lowest among those from Taipei City, New Taipei City, and Keelung (34%), except those from Yunlin, Chiayi, and Tainan and Yilan, Hualien, and Taitung, most of whom verified the information by checking if the information came from an institute they had heard of (54.4% and 49.8% respectively).

(2) Analysis on basic differences

When analyzed by gender, the bulk of both genders (44.6% of men and 37.5% of women) verified the authenticity of information from news reports or articles by checking if it came from an institute they thought credible.

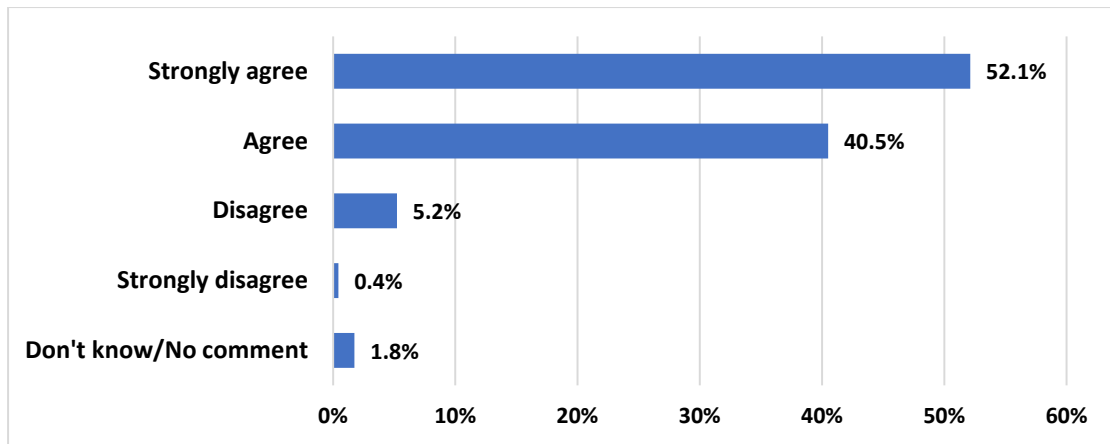
When analyzed by age, a larger proportion of those surveyed of all ages verified the authenticity of information from news reports of articles by confirming whether it came from an institute they found credible, with the highest proportion seen among those aged 16-25 (52.8%) and the lowest among those aged 56-65 (28.7%), except those aged 36-45 and 46-55, most of whom verified information by confirming it also appeared elsewhere (47.6% and 42.6% respectively), and those aged 66 and over, most of whom didn't check the authenticity of information from news reports (54.1%). In addition, those aged 16-25 constitute the largest proportion in all actions taken to verify the authenticity of information, an indication that the younger generation pays more attention to the authenticity of information.

When analyzed by marital status, most of the unmarried respondents and those married verified the authenticity of information from news reports or articles by checking if it came from an institute they found credible, except the widowed/separated, most of whom verified the information by checking if the information came from an institute they have heard of (33.3%). In addition, those unmarried constituted the largest proportion in all actions taken to verify the authenticity of information.

Protecting internet users from inappropriate or offensive content Q56

1. Overall analysis

The survey shows that 92.6% of respondents said they agreed (including "Strongly agree" and "agree" answers hereinafter) that Internet users must be protected from inappropriate or offensive content; while 5.6% disagreed (including "Strongly disagree" and "disagree" hereinafter) (See Figure 26).



Base: N=932, single-choice (Those who was online)

Figure 26 Do You Agree that Internet Users Must Be Protected from Inappropriate or Offensive Content

2. Comparative analysis

(1) Analysis on regional differences

The chi-square test suggests that whether one agrees internet users must be protected from inappropriate or offensive content is significantly related to area.

The cross analysis suggests that more than 90% of respondents from all areas agreed internet users must be protected from inappropriate or offensive content, with the highest proportion among Kaohsiung, Pingtung, and Penghu (95.1%), except those from Taipei City, New Taipei City, and Keelung and Taoyuan, Hsinchu, and Miaoli, where the rates were 89.1% and 89.6% respectively.

(2) Analysis on basic differences

The chi-square test suggests that whether one agreed internet users must be protected from inappropriate or offensive content is significantly related to gender.

When analyzed by gender, the bulk of both men (89.9%) and women (95.2%) agreed internet users must be protected from inappropriate or offensive content.

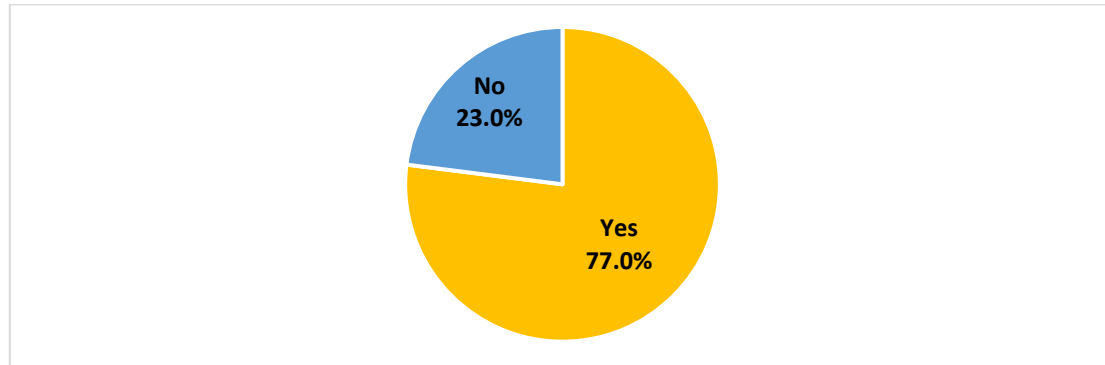
When analyzed by age, more than 90% of respondents of all ages agreed internet users must be protected from inappropriate or offensive content, with the highest proportion reported among those aged 56-65 (95.3%), except those aged 66 and over (89.6%).

When analyzed by marital status, more than 90% of respondents regardless of marital status agreed internet users must be protected from inappropriate or offensive content, with the highest proportion reported among those widowed/separated (96.1%) and the lowest among those single (90.9%).

Awareness of reporting inappropriate content on social media Q57

1. Overall analysis

Up to 77% of the respondents were aware that people could report inappropriate content with the report button or mark on social media and only 23% weren't (See Figure 27).



Base: N=908, single-choice (Those who have any social media or instant messenger accounts)

Figure 27 Are You Aware That People Can Report Inappropriate Content with the Report Button or Mark on Social Media

2. Comparative analysis

(1) Analysis on regional differences

The cross analysis suggests that more than 75% of the interviewees were aware that people could report inappropriate content with the report button or mark on social media, with the highest rate reported among those from Yunlin, Chiayi, and Tainan (86.2%), except those from Taipei City, New Taipei City, and Keelung, where the proportion was 72.7%.

(2) Analysis on basic differences

The chi-square test suggests that whether one is aware that people could report inappropriate content with the report button or mark on social media is significantly related to age and marital status.

When analyzed by gender, the bulk of both men (78.6%) and women (75.5%) were aware that people could report inappropriate content with the report button or mark on social media.

When analyzed by age, a larger proportion of those surveyed of all ages were aware that people could report inappropriate content with the report button or mark on social media than those who weren't, with the highest proportion reported among those aged 16-25 (92.8%) and the lowest among those aged 56-65 (60.8%), except those aged 66 and over, where those who weren't was the largest share (62.1%).

When analyzed by marital status, a larger proportion of those surveyed regardless of marital status were aware that people could report inappropriate content with the report button or mark on social media than those who weren't, but the proportion among those unmarried (87.4%) was substantially higher than among those married (70.7%) and those widowed/separated (66.3%).

(3) Analysis on differences in social and economic status

The chi-square test suggests that whether one is aware that people could report inappropriate content with the report button or mark on social media is significantly related to residence and education level.

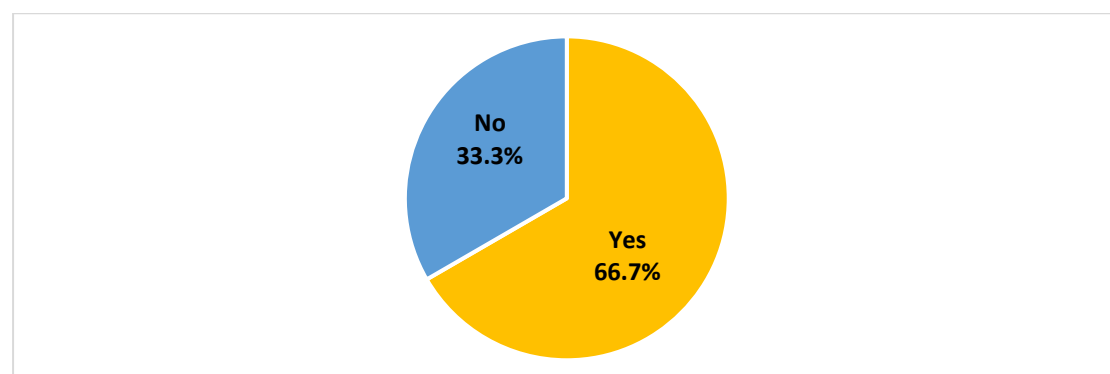
When analyzed by residence, the bulk of both house owners (73.6%) and renters (86.6%) were aware that people could report inappropriate content with the report button or mark on social media, with a much higher proportion among renters.

When analyzed by education level, a larger share of respondents of all education levels were aware that people could report inappropriate content with the report button or mark on social media than those who weren't, with the highest proportion among bachelor's degree holders (87.8%) and the lowest among those with junior high education (56.4%), except those with elementary education lower, where "No" answers accounted for the largest share (66.3%).

Reporting inappropriate content on social media Q58 Q59

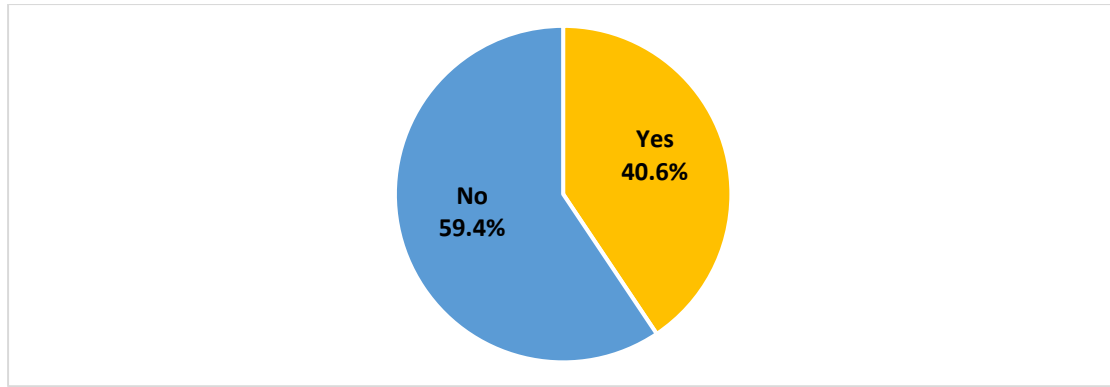
1. Overall analysis

More than 60% (66.7%) of those surveyed said they had seen content they found inappropriate on social media (See Figure 28), and only 40.6% of them had reported to social media (See Figure 29).



Base: N=908, single-choice (Those who have any social media or instant messenger accounts)

Figure 28 Have You Ever Seen Content You Found Inappropriate on Social Media



Base: N=605, single-choice (Those who saw content they found inappropriate on social media)

Figure 29 Have You Ever Reported Content You Found Inappropriate to Social Media

2. Comparative analysis

(1) Analysis on regional differences

The chi-square test suggests that whether one saw content one found inappropriate on social media is significantly related to the area where one lived.

The cross analysis suggests that most of the interviewees from all areas had seen content they found inappropriate on social media, with the highest rate (76.8%) reported among those from Yilan, Hualien, and Taitung and the lowest among those from Taipei City, New Taipei City, and Keelung (59.1%). And among them, a larger proportion of those didn't report it, with the highest proportion seen among those from Taichung, Changhua, and Nantou (62.4%) and the highest proportion among those from Yunlin, Chiayi, and Tainan (54.3%).

(2) Analysis on basic differences

The chi-square test suggests that whether one has seen any content one found inappropriate on social media is significantly related to gender, age and marital status, and that whether one reported content one finds inappropriate to social media is significantly related to age and marital status.

When analyzed by gender, a larger share of both men (70.6%) and women (62.9%) had seen content they found inappropriate on social media than those who had not, and among those who had, those who didn't report it to social media made up the bulk (56.4% and 62.6% respectively).

When analyzed by age, a larger proportion of those surveyed of all ages had seen content they found inappropriate on social media compared to those who hadn't, with the highest proportion reported among those aged 16-25 (75.9%) and the lowest among those aged 56-65 (58.5%), except those aged 66 and over, where those who hadn't

accounted for the largest share (50.4%). Among those who had seen content they found inappropriate, a larger proportion of interviewees of all ages hadn't reported it to social media, and the rate decreases with age, with only 10.6% among those aged 66 and over, except those aged 16-25, most of whom (64.3%) reported to social media.

When analyzed by marital status, a larger proportion of those surveyed regardless of marital status saw content they found inappropriate on social media than those who didn't, with the highest proportion reported among those unmarried (71.2%) and the lowest among those widowed/separated (60.9%). Among those who saw content they found inappropriate, a larger proportion of those married (70.3%) and those widowed/separated (59.8%) didn't report it to social media than those who did, except those single, 53.2% of whom reported to social media.

(3) Analysis on differences in social and economic status

The chi-square test suggests that whether one has seen content one finds inappropriate on social media is significantly related to education level and profession, and that whether one reports the content to social media is significantly related to residence, education level and profession.

When analyzed by residence, a larger proportion of house owners (63.1%) didn't report content they considered to be inappropriate to social media; while a larger proportion of renters (50.8%) did.

When analyzed by education level, a larger proportion of respondents of all education levels had seen content they found inappropriate on social media, with the highest proportion among master's and higher degree holders (83.1%) and the lowest among those with junior college education (63.5%), except those with elementary education or lower (59.7%) and those with junior high education (54%), where those who hadn't made up the bulk. Among those who had seen content they found inappropriate, a larger proportion of respondents of all education levels hadn't reported it to social media, with the highest proportion among those with elementary education and lower (90.3%) and the lowest among those with bachelor's degree (50.7%), except those with master's and higher degree level of education, where those who did made up the bulk (50.6%).

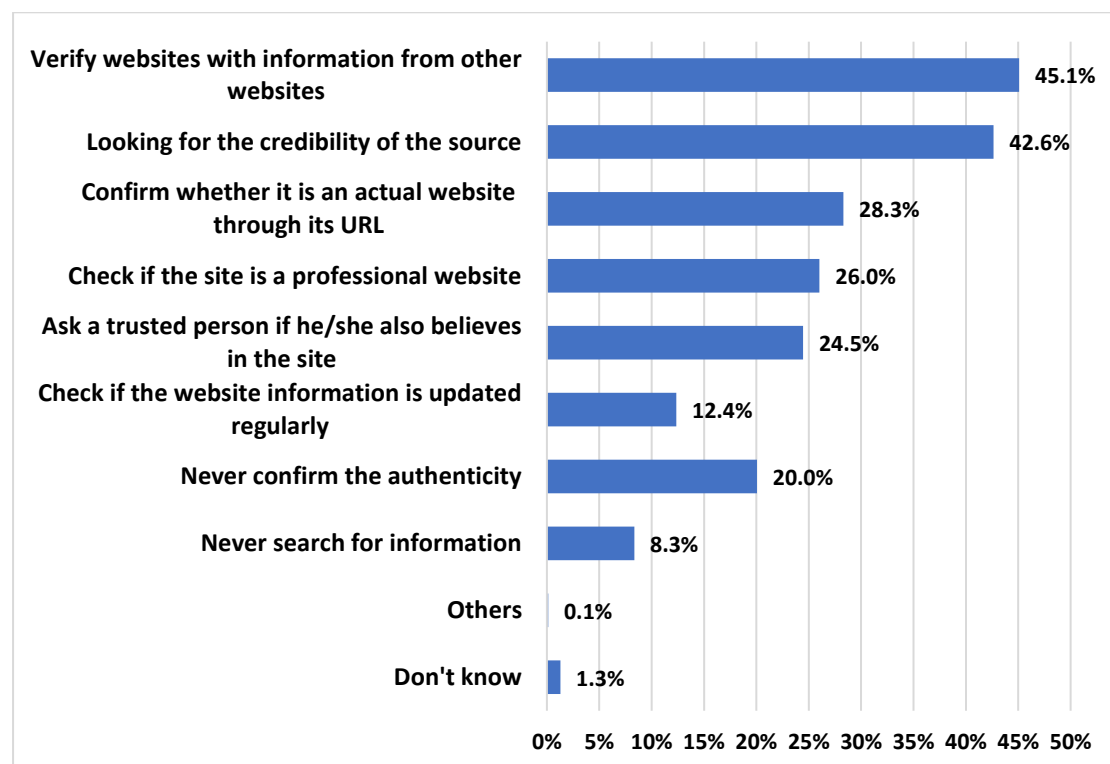
When analyzed by profession, the largest proportion of all those surveyed by profession had seen content they found inappropriate on social media than those who hadn't, with the highest proportion reported among job seekers and those waiting to

return to work with no pay (85.4%) and the lowest among those in the real estate industry (53.5%). Among those who had, the bulk of respondents of all professions hadn't reported it to social media, except those in the agricultural/forestry/fishery/husbandry industries (68.7%), publication, audio-video production, mass communication, and information and communications industries (78.6%), finance and insurance industries (50.9%), professional/scientific and technical services (62.1%), and students (75.1%), most of whom never reported it to social media.

Methods to Verify the Authenticity of Information from the Internet Q63

1. Overall analysis

Most of those surveyed verified the authenticity of the information from the internet by comparing it with information from other websites (45.1%), followed by those who looked for the credibility of the source (such as the name of the author and links to the original source of data) (42.6%), and those who checked whether it was an actual website through its URL (28.3%) (See Figure 30).



Base: N=932, multiple-choice (Those who was online)

Figure 30 How Do You Verify the Authenticity of Information from the Internet

2. Comparative analysis

(1) Analysis on regional differences

The cross analysis suggests that a majority of those surveyed from Taoyuan, Hsinchu, and Miaoli (54.1%), Yunlin, Chiayi, and Tainan (55.4%), and Yilan, Hualien, and Taitung (61.1%) verified the authenticity of information found online by comparing with information from other websites; while most of those from Taipei City, New Taipei City, and Keelung (34.2%), Taichung, Changhua, and Nantou (46%) and Kaohsiung, Pingtung, and Penghu (48.4%) did it by checking the credibility of the data source.

(2) Analysis on basic differences

When analyzed by sex, the majority of men (52.2%) verified the information found online by comparing the information from other websites compared to 38.3% of women.

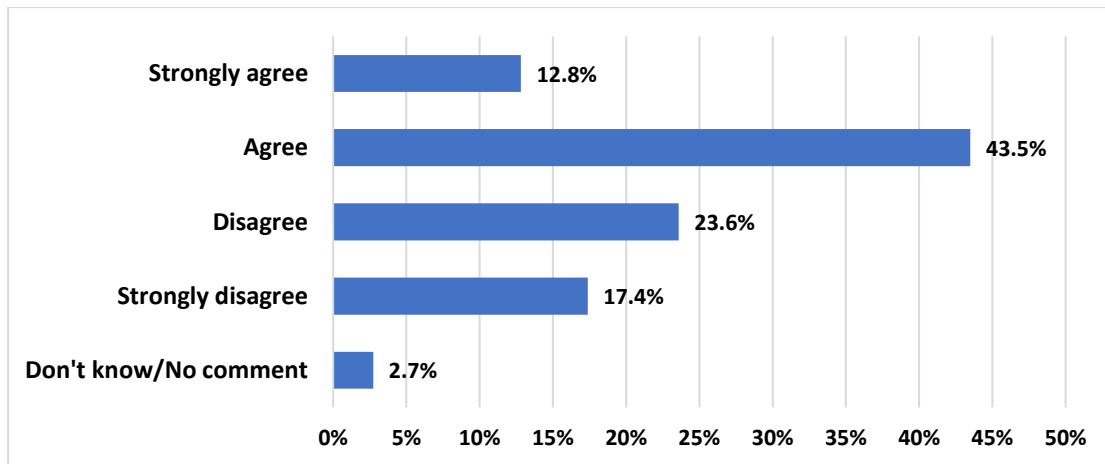
When analyzed by age, respondents of all ages verified the authenticity of information found online by comparing with information from other websites, with the highest percentage found among those aged 16-25 (66.3%) and the lowest among those aged 46-55 (31.6%), except those aged 66 and over, most of whom (45.9%) never verified the information, and those aged 36-45 (48.4%) and 46-55 (40.8%), most of whom verified the information by confirming the credibility of the data source.

When analyzed by marital status, a majority of those single (60%) and 37.2% of those married verified the information found online by comparing the information from other websites; while those who verified information by confirming the credibility of the data source (27.7%) and those who never verified the authenticity of information (27.5%) made up similar proportions among the widowed/separated.

Providing incorrect or false information on the website to protect personal identity Q64

1. Overall analysis

The survey shows that over half (56.3%) of the respondents agreed (including “Strongly agree” and “Agree”) with providing incorrect or false information on websites to protect personal identity; while 41% disagreed (including “Strongly disagree” and “Disagree” hereinafter) (See Figure 31).



Base: N=899, single-choice (Those who was online)

Figure 31 Do You Agree that Incorrect or False Information Should Be Provided on Websites to Protect Personal Identity

2. Comparative analysis

(1) Analysis on regional differences

According to the cross analysis, it is found that the bulk of the interviewees from all areas agreed with providing incorrect or false information to protect personal identity, with the highest proportion found among those from Kaohsiung, Pingtung, and Penghu (64.8%) and the lowest among those from Taoyuan, Hsinchu, and Miaoli (54.1%), except those from Yilan, Hualien, and Taitung, most of whom didn't agree (58%).

(2) Analysis on basic differences

The chi-square test suggests that whether one agrees with providing incorrect or false information to protect personal identity is significantly related to age and marital status.

When analyzed by gender, a larger percentage of both men (54.8%) and women (57.7%) agreed with providing incorrect or false information to protect personal identity than those who didn't.

When analyzed by age, the bulk of the interviewees of all ages agreed with providing incorrect or false information to protect personal identity, with the highest proportion found among those aged 16-25 (68.4%) and the lowest among those aged 46-55 (49.1%), except those aged 56-65 and 66 and over, most of whom didn't agree (55.3% and 51.2% respectively).

When analyzed by marital status, a larger percentage of both those single (63.7%) and those married (53%) agreed with providing incorrect or false information to protect personal identity than those who didn't; while those who disagreed accounted for the

largest percentage among the widowed/separated (47.9%).

(3) Analysis on differences in social and economic status

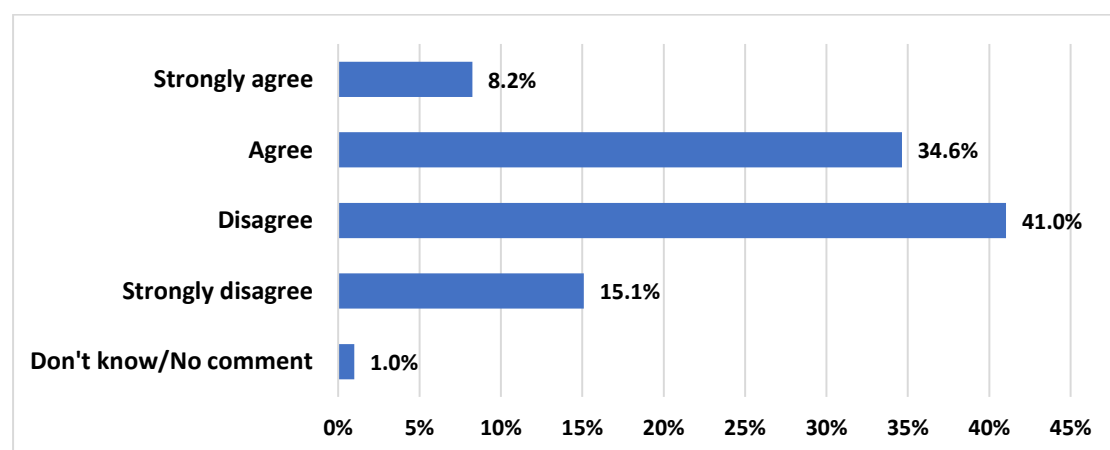
The chi-square test suggests that whether one agrees with providing incorrect or false information to protect personal identity is significantly related to profession.

When analyzed by profession, the bulk of the interviewees of all professions agree with providing incorrect or false information to protect personal identity, with the highest proportion found among those in the public administration and national defense/mandatory social security industries (74.6%) and the lowest among those in healthcare and social work services (50.6%), except for those in the construction engineering industry (54.2%), professional/scientific and technical services (52.2%), support service industry (53.8%), retirees (58.7%) and job seekers and those waiting to return to work with no pay (61.7%), most of whom disagreed.

Providing personal information to get what one wants on the internet Q65

1. Overall analysis

Over half (56.1%) of the respondents disagreed (including “Strongly disagree” and “Disagree” hereinafter) that personal information could be provided on the internet to get what they wanted; while 42.8% agreed (including “Strongly agree” and “Agree” hereinafter) (See Figure 32).



Base: N=932, single-choice (Those who was online)

Figure 32 Do You Agree that Personal information Can Be Provided on the Internet to Get What You Want

2. Comparative analysis

(1) Analysis on regional differences

The chi-square test suggests that whether one agrees that personal information can

be provided on the internet to get what one wants is significantly related to the area where one lives.

According to the cross analysis, it is found that the bulk of the interviewees from all areas didn't agree that personal information can be provided on the internet to get what they wanted, with the highest proportion found among those from Taichung, Changhua, and Nantou (67.9%) and the lowest among those from Yunlin, Chiayi, and Tainan (50.9%), except those from Taipei City, New Taipei City, and Keelung, most of whom agreed (54.3%).

(2) Analysis on basic differences

The chi-square test suggests that whether one agrees that personal information can be provided on the web to get what one wants is significantly related to age.

When analyzed by gender, a larger percentage of both men (55%) and women (57.2%) didn't agree that personal information can be provided on the web to get what one wants compared to those who did.

When analyzed by age, those who didn't agree made up the largest proportion of interviewees of all ages, with the highest percentage reported in interviewees aged 66 and over (69.5%); while the lowest is among those aged 36-45 (50.8%).

When analyzed by marital status, those who didn't agree make up the largest proportion of interviewees regardless of marital status, with the highest proportion among those unmarried (57.1%) and the lowest among those married (55.4%).

(3) Analysis on differences in social and economic status

The chi-square test suggests that whether one agrees with providing personal information on the internet to get what one wants is significantly related to education level and profession.

When analyzed by education level, those who didn't agree made up the largest proportion of interviewees of all education levels, with the highest percentage (75.1%) found among those with elementary education and lower and the lowest among those with junior college education (52.4%).

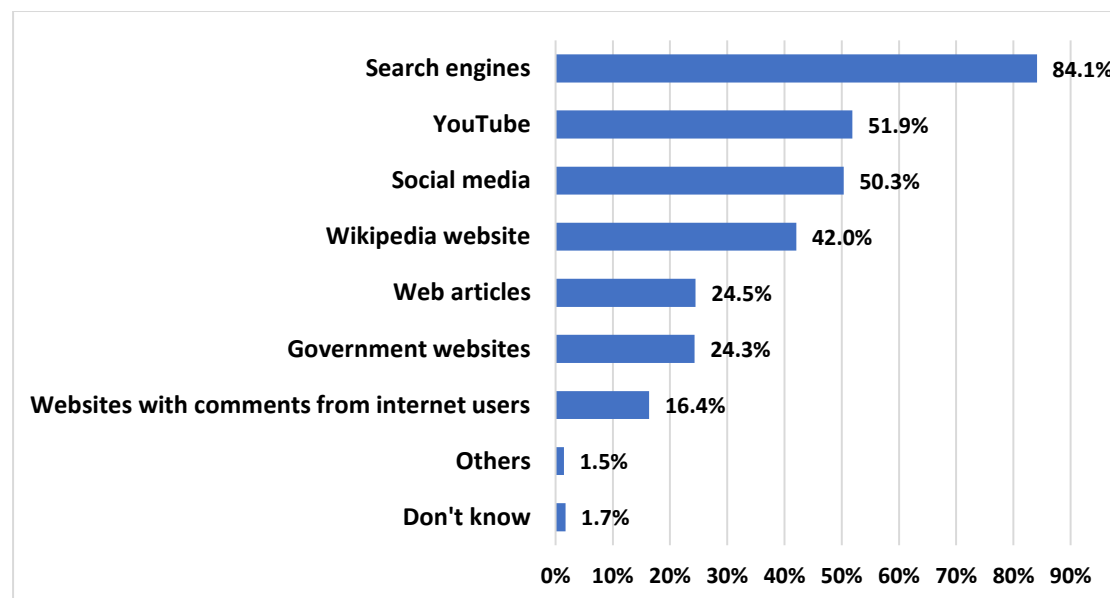
When analyzed by profession, a larger share of respondents of all professions didn't agree compared to those who agreed, with the highest proportion found among those in the retirees (67.1%) and the lowest among those in the publication, audio-video production, mass communication, and information and communications industries (50.5%), except for those in the agricultural/forestry/fishery/husbandry industries

(60.1%), construction engineering industry (60.4%), wholesale and retail industries (54.3%), finance and insurance industries (61.6%), real estate industry (73.4%), and art/entertainment and recreation industries (51.1%), most of whom agreed.

Ways to obtain information online Q67

1. Overall analysis

When searching for particular information online, over 80% (84.1%) of those surveyed visited search engines (e.g. Google). The responses that followed were YouTube (51.9%) and social media (50.3%) (See Figure 33).



Base: N=932, multiple-choice (Those who was online)

Figure 33 How Do You Obtain Information Online

2. Comparative analysis

(1) Analysis on regional differences

According to the cross analysis, it is found that most of the interviewees from all areas obtained information from search engines when searching for particular information, with the highest percentage found among those from Yunlin, Chiayi, and Tainan (91.9%) and the lowest among those from Kaohsiung, Pingtung, and Penghu (77.5%). It is noticeable that the majority of those from all areas received information from YouTube, except those from Taipei City, New Taipei City, and Keelung, and Yunlin, Chiayi, and Tainan, where a larger share of those got information from social media (43.3% and 64.6% respectively) than from YouTube (36.9% and 58.5% respectively).

(2) Analysis on basic differences

When analyzed by gender, the majority of both men (85.6%) and women (82.8%) obtain information from search engines.

When analyzed by age, the bulk of the interviewees of all ages get information from search engines when searching for particular information, with the highest percentage found among those aged 26-35 (93.9%) and the lowest among those aged 66 and over (55.5%).

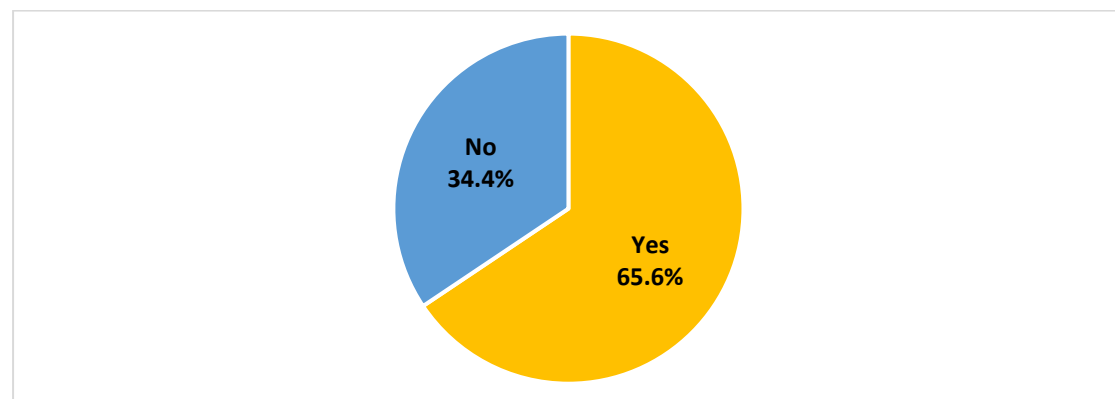
When analyzed by marital status, the largest proportion of interviewees regardless of marital status get information from search engines when searching for particular information, with the highest percentage found among those married (88.8%) and the lowest among those widowed/separated (70.6%).

C. Online Transactions

Searching for product information and comparing prices online Q68

1. Overall analysis

Over 60% (65.6%) of the respondents have experience of searching for product information and comparing prices online (See Figure 34).



Base: N=932, single-choice (Those who was online)

Figure 34 Do You Have Experience in Searching for Product Information and Comparing Prices Online

2. Comparative analysis

(1) Analysis on regional differences

The chi-square test suggests that whether one has experience of searching for product information and comparing prices online is significantly related to where one lives.

The cross analysis suggests that most of the interviewees from all areas have

experience of searching for product information and comparing prices online, with the highest rate reported among those from Yilan, Hualien, and Taitung (78.2%) and the lowest among those from Taipei City, New Taipei City, and Keelung (54.7%).

(2) Analysis on basic differences

The chi-square test suggests that whether one has experience of searching for product information and comparing prices online is significantly related to age and marital status.

When analyzed by gender, a larger share of men (62.9%) and women (68.2%) have experience searching for product information and comparing prices online than those who haven't.

When analyzed by age, the bulk of the interviewees of all ages have experience of searching for product information and comparing prices online, with the highest proportion found among those aged 16-25 (84.8%) and the lowest among those aged 46-55 (61%), except those aged 56-65 and 66 and over, most of whom have no experience (56.6% and 68.3% respectively).

When analyzed by marital status, a larger share of those single (79.5%) and those married (58.5%) have experience of searching for product information and comparing prices online than those who hadn't; while those who didn't accounted for the bulk of the widowed/separated.

(3) Analysis on differences in social and economic status

The chi-square test suggests that whether one has experience of searching for product information and comparing prices is significantly related to residence, education level, profession and average monthly income.

When analyzed by residence, a larger proportion of house owners (63.1%) and renters (75.2%) have experience of searching for product information and comparing prices than those who hadn't, with a substantially higher rate in the latter.

When analyzed by education level, a larger proportion of respondents of all education levels have experience of searching for product information and comparing prices than those who hadn't, with the highest proportion among master's and higher degree holders (92.8%) and the lowest among those with senior high and higher vocational education (59.6%), except those with elementary education or lower (81.1%) and those with junior high education (70.6%), where those who answered "No" made up the bulk.

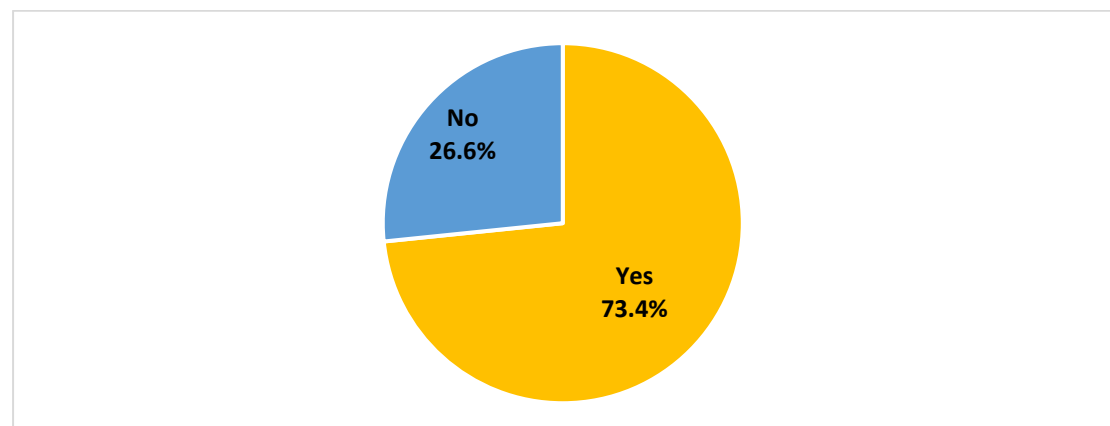
When analyzed by profession, the bulk of the interviewees of all professions have experience in searching for product information and comparing prices online, with the highest proportion found among those who work in the public administration and national defense/mandatory social security industries (91.2%) and the lowest among housekeepers (51.2%), except for those in the construction engineering industry (50.9%), real estate industry (52.7%), support service industry, and the retirees, most of whom have no experience (52.7% and 60.9% respectively).

When analyzed by average monthly individual income, a majority of interviewees of all income levels have experience of searching for product information and comparing prices online, with the highest proportion found among those who earned NT60,000 and more (80%) and the lowest among those who earned NT10,000-19,999 (53.2%).

Experience in online shopping Q71

1. Overall analysis

Over 70% (73.4%) of the respondents have experience in online shopping (See Figure 35).



Base: N=932, single-choice (Those who was online)

Figure 35 Do You Have Experience in Online Shopping

2. Comparative analysis

(1) Analysis on regional differences

The chi-square test suggests that whether one has experience of online shopping is significantly related to area where one lived.

The cross analysis suggests that most of the interviewees from all areas have experience of online shopping, with the highest rate reported among those from Kaohsiung, Pingtung, and Penghu (83.1%) and the lowest among those from Taipei

City, New Taipei City, and Keelung (67.4%).

(2) Analysis on basic differences

The chi-square test suggests that whether one has experience of online shopping is significantly related to age and marital status.

When analyzed by gender, a majority of both men (66.8%) and women (79.6%) have experience in online shopping.

When analyzed by age, the bulk of the interviewees of all ages have experience of online shopping, with the highest proportion found among those aged 16-25 (92.3%) and the lowest among those aged 56-65 (51.1%), except those aged 66 and over, most of whom had no experience (67.3%).

When analyzed by marital status, a larger proportion of those surveyed regardless of marital status have experience of online shopping, with the highest proportion seen among those unmarried (85.9%) and the lowest among those widowed/separated (62.3%).

(3) Analysis on differences in social and economic status

The chi-square test suggests that whether one has experience of online shopping is significantly related to residence, education level, profession and average monthly income.

When analyzed by residence, a larger proportion of house owners (70%) and renters (84.5%) have experience of online shopping than those who hadn't, with a much higher rate in the latter.

When analyzed by education level, most of the respondents of all education levels have experience of online shopping and the percentage increased with age, with the lowest proportion among those with junior high education (51.7%) and the highest among master's and higher degree holders (90.2%), except those with elementary education or lower, where those with no experience (79%) accounted for the largest share.

When analyzed by profession, the bulk of the interviewees of all professions have experience of online shopping, with the highest proportion found among those in the healthcare and social work services (93.9%) and the lowest in the support service industry (52.1%), except the retirees (54.6%), most of whom had no experience.

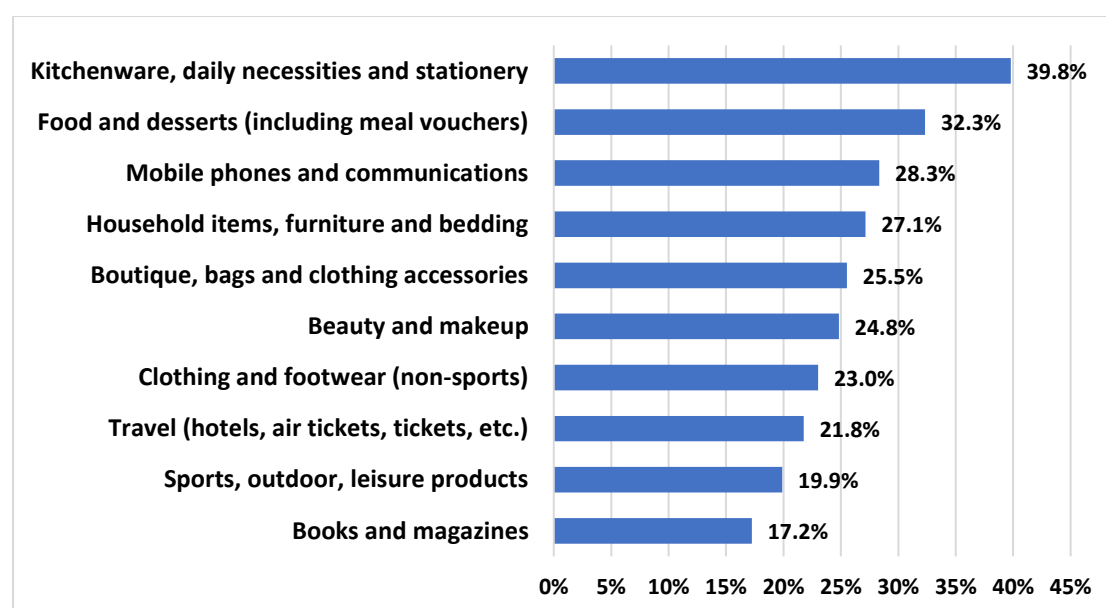
When analyzed by average monthly individual income, a majority (all greater than 60%) of interviewees of all incomes have experience of online shopping, with the

highest proportion found among those who earned NT30,000-NT39,999 (79.5%) and the lowest among those who earned less than NT10,000 (64.9%).

Products shopped online Q73

1. Overall analysis

Among the products purchased online by the respondents during the last 12 months, “Kitchenware, daily necessities and stationery” accounted for the largest share (39.8%), followed by “Food and desserts (including meal vouchers)” (32.3%), and “Mobile phones and communications” (28.3%) (See Figure 36).



Base : N=528, multiple answers allowed (Those who sold product online at least once during the past 12 months)

Figure 36 What Products Did You Shop Online During the Last 12 Months (Top 10)

2. Comparative analysis

(1) Analysis on regional differences

The cross analysis suggests that most of those from all areas shopped for “Kitchenware, daily necessities and stationery” during the last 12 months, with the highest percentage reported among those from Yilan, Hualien, and Taitung (49%) and the lowest among those from Yunlin, Chiayi, and Tainan (36%), except those from Taipei City, New Taipei City, and Keelung (40.4%) and Taichung, Changhua, and Nantou (41.6%), most of whom shopped for “Food and desserts (including meal vouchers)”.

(2) Analysis on basic differences

When analyzed by gender, the largest share of men (41%) purchased “Mobile phones and communications” online and the largest share of women (46.5%) bought “Kitchenware, daily necessities and stationery” on the internet during the last 12 months.

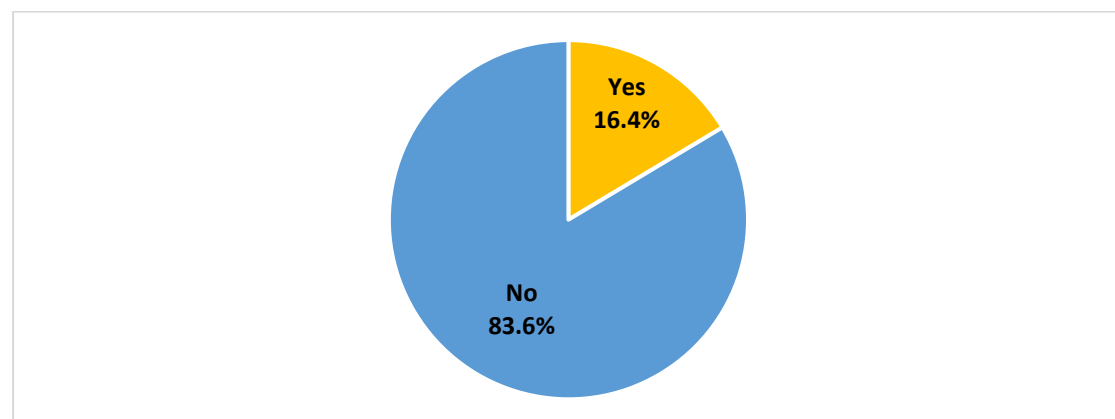
When analyzed by age, most of respondents of all ages shopped for “Kitchenware, daily necessities and stationery” during the last 12 months, with the highest proportion found among those aged 56-65 (50.7%) and the lowest among those aged 26-35 (38.4%), except those aged 16-25 (36.3%), the bulk of whom bought “Boutiques, bags and apparel accessories” online, and those aged 66 and over (63.3%), most of whom shopped for “Food and desserts (including meal vouchers)”.

When analyzed by marriage status, the largest share of those married (49.8%) and those widowed/separated (37.5%) purchased “Kitchenware, daily necessities and stationery” online during the last 12 months, but those who shopped for “Mobile phones and communications” (30.3%) and those who shopped for “Kitchenware, daily necessities and stationery” (30.7%) online during the last 12 months accounted for similar proportions.

Experience in online selling Q78

1. Overall analysis

Up to 80% (83.6%) of those surveyed had no experience of online selling (See Figure 37).



Base: N=932, single-choice (Those who was online)

Figure 37 Do You Have Experience in Online Selling

2. Comparative analysis

(1) Analysis on regional differences

The cross analysis suggests that a vast majority (up to 70%) of those surveyed

from all areas have no experience in online selling. When it comes to those with the experience, Yilan, Hualien, and Taitung saw the highest percentage (28.5%) and Taipei City, New Taipei City, and Keelung saw the lowest (11.7%).

(2) Analysis on basic differences

The chi-square test suggests that whether one has experience of online selling is significantly related to age and marital status.

When analyzed by gender, a majority of both men (85.6%) and women (81.6%) have no experience in online selling.

When analyzed by age, a larger proportion of respondents of all ages have no experience of online selling than those who have. Those aged 26-35 saw the largest share to have experience of online selling (30.8%) and those aged 66 and over saw the smallest (1.1%).

When analyzed by marital status, a larger proportion of those surveyed regardless of marital status have no experience of online selling. Those unmarried saw the highest percentage (23.2%) to have experience of online selling and those widowed/separated the lowest (8.3%).

(3) Analysis on differences in social and economic status

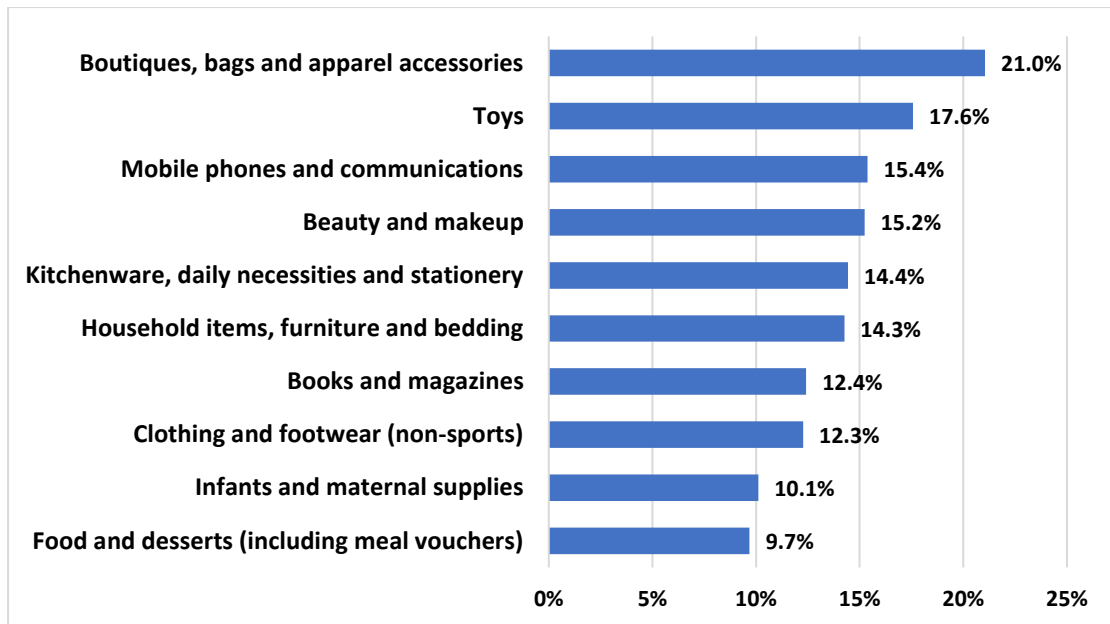
The chi-square test suggests that whether one has experience of online selling is significantly related to education level.

When analyzed by education level, most of those surveyed of all education levels have no experience of online selling. Bachelor's degree holders saw the highest percentage (23.4%) to have experience in online selling and those with elementary education or lower the lowest (0%).

Product sold online Q80

1. Overall analysis

Among the products sold online by the respondents during the last 12 months, “Boutiques, bags and apparel accessories” answers accounted for the largest share (21%), followed by “Toys” (17.6%), and “Mobile phones and communications” (15.4%) (See Figure 38).



Base : N=90, multiple answers allowed (Those who sold products online at least once during the past 12 months)

Figure 38 Products Sold Online in the Last 12 Months (Top 10)

2. Comparative analysis

(1) Analysis on regional differences

The cross analysis suggests that among those surveyed from Taipei City, New Taipei City, and Keelung, “Music or films (including vouchers)” (30.9%) and “Toys” (30%) answers accounted for similar rates of products sold online during the last 12 months; most of those from Taoyuan, Hsinchu, and Miaoli (26.5%) and Taichung, Changhua, and Nantou (31.5%) sold “Boutiques, bags and apparel accessories”; “Toys” answers constituted the bulk (46.3%) among those from Kaohsiung, Pingtung, and Penghu; those from Yunlin, Chiayi, and Tainan who sold “Kitchenware, daily necessities and stationery” online accounted for the largest share (29.3%); most of those from Yilan, Hualien, and Taitung sold “Mobile phones and communications” (22.2%) online during the last 12 months.

(2) Analysis on basic differences

When analyzed by gender, the greater share of men (25.4%) sold “Toys” and the greater share of women (26.7%) sold “Boutiques, bags and apparel accessories” online during the last 12 months.

When analyzed by age, “Mobile phones and communications” (21.7%) and “Beauty and makeup” (22%) answers constituted almost the same rates among products sold online by those aged 16-25 during the last 12 months; “Clothing and footwear

(non-sports)” was the response given by most of those aged 26-35 (31.4%); “Boutiques, bags and apparel accessories” was the answer given by most of those aged 36-45 (27.2%); and “Household items, furniture and bedding” was the most popular answer among those aged 46-55 (26.8%).

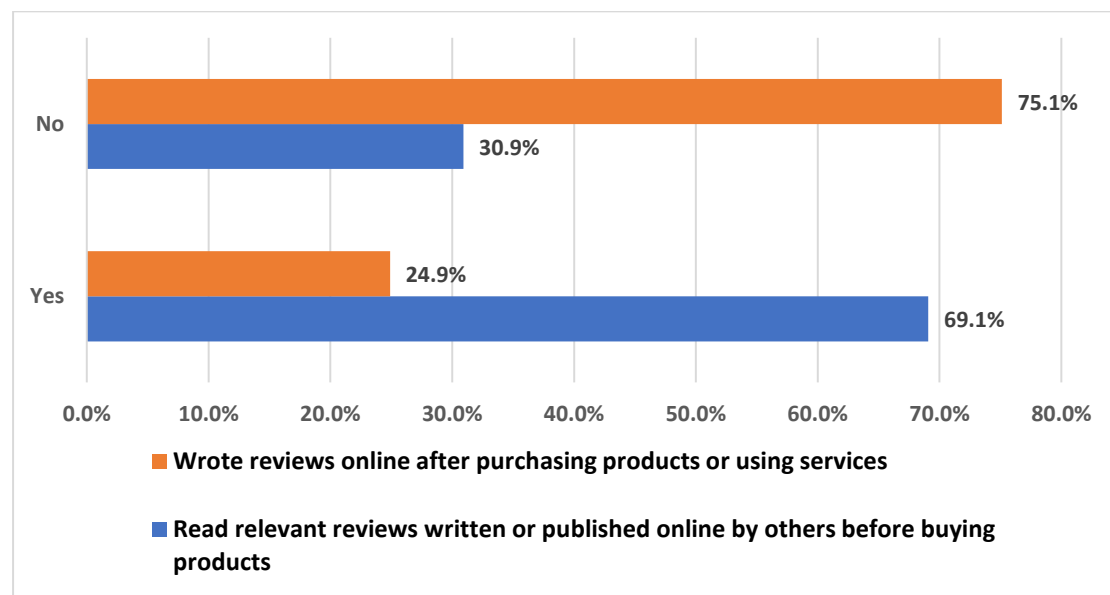
When analyzed by marital status, “Toys” was given by most of those single (21.8%); while “Household items, furniture and bedding” was given by most of those married (22.9%).

D. Searching and Sharing Information Online

Information Sharing before and after Buying Products or Using Services Q83 Q84

1. Overall analysis

Nearly 70% (69.1%) of those surveyed read relevant reviews written or published online by others before buying products, while only 24.9% wrote reviews online after purchasing products or using services (See Figure 39).



Base: N=932, single-choice (Those who was online)

Figure 39 Information Sharing before and after Buying Products or Using Services

1. Comparative analysis

(1) Analysis on regional differences

The chi-square test suggests that whether one reads relevant reviews written or published online by others before buying products or services or writes reviews online

after purchasing products or using services is significantly related to area where one lives.

The cross analysis suggests that most of the interviewees from all areas read relevant reviews written or published online by others before buying products or services, with the highest rate reported among those from Taichung, Changhua, and Nantou (75.1%) and Kaohsiung, Pingtung, and Penghu (75%) and the lowest among those from Taipei City, New Taipei City, and Keelung (58.4%). A majority (more than 70%) of the respondents from all areas didn't write reviews online after purchasing products or using services, except those from Yilan, Hualien, and Taitung (66.4%%). Among those who wrote reviews online, the highest percentage was found among those from Yilan, Hualien, and Taitung (33.6%) and the lowest among those from Taichung, Changhua, and Nantou (16.1%).

(2) Analysis on basic differences

The chi-square test suggests that whether one reads relevant reviews written or published online by others before buying products or services is significantly related to gender, age, and marital status, and that whether one writes reviews online after purchasing products or using services is significantly related to age and marital status.

When analyzed by gender, most of men (68.5%) and women (69.7%) read relevant comments written or published online by others before buying products or services. Most men and women didn't write reviews online after purchasing products or using services, but a larger proportion of women (28.3%) than men (21.3%) published comments online after buying products or using services.

When analyzed by age, the bulk of the interviewees of all ages read relevant reviews written or published online by others before buying products or services and the rates increased with age, with the highest proportion found among those aged 16-25 (89.3%) and the lowest among those aged 46-55 (70.9%), except those aged 56-65 and 66 and over, most of whom hadn't read reviews (52.4% and 67.4% respectively). A majority of the respondents of all ages didn't write reviews online after purchasing products or using services and the rates decreased with age, with the highest percentage found among those aged 16-25 (41.3%) and the lowest among those aged 66 and over (4.8%).

When analyzed by marriage status, most of the interviewees regardless of marital status read relevant comments written or published online by others before buying

products or services, with the highest rate (80.6%) given by those unmarried and the lowest by those widowed/separated (54%). A majority of the respondents regardless of marital status didn't write reviews online after purchasing products or using services, with the highest percentage found among those unmarried (31.3%) and the lowest among those widowed/separated (15.4%).

(3) Analysis on differences in social and economic status

The chi-square test suggests that whether one reads relevant reviews written or published online by others before buying products or services is significantly related to residence, education level, and profession, and that whether one writes reviews online after purchasing products or using services is significantly related to education level and profession.

When analyzed by residence, a larger share of both house owners (67.3%) and renters (78%) read relevant comments written or published online by others before buying products or services, with a larger proportion of house owners than renters doing so.

When analyzed by education level, a larger proportion of respondents of all education levels read relevant reviews written or published online by others before buying products or services, with the highest proportion among master's and higher degree holders (87.7%) and the lowest among those with junior college education (62.1%), except those with elementary education and lower (80.2%) and those with junior high education (55.8%), where those who didn't made up the bulk. A majority of the respondents of all education levels didn't write reviews online after purchasing products or using services, with the highest percentage among the bachelor's degree holders (33.7%) and the lowest among those with elementary education or lower (2.2%).

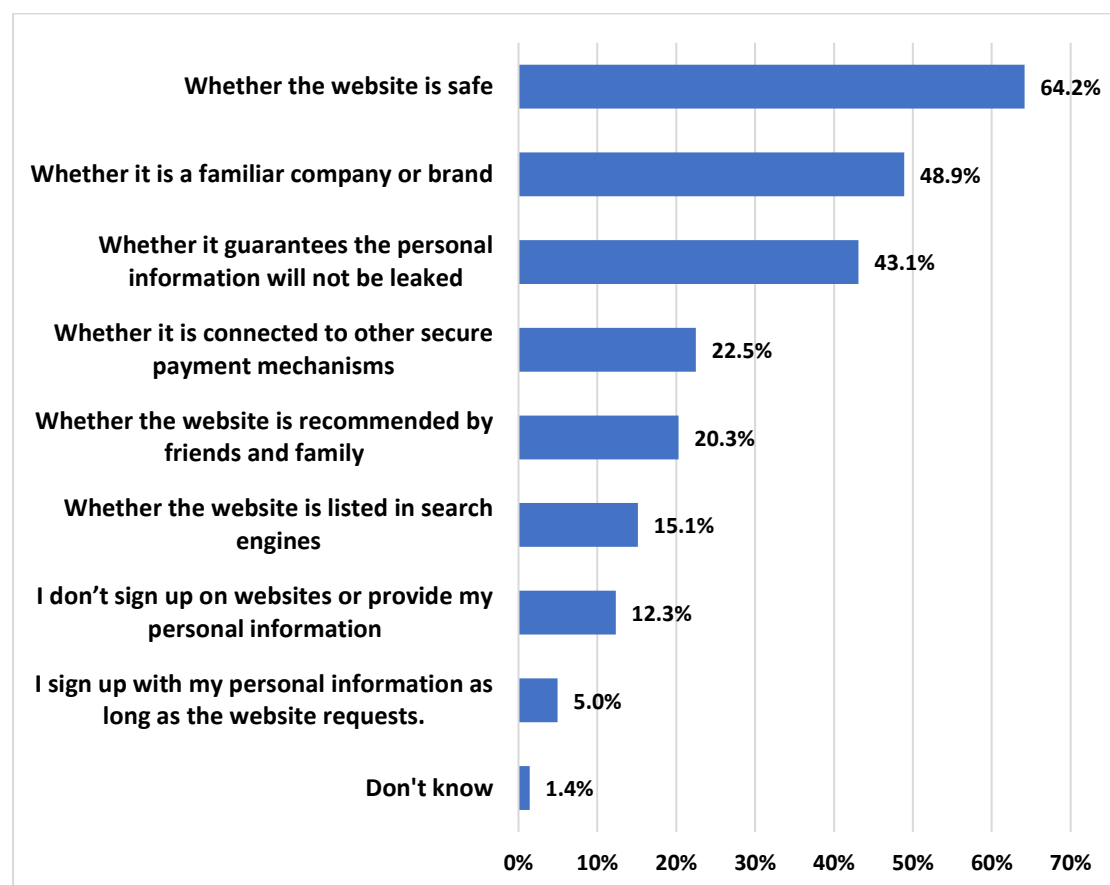
When analyzed by profession, the bulk of the interviewees of all professions read relevant reviews written or published online by others before buying products or services, with the highest proportion among students (91.2%) and the lowest among those in the construction engineering industry (54.4%), except retirees, most of whom didn't read reviews (55.3%). A majority of the respondents of all professions didn't write reviews online after purchasing products or using services, with the highest percentage among job seekers and those waiting to return to work with no pay (40.5%) and the lowest among those who work in the support services (5%).

E. Online Information Verification and Information Security

Considerations before signing up on a website with personal information Q87

1. Overall analysis

When it comes to considerations before signing up on websites with personal information, “Whether the website is safe” (64.2%) was given most, followed by “Whether it is a familiar company or brand” (48.9%), and “Whether it guarantees the personal information will not be leaked” (43.1%) (See Figure 40).



Base: N=932, multiple-choice (Those who was online)

Figure 40 What Are Your Considerations before Signing Up on a Website with Personal Information

2. Comparative analysis

(1) Analysis on regional differences

The cross analysis suggests that among considerations before signing up on websites with personal information, “Whether the website is safe” was most given by those surveyed from all areas, with the largest percentage reported among those from

Yunlin, Chiayi, and Tainan (74.6%) and the lowest among those from Taoyuan, Hsinchu, and Miaoli (58.6%). The response “Confirmed the website was listed in search engines (such as Google)” was given by a much smaller percentage of the interviewed from Taoyuan, Hsinchu, and Miaoli (5.2%) than those from other areas.

(2) Analysis on basic differences

When analyzed by gender, the most given response by both men (65.2%) and women (63.1%) was “Whether the website is safe.”

When analyzed by age, the most given response by respondents of all ages was “Whether the website is safe” and the rate decreased with age, with the highest percentage found among those aged 16-25 (77.7%) and the lowest in those aged 56-65 (52.8%), except those aged 66 and over, where “Whether the website is safe” (36.5%) and “I don’t sign up on websites or provide my personal information” (36.6%) responses accounted for similar percentages.

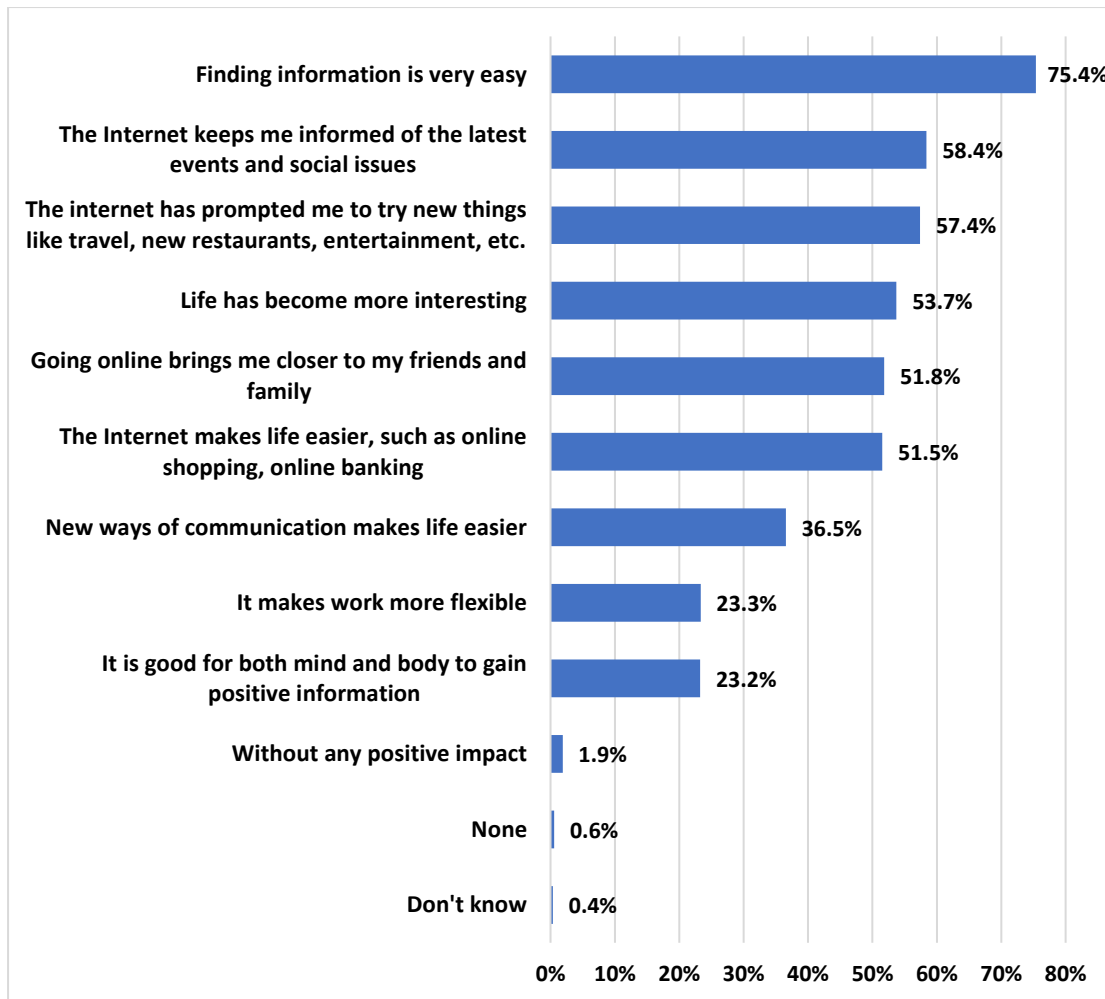
When analyzed by marital status, “Whether the website is safe” was the most given response by those surveyed regardless of marital status, with the highest percentage found among those unmarried (71.1%) and the lowest among those widowed/separated (50.4%). Besides, a significantly smaller proportion of those widowed/separated considered “Whether it was connected to other secure payment mechanisms” (9%) than those in other marital statuses. A much higher proportion of those single confirmed that “Whether the website was listed in search engines” (23.2%) than those of another marital status.

F. Impacts of Internet Use on Work or Daily Life

Benefits of Internet use on work or daily life Q88

1. Overall analysis

Among the perceived benefits of internet use for either work or daily life, “Finding information is very easy” accounted for the largest share (75.4%), followed by “The internet keeps me informed of the latest events and social issues” (58.4%), and “The internet has prompted me to try new things like travel, new restaurants, entertainment, etc.” (57.4%) (See Figure 41).



Base: N=932, multiple-choice (Those who was online)

Figure 41 What Are the Benefits of Internet Use on Your Work or Daily Life

2. Comparative analysis

(1) Analysis on regional differences

Cross analysis suggests that “Finding information is very easy” was the most given response by those surveyed from all areas, with the highest percentage given by those from Yilan, Hualien, and Taitung (85.7%) and the lowest by those from Kaohsiung, Pingtung, and Penghu (68.8%). In addition, more than 50% of those from all areas agreed that “The internet keeps me informed of the latest events and social issues.”

(2) Analysis on basic differences

When analyzed by gender, among the perceived benefits of internet-use for either work or daily life, “Finding information is very easy” was the most frequently given answer by both men (76%) and women (74.7%), and “The internet keeps me informed of the latest events and social issues,” “Life has become more interesting,” and “The internet has prompted me to try new things like travel, new restaurants, entertainment,

etc.” responses were given by more than half of both men and women.

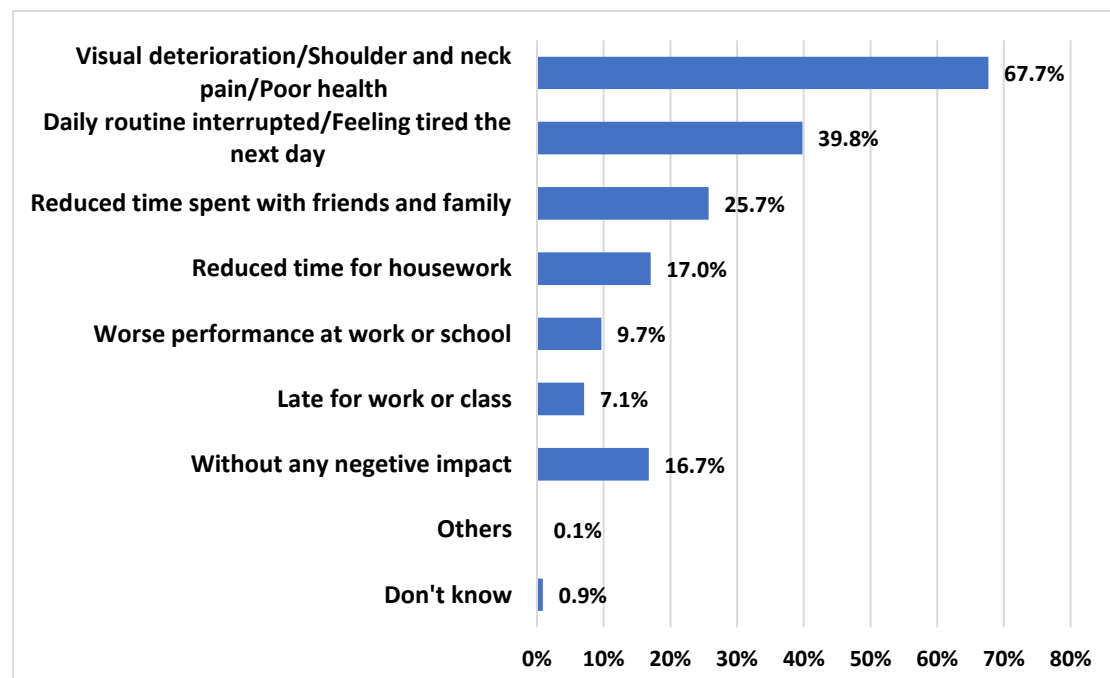
When analyzed by age, “Finding information is very easy” was the most given response by those surveyed for all ages, with the highest percentage among those aged 16-25 (84.8%) and the lowest among those aged 46-55 (73.7%), except for those aged 66 and over, most of whom (52.4%) gave the response “Going online brings me closer to my friends and family.”

When analyzed by marital status, “Finding information is very easy” was the most given response by those surveyed regardless of marital status, with the highest percentage given by those single (80.5%) and the lowest by those widowed/separated (66.6%).

Disadvantages of internet use on work or daily life Q89

1. Overall analysis

The survey shows that among the disadvantages of internet-use on work or daily life, “Visual deterioration/Shoulder and neck pain/Poor health” was the most given answer (67.7%) by those surveyed, followed by “Daily routine interrupted/Feeling tired the next day” (39.8%) and “Reduced time spent with friends and family” (25.7%) (See Figure 42).



Base: N=932, multiple-choice (Those who was online)

Figure 42 What Are the Disadvantages of Internet Use on Your Work or Daily Life

2. Comparative analysis

(1) Analysis on regional differences

The cross analysis suggests that among the disadvantages of internet-use on work or daily life, “Visual deterioration/Shoulder and neck pain/Poor health” was the most given response by those surveyed from all areas, with the highest percentage given by those from Yunlin, Chiayi, and Tainan (77.3%) and the lowest by those from Taipei City, New Taipei City, and Keelung (55.6%).

(2) Analysis on basic differences

When analyzed by gender, among the disadvantages of internet-use on work or daily life, “Visual deterioration/Shoulder and neck pain/Poor health” was the most given response by men (67%) and women (68.3%).

When analyzed by age, among the disadvantages of internet use on work or daily life, “Visual deterioration/Shoulder and neck pain/Poor health” was the most given response by those surveyed of all ages, with the highest percentage given by those aged 36-45 (72.9%) and the lowest by those aged 26-35 (57.9%). Further, the percentage of those who didn’t perceive any disadvantage increased with age, with the lowest rate found among those aged 16-25 (12.3%) and the highest among those aged 66 and over (25.6%). The percentage of those giving the response “Daily routine interrupted/Feeling tired the next day” decreased with age, with the highest rate among those aged 16-25 (53.8%) and the lowest among those aged 66 and over (16.1%).

When analyzed by marital status, among the disadvantages of internet use on work or daily life, “Visual deterioration/Shoulder and neck pain/Poor health” was the most given response by those surveyed regardless of marital status, with the highest percentage given by those widowed/separated (72.7%) and similar percentages given by those unmarried (67.1%) and those married (67.2%). Furthermore, “Worse performance at work or school” (15.1%) and “Late for work or class” (13.3%) were a significantly higher rate among those single.

Impacts of cell phones on sleep Q90–Q93

The survey results show how the respondents agreed with the following statements on a scale of 1 to 10, with 1 being the least and 10 being the most.

1. Overall analysis

Among the statements about cell phone habits, “I make sure my cell phone is around when sleeping” (5.23) was the most agreed to by the respondents, followed by

“I always check my cell phone before bed” (5.21), “The first thing in the morning is to check the cell phone” (4.86), and “The first thing after waking up at night is to check the cell phone” (3.4). (See Table 14).

Table 14 Cell Phone Habits When Sleeping

Statement	Level of Agreement (Average)
I make sure my cell phone is around when sleeping.	5.23
I always check my cell phone before bed (excluding setting alarms, checking the time)	5.21
The first thing in the morning is to check the cell phone (excluding setting an alarm, checking the time).	4.86
The first thing after waking up at night is to check the cell phone (excluding checking the time).	3.40

Base: N=1,105

Source: Results from this research

2. Comparative analysis

(1) Analysis on regional differences

One-way ANOVA suggests that the extent to which one agrees with the statement “The first thing after waking up at night is to check the cell phone” is significantly related to area where one lives.

When analyzed by area, the statement “I make sure my cell phone is around when sleeping” was most agreed to by those from Taoyuan, Hsinchu, and Miaoli at 5.87, and least agreed to by those from Yilan, Hualien, and Taitung at 4.72; “I always check my cell phone before bed” was most agreed to by those from Taoyuan, Hsinchu, and Miaoli at 5.61 and least agreed to by those from Yilan, Hualien, and Taitung at 4.13; “The first thing in the morning is to check the cell phone” was most agreed to by those from Taipei City, New Taipei City, and Keelung and Yunlin, Chiayi, and Tainan at 5.08 and least agreed to by those from Kaohsiung, Pingtung, and Penghu at 4.17; “The first thing after waking up at night is to check the cell phone” was most agreed to by those from Taipei City, New Taipei City, and Keelung at 3.98 and least agreed to by those from Yilan, Hualien, and Taitung at 2.82.

(2) Analysis on basic differences

One-way ANOVA suggests that the extent to which one agrees with the statements “I make sure my cell phone is around when sleeping” and “The first thing in the morning is to check the cell phone” is significantly related to marital status.

When analyzed by gender, the statement “I make sure my cell phone is around when sleeping” was agreed to by more men at 5.27 than women at 5.19; “I always check my cell phone before bed” was agreed to by more women at 5.23 than men at 5.18; “The first thing in the morning is to check the cell phone” was agreed to by more women at 4.9 than men at 4.81; “The first thing after waking up at night is to check the cell phone” was agreed to by more women at 3.42 than men 3.38.

When analyzed by age, the levels of agreement with “I make sure my cell phone is around when sleeping,” “I always check my cell phone before bed” and “The first thing after waking up at night is to check the cell phone” decreased with age, with the highest agreement level given by those aged 16-25 at 7.09, 7.02 and 4.54, and the lowest given by those aged 66 and over at 2.67, 2.76 and 2.06. Similarly, “The first thing in the morning is to check the cell phone” was most agreed to by those aged 16-25 at 6.33 and the least agreed to by those aged 66 and over at 2.41.

When analyzed by marriage status, “I make sure my cell phone is around when sleeping,” “I always check my cell phone before bed,” “The first thing in the morning is to check the cell phone” and “The first thing after waking up at night is to check the cell phone” were the most agreed to by those single at 6.62, 6.4, 5.75 and 3.98, respectively, and the least agreed to by those widowed/separated at 4.19, 3.48, 3.67 and 2.75, respectively.

(3) Analysis on differences in social and economic status

One-way ANOVA suggests that the extent to which one agrees with “I make sure my cell phone is around when sleeping” is significantly related to residence and average monthly individual income; the extent to which one agrees with “I always check my cell phone before bed” is significantly related to residence, profession, and average monthly individual income; the extent to which one agrees with “The first thing in the morning is to check the cell phone” is significantly related to residence.

When analyzed by residence, “I make sure my cell phone is around when sleeping,” “I always check my cell phone before bed” and “The first thing in the morning is to check the cell phone” were agreed to by more house renters at 6, 6.07 and 5.69 than renters at 4.98, 4.94 and 4.6, respectively.

When analyzed by profession, “I always check my cell phone before bed” was the most agreed to by those in the art/entertainment and recreation industries at 6.87 and least agreed by retirees at 3.05.

When analyzed by average monthly individual income, “I make sure my cell phone is around when sleeping” and “I always check my cell phone before bed” were the most agreed to by those who earned NT40,000 - NT49,999 at 5.79 and 5.93 and the least agreed to by those who earned less than NT10,000 at 4.26 and 4.2.

How people feel about the internet Q95–Q103

1. Overall analysis

Among the statements about the internet (on a scale of 1 to 10 with 1 being the least and 10 being the most), “Life with the internet is never boring” is the most agreed to by those surveyed at 6.63. And the levels of agreement with “Life without the internet becomes boring” (6.03), “I feel it’s hard to get rid of the internet” (5.59), “I don’t know how to search for particular information without the internet” (5.49), “I don’t know what’s happening out there without the internet” (5.45) all surpassed 5 each (See Table 15).

Table 15 How People Feel about the Internet

Statement	Level of Agreement (Average)
Life with the internet is never boring	6.63
Life without the internet becomes boring	6.03
I feel it’s hard to get rid of the internet	5.59
I don’t know how to search for particular information without the internet	5.49
I don’t know what’s happening out there without the internet	5.45
I feel anxious when cut off from the internet	4.64
I feel lost when cut off from the internet	4.60
I feel disconnected from the real world when cut off from the internet	4.59
I feel at work when connected to the internet	3.87

Base: N=929 (Those who was online)

Source: Results from this research

2. Comparative analysis

(1) Analysis on regional differences

One-way ANOVA suggests that the extent to which one agrees with “Life without the internet becomes boring,” “I don’t know what’s happening out there without the internet,” “I feel lost when cut off from the internet,” “I feel disconnected from the real world when cut off from the internet,” “I feel at work when connected to the internet,” and “Life with the internet is never boring” is significantly related to area where one lives.

When analyzed by area, all the perceptions of the internet were the most agreed to by those from Taipei City, New Taipei City, and Keelung. Of these, “Life without the internet becomes boring” was the most agreed to by those from Taipei City, New Taipei City, and Keelung at 6.37 and the least agreed to by those from Yilan, Hualien, and Taitung at 5.02; “I don’t know how to search for particular information without the internet” was the most agreed to by those from Taipei City, New Taipei City, and Keelung at 6.01 and the least agreed to by those from Taoyuan, Hsinchu, and Miaoli at 4.81; “I don’t know what’s happening out there without the internet” was the most agreed to by those from Taipei City, New Taipei City, and Keelung at 5.77 and the least agreed to by those from Taoyuan, Hsinchu, and Miaoli at 4.88; “I feel anxious when cut off from the internet” was the most agreed to by those from Taipei City, New Taipei City, and Keelung at 5.37 and the least agreed to by those from Yilan, Hualien, and Taitung at 3.69; “I feel lost when cut off from the internet” was the most agreed to by those from Taipei City, New Taipei City, and Keelung at 5.44 and the least agreed to by those from Yilan, Hualien, and Taitung at 3.8; “I feel it’s hard to get rid of the internet” was the most agreed to by those from Taipei City, New Taipei City, and Keelung at 6.23 and the least agreed to by those from Yilan, Hualien, and Taitung at 4.71; “I feel disconnected from the real world when cut off from the internet” was the most agreed to by those from Taipei City, New Taipei City, and Keelung at 5.49 and the least agreed to by those from Yilan, Hualien, and Taitung at 3.73; “I feel at work when connected to the internet” was the most agreed to by those from Taipei City, New Taipei City, and Keelung at 4.34 and the least agreed to by those from Taoyuan, Hsinchu, and Miaoli at 3.27; “Life with the internet is never boring” was the most agreed to by those from Taipei City, New Taipei City, and Keelung at 7.07 and the least agreed to by those from Yilan, Hualien, and Taitung at 6.02.

(2) Analysis on basic differences

One-way ANOVA suggests that the extent to which one agrees with “Life without the internet becomes boring,” “I don’t know what’s happening out there without the internet,” “I feel anxious when cut off from the internet,” “I feel lost when cut off from the internet” and “I feel disconnected from the real world when cut off from the internet” is significantly related to gender; the extent to which one agrees with “Life without the internet becomes boring,” “I don’t know how to search for particular information without the internet,” “I don’t know what’s happening out there without the internet,”

“I feel anxious when cut off from the internet,” “I feel lost when cut off from the internet,” “I feel it’s hard to get rid of the internet” and “I feel disconnected from the real world when cut off from the internet” is significantly related to age; the extent to which one agrees with “Life without the internet becomes boring,” “I don’t know how to search for particular information without the internet,” “I feel anxious when cut off from the internet,” “I feel lost when cut off from the internet” and “I feel it’s hard to get rid of the internet” is significantly related to marital status.

When analyzed by gender, all the perceptions of the internet were more agreed to by women than men. Of these, “Life without the internet becomes boring” was agreed to by more women at 6.3 than men at 5.74; “I don’t know how to search for particular information without the internet” was agreed to by more women at 5.8 than men at 5.17; “I don’t know what’s happening out there without the internet” was agreed to by more women at 5.65 than men at 5.24; “I feel anxious when cut off from the internet” was agreed to by more women at 4.84 than men at 4.43; “I feel lost when cut off from the internet” was agreed to by more women at 4.84 than men at 4.34; “I feel it’s hard to get rid of the internet” was agreed to by more women at 5.71 than men at 5.46; “I feel disconnected from the real world when cut off from the internet” was agreed to by more women at 4.85 than men at 4.32; “I feel at work when connected to the internet” was agreed to by more women at 3.88 than men at 3.85; “Life with the internet is never boring” was agreed to by more women at 6.72 than men at 6.53.

When analyzed by age, all perceptions of the internet were the least agreed to by those aged 66 or over, and the most agreed to by those aged 36-45, except “I feel anxious when cut off from the internet,” which was the most agreed to by those aged 16-25. Of these, “Life without the internet becomes boring” was the most agreed to by those aged 36-45 at 6.82 and the least agreed to by those aged 66 or over at 4.1; “I don’t know how to search for particular information without the internet” was the most agreed to by those aged 36-45 at 6.15 and the least agreed to by those aged 66 and over at 3.89; “I don’t know what’s happening out there without the internet” was the most agreed to by those aged 36-45 at 6.26 and the least agreed to by those aged 66 and over at 3.5; “I feel anxious when cut off from the internet” was most agreed by those aged 16-25 at 5.48 and least agreed by those aged 66 and over at 3.03; “I feel lost when cut off from the internet” was the most agreed to by those aged 36-45 at 5.36 and the least agreed to by those aged 66 and over at 3.54; “I feel it’s hard to get rid of the internet” was the

most agreed to by those aged 36-45 at 6.44 and the least agreed to by those aged 66 and over at 3.78; “I feel disconnected from the real world when cut off from the internet” was the most agreed to by those aged 36-45 at 5.18 and the least agreed to by those aged 66 and over at 3.53; “I feel at work when connected to the internet” was the most agreed to by those aged 36-45 at 4.93 and the least agreed to by those aged 66 and over at 2.51; “Life with the internet is never boring” was the most agreed to by those aged 36-45 at 7.46 and the least agreed to by those aged 66 and over at 5.08.

When analyzed by marital status, all perceptions of the internet were the most agreed to by those single and the least agreed to by those widowed/separated. Of these, “Life without the internet becomes boring” was the most agreed to by those single at 6.53 and the least agreed to by those widowed/separated at 4.65; “I don’t know how to search for particular information without the internet” was the most agreed to by those single at 5.77 and the least agreed to by those widowed/separated at 4.2; “I don’t know what’s happening out there without the internet” was the most agreed to by those single at 5.79 and the least agreed to by those widowed/separated at 3.95; “I feel anxious when cut off from the internet” was the most agreed to by those single at 5.04 and the least agreed to by those widowed/separated at 3.64; “I feel lost when cut off from the internet” was the most agreed to by those single at 4.84 and the least agreed to by those widowed/separated at 3.64; “I feel it’s hard to get rid of the internet” was the most agreed to by those single at 6.06 and the least agreed to by those widowed/separated at 4.35; “I feel disconnected from the real world when cut off from the internet” was the most agreed to by those single at 4.82 and the least agreed to by those widowed/separated at 3.51; “I feel at work when connected to the internet” was the most agreed to by those single at 4.01 and the least agreed to by those widowed/separated at 3.48; “Life with the internet is never boring” was the most agreed to by those single at 6.92 and the least agreed to by those widowed/separated at 5.3.

(3) Analysis on differences in social and economic status

One-way ANOVA suggests that the extent to which one agreed with “Life without the internet becomes boring,” “I feel anxious when cut off from the internet” and “I feel it’s hard to get rid of the internet” is significantly related to residence; the extent to which one agreed with “Life without the internet becomes boring,” “I don’t know what’s happening out there without the internet,” “I feel anxious when cut off from the internet,” “I feel lost when cut off from the internet” and “Life with the internet is never

boring” is significantly related to education level and profession; the extent to which one agreed with “Life without the internet becomes boring.” “I don’t know what’s happening out there without the internet,” “I feel anxious when cut off from the internet,” “I feel lost when cut off from the internet,” “I feel it’s hard to get rid of the internet,” “I feel disconnected from the real world when cut off from the internet” and “I feel at work when connected to the internet” is significantly related to average monthly individual income.

When analyzed by residence, all the perceptions of the internet were more agreed by house renters than house owners. Of these, “Life without the internet becomes boring” was more agreed by renters at 6.56 than house owners at 5.86; “I feel lost when cut off from the internet” was agreed to by more house renters at 4.99 than house owners at 4.47; “I feel it’s hard to get rid of the Internet” more house renters agreed to this at 6.05 than house owners at 5.41.

When analyzed by education level, all the perceptions of the internet were the least agreed to by those with elementary education and lower. Of these, “Life without the internet becomes boring” was the most agreed to by master's and higher degree holders at 6.69 and the least agreed to by those with elementary education and lower at 3.52; “I don’t know what’s happening out there without the internet” was most agreed by master's and higher degree holders at 6.04 and the least agreed to by those with elementary education and lower at 2.59; “I feel anxious when cut off from the internet” was the most agreed to by bachelor’s degree holders at 5.11 and the least agreed to by those with elementary education and lower at 2.67; “I feel lost when cut off from the internet” was the most agreed to by bachelor's degree holders at 4.98 and the least agreed to by those elementary education and lower at 2.88; “Life with the internet is never boring” was the most agreed to by master's and higher degree holders at 7.09 and the least agreed to by those with elementary education and lower at 4.87.

When analyzed by profession, “Life without the internet becomes boring” was the most agreed to by those in the publication, audio-video production, mass communication, and information and communications industries at 7.78 and the least agreed to by those in the agricultural/forestry/fishery/husbandry industries at 4.19; “I don’t know what’s happening out there without the internet” was the most agreed by those in the publication, audio-video production, mass communication, and information and communications industries at 7.17 and the least agreed the by the retirees at 3.81;

“I feel anxious when cut off from the internet” was the most agreed to by those in the art/entertainment and recreation industries at 6.68 and the least agreed by the retirees at 3.1; “I feel lost when cut off from the internet” was the most agreed to by those in the publication, audio-video production, mass communication, and information and communications industries at 5.71 and least agreed by those in the agricultural/forestry/fishery/husbandry industries at 3.47; “Life with the internet is never boring” was most agreed by those in the publication, audio-video production, mass communication, and information and communications industries at 7.68 and the least agreed to by those in the agricultural/forestry/fishery/ husbandry industries at 5.01.

When analyzed by average monthly individual income, all the perceptions of the internet were the most agreed to by those who earned NT40,000-NT49,999. Of these; “Life without the internet becomes boring” was the most agreed to by those who earned NT40,000-49,999 at 7.1 and the least agreed to by those who earned NT10,000-19,999 at 5.45; “I don’t know what’s happening out there without the internet” was the most agreed to by those who earned NT40,000-49,999 at 6.07 and the least agreed to by those who earned less than NT10,000 at 4.75; “I feel anxious when cut off from the internet” was the most agreed to by those who earned NT40,000-49,999 at 5.72 and the least agreed to by those who earned less than NT10,000 at 3.91; “I feel lost when cut off from the internet” was the most agreed to by those who earned NT40,000-49,999 at 5.39 and the least agreed to by those who earned less than NT10,000 at 3.83; “I feel it’s hard to get rid of the internet” was the most agreed to by those who earned NT40,000-49,999 at 6.89 and the least agreed to by those who earned NT10,000-19,999 at 4.79; “I feel disconnected from the real world when cut off from the internet” was the most agreed to by those who earned NT40,000-49,999 at 5.27 and the least agreed to by those who earned less than NT10,000 at 3.59; “I feel at work when connected to the internet” was the most agreed to by those who earned NT40,000-49,999 at 4.66 and the least agreed to by those who earned NT10,000-19,999 at 2.95.

Table 16 One-way ANOVA Results on Perceptions of the Internet

One-way ANOVA Test	
Statement	Variables Causing Significant Difference
Life without the internet becomes boring	Area, gender, age, marital status, residence, education level, profession, average monthly individual income
I don't know how to search for particular information without the internet	Age, marital status
I don't know what's happening out there without the internet	Area, gender, age, education level, profession, average monthly individual income
I feel anxious when cut off from the internet	Gender, age, marital status, residence, education level, profession, average monthly individual income
I feel lost when cut off from the internet	Area, gender, age, marital status, education level, profession, average monthly individual income
I feel it's hard to get rid of the internet	Age, marital status, residence, average monthly individual income
I feel disconnected from the real world when cut off from the internet	Area, gender, age, average monthly individual income
I feel at work when connected to the internet	Area, average monthly individual income
Life with the internet is never boring	Area, education level, profession

Source: Results from this research