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

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, Niaosong District of Kaohsiung City, Gangshan District of Kaohsiung City
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, Shenkeng 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
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
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, Sihu Township of Yunlin County, Kouhu Township of Yunlin County, Shuilin Township of Yunlin County, Puzi City of Jiayi County, Budai Township of Jiayi 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 Pingding Township, 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
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, 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

Table 2 Geographic Stratifications

| Geographic Area | Level Code | Combined Level Code |
| :---: | :---: | :---: |
|  | 1 | 1 |
|  | 2 | 2 |
|  | 3,4 | 3 |
| Taoyuan, Hsinchu, <br> Miaoli | $5,6,7$ | 4 |
|  | 1,2 | 1 |
|  | 3,4 | 2 |
| Nantou | $5,6,7$ | 3 |
|  | 1,2 | 1 |
|  | 3,4 | 2 |
| Yunlin, Chiayi, Tainan | 5 | 3 |
|  | 6,7 | 4 |
|  | $1,2,3$ | 1 |
| Kaohsiung, Pingtung, | 4,5 | 2 |
| Penghu | 6,7 | 3 |
|  | 1,2 | 1 |
|  | 3,4 | 2 |
| Hualien, Taitung | $5,6,7$ | 3 |
|  | 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 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 threestage 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 $\pm 3$ 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 <br> Percentage | Planned <br> Allocation of Samples | No. of <br> Townships and <br> Districts <br> 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, <br> Pingtung, <br> 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, <br> 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 have 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 <br> 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 2635 | Expected No. of Samples with Ages 3645 | Expected No. of Samples with Ages 4655 | Expected No. of Samples with Ages 5665 | 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 |
|  | Level2 | 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 |
| Taoyuan, Hsinchu, Miaoli | Subtotal | 6,488,762 | 32.06\% | 353 | 14 |  |  | 30 | 344 | 7 | 8 | 8 | 8 | 8 | 6 | 45 | 344 |
|  | 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 |
| Taichung, Changhua, Nantou | Subtotal | 3,197,908 | 15.80\% | 174 | 7 |  |  | 14 | 178 | 7 | 7 | 6 | 7 | 6 | 4 | 37 | 174 |
|  | Level 1 | 923,773 | 23.57\% | 50 | 2 | 2 | 13 | 4 | 52 | 2 | 2 | 2 | 3 | 2 | 2 | 13 | 52 |
|  | Level2 | 1,283,279 | 32.74\% | 70 | 3 | 2 | 12 | 6 | 72 | 2 | 2 | 2 | 2 | 2 | 2 | 12 | 72 |
|  | Level3 | 1,279,001 | 32.63\% | 70 | 3 | 2 | 12 | 6 | 72 | 2 | 2 | 2 | 2 | 2 | 2 | 12 | 72 |
|  | Level4 | 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 |
| Kaohsiung, <br> Pingtung, <br> Penghu | Subtotal | 2,916,122 | 14.41\% | 159 | 6 |  |  | 12 | 160 | 6 | 7 | 7 | 7 | 7 | 6 | 40 | 160 |
|  | Level 1 | 1,134,075 | 35.00\% | 62 | 2 | 2 | 15 | 4 | 60 | 3 | 3 | 2 | 3 | 2 | 2 | 15 | 60 |
|  | Level2 | 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 | By Survey Site |
| :---: | :---: | :---: | :---: | :---: |
| Area | Level | District or Township for Survey | No. of Expected Samples (1,160 samples in total) | No. of Completed Samples (1,166 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 | 23 |
|  |  | North District of Hsinchu City | 22 | 22 |
|  | Level 2 | Hukou Township of Hsinchu County | 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 (1,166 samples in total) |
|  |  | Kaohsiung City |  |  |
|  |  | Pingtung City of Pingtung County | 28 | 28 |
|  | Level 3 | Meinong District of Kaohsiung City | 30 | 30 |
|  |  | Baisha Township of Penghu County | 30 | 30 |
|  |  | Subtotal | 176 | 177 |
| Hualien, Taitung | Level 1 | Ji'an Township of Hualien County | 14 | 14 |
|  | Level 2 | Chenggong Township of Taitung County | 12 | 14 |
|  |  | Subtotal | 26 | 28 |
| Kinmen, Matsu |  | Kinmen County | 30 | 30 |
|  |  | ianjiang County | 30 | 30 |
|  |  | Subtotal | 60 | 60 |
| Grand total |  |  | 1,160 | 1,166 |

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 Broadcasting Market 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\% | 1,100 | 100.0\% |  |
| Survey Site |  |  |  |  | The Chi-square value is 0.359 , and p-value (= 0.996 ) is below the accepted significance level of 5\%, meaning no significant difference between the distribution of samples and the original allocation of samples. |
| Taipei City, <br> New Taipei City, <br> Keelung, Yilan | 344 | 31.5\% | 344 | 31.1\% |  |
| Taoyuan, Hsinchu, Miaoli | 174 | 15.6\% | 175 | 15.8\% |  |
| Taichung, <br> Changhua, <br> Nantou | 220 | 19.6\% | 221 | 20.0\% |  |
| Yunlin, Chiayi, Tainan | 160 | 14.9\% | 161 | 14.6\% |  |
| Kaohsiung, <br> Pingtung, Penghu | 176 | 16.0\% | 177 | 16.0\% |  |
| Hualien, Taitung | 26 | 2.4\% | 28 | 2.5\% |  |

## 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.

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. $\frac{N_{i}}{N} / \frac{n_{i}^{\prime}}{n}$,
$N_{i}$ and ${ }^{n_{i}^{\prime}}$ 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) $\alpha$ 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:
$\mathrm{W}=\sum_{i=1}^{r} \sum_{j=1}^{c} \frac{\left(O_{i j}-E_{i j}\right)^{2}}{E_{i j}} \sim \chi^{2}((r-1)(c-1))$ , wherein
$0_{i j}$ is the observed frequency from Row j , Column i , and $E_{i j}$ 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.
$F=\frac{M S_{b}}{M S_{w}}=\frac{S S_{b} / k-1}{S S_{w} / n-k}$
, where n represents the number of samples and k represents the number of groups,
$S S_{b}=n \sum_{i=1}^{k}\left(\overline{\mathrm{X}}_{i}-\overline{\mathrm{X}}\right)^{2}$
is the total sum of squared deviations of group means from grand mean, and

$$
S S_{w}=\sum_{i=1}^{k} \sum_{j=1}^{n_{i}}\left(\mathrm{X}_{i j}-\overline{\mathrm{X}}_{i}\right)^{2}
$$

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 1,104 questionnaires completed ${ }^{1}$ as valid samples.

[^0]The sample structure is shown in Table 7.
Table 7 Contingency Table for Broadcasting Market 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\% | 1,104 | 100.0\% | 1,104 | 100.0\% |  |  |
| Gender <br> Male <br> Female | $\begin{array}{r} 9,957,272 \\ 10,279,041 \end{array}$ | $\begin{aligned} & 49.2 \% \\ & 50.8 \% \end{aligned}$ | 517 587 | $\begin{aligned} & 46.8 \% \\ & 53.2 \% \end{aligned}$ | 543 561 | $\begin{aligned} & 49.2 \% \\ & 50.8 \% \end{aligned}$ | The Chi-square value is 2.492 , and p -value (= 0.114 ) is below the accepted siginificance 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 siginificance level of $5 \%$, meaning no significant difference between samples and the target population in distribution of gender. |
| Age <br> Age 16-25 <br> Age 26-35 <br> Age 36-45 <br> Age 46-55 <br> Age 56-65 <br> Age 66 and above | $\begin{aligned} & 2,848,953 \\ & 3,226,276 \\ & 3,901,910 \\ & 3,581,873 \\ & 3,389,119 \\ & 3,288,182 \\ & \hline \end{aligned}$ | $\begin{aligned} & 14.1 \% \\ & 15.9 \% \\ & 19.3 \% \\ & 17.7 \% \\ & 16.7 \% \\ & 16.2 \% \end{aligned}$ | $\begin{aligned} & 185 \\ & 195 \\ & 211 \\ & 194 \\ & 170 \\ & 149 \\ & \hline \end{aligned}$ | $\begin{aligned} & 16.8 \% \\ & 17.7 \% \\ & 19.1 \% \\ & 17.6 \% \\ & 15.4 \% \\ & 13.5 \% \\ & \hline \end{aligned}$ | $\begin{aligned} & 155 \\ & 176 \\ & 213 \\ & 195 \\ & 185 \\ & 179 \\ & \hline \end{aligned}$ | $\begin{aligned} & 14.1 \% \\ & 15.9 \% \\ & 19.3 \% \\ & 17.7 \% \\ & 16.7 \% \\ & 16.2 \% \\ & \hline \end{aligned}$ | The Chi-square value is 14.050 , and $p$-value ( $=$ 0.015 ) is below the accepted siginificance 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 siginificance level of $5 \%$, meaning no significant difference between samples and the target population in distribution of age. |
| City or County <br> New Taipei City <br> Taipei City <br> Taoyuan City <br> Taichung City <br> Tainan City <br> Kaohsiung City <br> Yilan County <br> Hsinch County <br> Miaoli County <br> Changhua County <br> Nantou County <br> Yilan County <br> Chiayi County <br> Pingtung County <br> Taitung County <br> Hualien County <br> Penghu County <br> Keelung City <br> Hsinch City <br> Chiayi City | $3,496,771$ $2,268,067$ $1,891,291$ $2,386,347$ $1,637,097$ $2,420,482$ 396,287 466,323 473,111 $1,096,893$ 436,377 597,967 452,239 725,792 189,642 284,487 93,501 327,637 367,183 228,819 | $17.3 \%$ $11.2 \%$ $9.3 \%$ $11.8 \%$ $8.1 \%$ $12.0 \%$ $2.0 \%$ $2.3 \%$ $2.3 \%$ $5.4 \%$ $2.2 \%$ $3.0 \%$ $2.2 \%$ $3.6 \%$ $0.9 \%$ $1.4 \%$ $0.5 \%$ $1.6 \%$ $1.8 \%$ $1.1 \%$ | 164 116 90 83 64 99 44 31 24 68 64 46 43 25 28 14 28 17 29 27 | $14.9 \%$ $10.5 \%$ $8.2 \%$ $7.5 \%$ $5.8 \%$ $9.0 \%$ $4.0 \%$ $2.8 \%$ $2.2 \%$ $6.2 \%$ $5.8 \%$ $4.2 \%$ $3.9 \%$ $2.3 \%$ $2.5 \%$ $1.3 \%$ $2.5 \%$ $1.5 \%$ $2.6 \%$ $2.4 \%$ | 191 124 103 130 89 132 22 25 26 60 24 33 25 40 10 16 5 18 20 | $17.3 \%$ $11.2 \%$ $9.3 \%$ $11.8 \%$ $8.1 \%$ $12.0 \%$ $2.0 \%$ $2.3 \%$ $2.3 \%$ $5.4 \%$ $2.2 \%$ $3.0 \%$ $2.2 \%$ $3.6 \%$ $0.9 \%$ $1.4 \%$ $0.5 \%$ $1.6 \%$ $1.8 \%$ $1.1 \%$ | The Chi-square value is 310.444 , and $p$-value $(=0.000)$ is below the accepted siginificance 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 siginificance level of $5 \%$, meaning no significant difference between samples and the target population in distribution of city and county. |

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.
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."

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 increased or reduced 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 | 1,104 | 100.0\% | 1,104 | 100.0\% |  |
| Age |  |  |  |  |  |
| Age 16-25 | 185 | 16.8\% | 155 | 14.1\% | 0.84 |
| Age 26-35 | 195 | 17.7\% | 176 | 15.9\% | 0.90 |
| Age 36-45 | 211 | 19.1\% | 213 | 19.3\% | 1.01 |
| Age 46-55 | 194 | 17.6\% | 195 | 17.7\% | 1.01 |
| Age 56-65 | 170 | 15.4\% | 185 | 16.7\% | 1.09 |
| Age 66 and above | 149 | 13.5\% | 179 | 16.2\% | 1.20 |

## 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 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 101 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 7.98 . Among the aged 55 and over groups, the average number of refusals was 9.53 , 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 0.84 times greater; the sample number of ages 26-35 was 0.9 times greater; the sample number of ages $36-45$ was 1.01 times greater; the sample number of middle-aged people such as ages 46-55 was 1.01 times greater; the sample number of ages 56-65 was 1.09 times greater; and the sample number of ages 66 and above was 1.2 times greater.

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

## III. Results

## A. Audiovisual Behaviors

## Audiovisual Behavior Q3

## 1. Overall Analysis

According to the survey results, $59.3 \%$ of the people over the age of 16 only watch TV, while $34.8 \%$ watch TV and listen to radio and only $0.9 \%$ listen to radio; $5 \%$ neither watch TV nor listen to radio (see Figure 1).


Base : $N=1,104$, single-choice
Figure 1 Those Who Watch TV or Listen to Radio

## 2. Comparative Analysis

## (1) Analysis of regional differences

As far as the regions are concerned, except for people in Kaohsiung, Pingtung and Penghu, who have the highest proportion of watching TV and listening to the radio ( $59.8 \%$ ), the highest proportions in other regions watch TV. Among them, the highest proportion of watching TV is in Taipei City, New Taipei City and Keelung (70.4\%), the lowest proportion of watching TV is in Yunlin, Chiayi, and Tainan (58.7\%).
(2) Analysis of basic differences

When analyzed by gender, more women (61.6\%) than men (56.9\%) watch television, both the highest proportions.

When analyzed by age, the majority of people the highest proportion in all age groups watch TV, with the highest rate $69 \%$ of people aged 66 and over and the lowest rate $48.6 \%$ of those aged $36-45$ years old.

When analyzed by marital status, the majority regardless of marital status have the highest proportion watching TV, with the highest rate $63.8 \%$ of those widowed/separated people and the lowest rate $58.4 \%$ of those unmarried.

## (3) Analysis of differences in social and economic status

The result of Chi-square tests indicates that people those who watch TV or listen to radio significantly varies by housing tenure.

When analyzed by housing tenure, home owners(59.7\%) and house renters ( $59.2 \%$ ) have the highest proportion of watching TV.

## Equipment Q4

## 1. Overall analysis

More than $94.3 \%$ of people over the age of 16 have TV sets in their homes, with having one TV being the highest (46.6\%), followed by two TV sets (32.1\%) (see Figure 2)


Base : $N=1,104$, single-choice
Figure 2 Number of TV Sets at Home

## 2. Comparative Analysis

## (1) Analysis of regional differences

The majority of people in all of the regions have one TV set, the highest rate $53.5 \%$ in Taipei City, New Taipei City and Keelung and the lowest rate $39.6 \%$ in Yunlin, Chiayi, and Tainan.

## (2) Analysis of basic differences

The result of Chi-square tests indicates that number of TV sets at home varies significantly by marital status.

When analyzed by gender, the highest proportions for both men ( $47 \%$ ) and women ( $46.1 \%$ ) have one TV set.

When analyzed by age, the majority of people in all age group have the highest proportion of having one TV, with a highest rate of $51.6 \%$ among those $56-65$ years old and the lowest rate $43.8 \%$ of those aged 16-25.

When analyzed by marital status, regardless of marital status, people have more than one TV, with the highest rate $53.4 \%$ of those widowed/separated people and the
lowest rate $44.6 \%$ of those unmarried.

## (3) Analysis of differences in social and economic status

The result of Chi-square tests indicates that number of TV sets at home varies significantly by housing tenure status.

When analyzed by housing tenure, home owners ( $44.3 \%$ ) and house renters (53\%) have the highest rates of having one TV. More home owners (34.6\%) than house renters ( $25.7 \%$ ) have two TV sets.

## The Main Visual Platform Q10

1. Overall analysis

The most common platform for viewers in Taiwan is cable TV (64.3\%), followed by Chunghwa Telecom's MOD (13.1\%) and Online Streaming videos (11.4\%) (see Figure 3).


Base : $\mathrm{N}=1,032$, single-choice ( except those people who don't know what kind of platform they watch )

## Figure 3 Primary Visual Platform

## 2. Comparative Analysis

## (1) Analysis of regional differences

When analyzed by region, cable TV is the most important platform in all regions, with the highest rate $69.4 \%$ in people in Yilan, Hualien, and Taitung and the lowest rate $58.4 \%$ in people in Yunlin, Chiayi, and Tainan. Online Streaming videos (OTT TV) is higher than other regions in Taoyuan, Hsinchu and Miaoli, accounting for 18.6\%
(2) Analysis of basic differences

The Chi-square test shows that the primary video watching platform varies significantly by age and marital status.

When analyzed by gender, both men ( $63.7 \%$ ) and women ( $64.9 \%$ ) choose cable TV as their primary source of viewing.

When analyzed by age, cable TV is the main source of viewing for all age groups,
with the highest rate $77.6 \%$ of those aged 66 and above and the lowest rate of $50.7 \%$ of 16-25 years old. In addition, the rate choosing OTT TV as their primary source of viewing decreases by age, with the highest rate $24.5 \%$ for $16-25$ years old and the lowest rate $2.5 \%$ for people aged 66 and over.

When analyzed by marital status, cable TV is the main source of viewing for all marital status, with the highest rate $68.6 \%$ of those widowed/separated and the lowest rate $58.1 \%$ among those unmarried.

In addition, the rate among those unmarried (20.3\%) choose OTT TV as their primary source of viewing is higher than those of other marital status groups. $14.5 \%$ of those widowed/separated choose terrestrial TV as their primary source of viewing, higher than those of other marital status groups.
(3) Analysis of differences in social and economic status

The result of Chi-square tests indicates that the primary video watching platform varies significantly by housing tenure, education level and individual average monthly income.

When analyzed by housing tenure, cable TV is the main source of viewing for both homeowners ( $67.6 \%$ ) and house renters $(51.1 \%)$. The rate of house renters ( $21.4 \%$ ) choose OTT TV as their primary source of viewing have a higher rate than home owners (8.9\%).

When analyzed by education level, cable TV is the main source of viewing for all education level, with the highest rate of $77.8 \%$ in the group of elementary school and below and the lowest rate of $55.2 \%$ in people with a master's degree or higher.

When analyzed by individual average monthly income, cable TV is the main source of viewing for all groups, with the highest rate $75.4 \%$ in the NT10,000NT19,999 group and the lowest rate $57 \%$ in the NT30,000-NT39,999 group.

## Cable TV Subscription Service Q11 Q13 Q14

## 1. Overall analysis

Most cable TV subscribers do not purchase other channels (88.8\%) (see Figure 4). The proportion of those who know (49.3\%) and those who do not know (50.7\%) that cable TV has functions such as recording, pause, and rebroadcasting makes little difference (see Figure 5). $69.7 \%$ say they do not use any value-added functions of cable TV. For value-added functions, more people use shopping (14.4\%) and catch-up services (12.2\%) (see Figure 6).


Base: $\mathrm{N}=729$, multiple-choice (people who use cable TV to watch TV programs)
Figure 4 Whether to Purchase other Channels of Cable TV Services


Base: $\mathrm{N}=729$, single-choice (people watch TV programs via cable TV)
Figure 5 Do You Know that Cable TV Provide Recording, Pausing, and Catchup TV Programs?


Base: $\mathrm{N}=359$, multiple-choice (people who know Cable TV has the functions of recording, pausing and catch-up TV programs)

Figure 6 Which Cable TV Features have been Used?

## 2. Comparative Analysis

## (1) Analysis of regional differences

The results of the Chi-square tests indicate that whether the public knows about the recording, pausing, and catch-up functions on cable TV at home varies significantly by regions.

The majority of people in all regions have not purchased other channels. Among them, the Taoyuan, Hsinchu and Miaoli region has the highest proportion of $90.3 \%$ and the Yunlin, Chiayi, and Tainan region has the lowest proportion of $83.6 \%$. Regarding whether the public know that cable TV has recording, pause and catch-up functions, a higher percentage of those who know is found in Taoyuan, Hsinchu and Miaoli ( $68.2 \%$ ), while the other areas have higher percentages of not knowing. Among them, the Kaohsiung, Pingtung and Penghu area have the highest proportion of $57.1 \%$ and Yunlin, Chiayi, and Tainan area have the lowest proportion of $51 \%$. Regarding the cable TV functions used by the public, those not using any above functions is the highest proportion in all regions, with the highest rate of $81.7 \%$ in Yilan, Hualien, and Taitung and the lowest rate of $58.5 \%$ in Kaohsiung, Pingtung and Penghu area.
(2) Analysis of basic differences

The result of Chi-square tests indicates that whether the public know of the recording, pausing, and catch-up functions of cable TV varies significantly by age and marital status.

When analyzed by gender, in addition to subscribing to the basic channels, men ( $87 \%$ ) and women ( $90.4 \%$ ) do not purchase additional channels. Regarding whether people know that cable TV at home has the functions of recording, pausing, and catch-up programs, $52.2 \%$ of men and $53.5 \%$ of women know this. Regarding the cable TV functions used by the public, the highest proportions of men (71.1\%) and women (68.2\%) do not use any function.

When analyzed by age, in addition to subscribing to the basic channels of cable TV, the majority of people in all age groups do not purchase additional channels, with the highest rate of $93.8 \%$ of $46-55$ year-olds and the lowest rate of $77.2 \%$ of $16-25$ year-olds. Regarding whether the public know that cable TV can be used for recording, pausing, and catch-up programs, 16-25 year-olds (58.4\%), 26-35 year-olds (56.6\%) and 36-45 year-olds (55.1\%) have a higher rate of knowing, while the other age groups, 46-55 year-olds (53.4\%); 56-65 year-olds (54.8\%); and people aged 66 and above ( $63.3 \%$ ), have higher rates of not knowing. Regarding the cable TV functions used by the public, the highest percentages of all age groups do not use these, with the highest rate $80.9 \%$ of $26-35$ year-olds and the lowest rate $58.3 \%$ of $46-55$ year-olds

When analyzed by marital status, in addition to subscribing to the basic cable TV
channels, the majority of people regardless of marital status have not purchased other channels, with the highest rate $92.6 \%$ of widowed/separated people and the lowest rate $85 \%$ of those unmarried. Regarding whether the public know that cable TV can be used for recording, pausing, and catch-up programs, unmarried people (62.8\%) have a higher rate of knowing, and married people (56.6\%) and those widowed/separated ( $65.6 \%$ ) have a higher rate of not knowing. Regarding the cable TV functions used by the public, all have a higher rate of not using regardless of marital status, with the highest rate $72.7 \%$ among those widowed/separated and the lowest rate $68.8 \%$ of those unmarried.

## (3) Analysis of differences in social and economic status

The result of Chi-square tests indicates that the public knowing of the recording, suspending, and catch-up functions of cable TV varies significantly by education level, profession and individual average monthly income.

When analyzed by education level, those with elementary school or lower education ( $72.8 \%$ ), high school and secondary school education (67.6\%) and senior high and vocational school education ( $51 \%$ ) have higher proportions of not knowing, while those with junior college education (53.6\%), a bachelor's degree (57.5\%), a master's degree or higher (65.1\%), have higher proportion of knowing.

When analyzed by profession, people in agriculture, forestry, fishery and husbandry ( $84 \%$ ), people in the wholesale and retail trade industries ( $54.4 \%$ ), people in the transportation and warehousing industries( $77.6 \%$ ), people in the hospitality and catering industries $(56.7 \%)$, people in the real estate industry ( $69.1 \%$ ), people in the support service industries ( $51 \%$ ), people in the arts, entertainment and recreation services industries ( $57.5 \%$ ), housekeepers( $66 \%$ ) and the retired ( $57.4 \%$ ) have the highest proportion of not knowing, while those of other occupations have a higher proportion of knowing, with the highest rate of $91.2 \%$ of people in public administration and national defense, and the lowest rate of $51.7 \%$ of people in both the manufacturing industry and the health care and social work services industries.

When analyzed by individual average monthly income, those earning NT1NT9,999 (55.5\%), NT10,000-NT19,999 (63.9\%), NT20,000-NT29,999 (52.2\%) and NT30,000-NT39,999 (50.4\%) have a higher proportion of not knowing, while people of no income ( $55.9 \%$ ), those earning NT40,000-NT49,999 (50.2\%), NT50,000NT59,999(70.9\%) and NT60,000 or more (57.8\%) have higher proportions of knowing.

## Considering Cancellation of Subscription to Cable TV Services Q15 Q16 Q17

## 1. Overall analysis

The above analysis shows that cable TV is the most common source of viewing in Taiwan. When interviewees were asked their willingness to renew their subscription for next year, $89.1 \%$ of them responded affirmatively, while $4.9 \%$ of cable subscribers considered suspension (see Figure 7).


Base: $\mathrm{N}=729$, single-choice (cable TV subscribers)
Figure 7 Considering Cancellation of Cable Television Services

For those who consider suspension, the main reasons include that cable TV services is too expensive ( $34.5 \%$ ), the internet is convenient ( $23.9 \%$ ), and they seldom watch TV (12.3\%) (see Figure 8); among the respondents who considered the suspension, $47.8 \%$ would consider using free online streaming series, and $28.4 \%$ considered subscribing to Chunghwa Telecom's MOD (see Figure 9).


Base : $\mathrm{N}=36$, multiple-choice (people considering not to subscribe to cable TV in the next 12 months)
Figure 8 Reasons to Stop Subscribing to Cable TV Services


Base : $\mathrm{N}=36$, multiple-choice (people considering not to subscribe to cable TV in the next 12 months)
Figure 9 Consider Subscribing to Other Services

## 2. Comparative Analysis

## (1) Analysis of regional differences

When analyzed by region, the majority of people in all regions are not considering stopping subscription to cable TV services in the next year, with the highest being $93.7 \%$ in Kaohsiung, Pingtung and Penghu and the lowest $85.2 \%$ in Taoyuan, Hsinchu and Miaoli. For those who consider suspension, people in Taoyuan, Hsinchu and Miaoli (32.8\%) have the highest rate of seldom watching TV, those in Kaohsiung, Pingtung and Penghu ( $42.7 \%$ ) have the highest rate of thinking that the internet is convenient, while those in Taichung, Changhua and Nantou (59.9\%) have the highest rates of thinking that cable TV services is too expensive. Among the respondents who considered suspension, the majority of people in all regions have considered using free online streaming series. Among them, the Taichung, Changhua and Nantou region has the highest proportion of $63.3 \%$ and the Kaohsiung, Pingtung and Penghu region has the lowest proportion of $41.2 \%$. Some results were not analyzed due to the small sample size (less than 5).
(2) Analysis of basic differences

When analyzed by gender, both men ( $88.5 \%$ ) and women ( $89.8 \%$ ) are considering to subscribe to cable TV next year. For those who are considering suspension, $21.6 \%$ of men say they seldom watch TV, and $52 \%$ of women say they think cable TV services are too expensive. Among the respondents who consider suspension, $64.1 \%$ of men would consider using free online streaming series, while women consider using terrestrial TV services (37.5\%) or subscribing to Chunghwa Telecom's MOD (37.4\%).

When analyzed by age, the majority in all age groups are not considering to stop subscribing to cable TV services in the next year, with the highest rate $95.7 \%$ aged 66 and above and the lowest rate $72.5 \%$ aged 16-25.

For those who are considering suspension, except for people aged 46-55 (29.2\%) who consider the internet to be convenient, the other age groups have the highest proportion of thinking that think cable TV service is too expansive, with the higher rate $61 \%$ aged $56-65$ and the lowest rate $35.7 \%$ aged $16-25$. Among the respondents who consider suspension, people aged 16-25 (46\%) have the highest proportion of considering Chunghwa Telecom's MOD services, while the majority of people aged 46-55 (57.6\%) and 56-65 (53.3\%) consider using free online streaming services.

Regardless of marital status, the majority are not considering to stop a subscription to cable TV services in the next year, with the highest rate $93.2 \%$ of those married and the lowest rate $81.3 \%$ of those unmarried. For those who consider suspension, unmarried people ( $25.7 \%$ ) has the highest proportion considering the internet to be convenient, and married people (49.1\%) have the highest proportion who think that cable TV service is too expansive. Among the respondents who consider suspension, unmarried ( $58.4 \%$ ) and married ( $35 \%$ ) both have the highest rates of using free online streaming services, while the results from widowed/separated people were not analyzed due to small sample size (less than 5).

## The Subscription to and Use of MOD Services Q20 Q22 Q23

## 1. Overall analysis

For those who subscribe to Chunghwa Telecom's MOD, the most frequent option (25.8\%) are subscription packages of NT\$201-300, such as family luxury package, popular package, value package; followed by packages NT\$101-200, such as special selected family package, selected package, package B, etc. (21.1\%). In addition, up to $22.7 \%$ people not knowing which package they purchased is the highest proportion (see Figure 10).


Base: $\mathrm{N}=200$, multiple-choice (MOD subscribers)

## Figure 10 The Package Subscribed by MOD Subscribers

68.4\% of the people who subscribe to Chunghwa Telecom's MOD know that Chunghwa Telecom's MOD has recording, pause, catch-up, and information query functions, and $31.6 \%$ of the people don't know (see Figure 11); however, in terms of usage, $40.6 \%$ of people do not use the above functions, while $22.6 \%$ use the catch-up function, $22 \%$ use pause program function, and $21.3 \%$ use life information inquiries function (see Figure 12).


Base: N=200, single-choice (MOD subscribers)
Figure 11 Do you Know that MOD has Recording, Pause, Catch-up, and Information Query Functions?


Base: $\mathrm{N}=137$, multiple-choice (people who know MOD has recording, pause, catch-up, and information query functions)

Figure 12 Use the MOD Function

## 2. Comparative Analysis

(1) Analysis of regional differences

Among the people who subscribed to Chunghwa Telecom MOD, Taichung, Changhua and Nantou (28.4\%) and Kaohsiung, Pingtung and Penghu (40.7\%) have the highest rates subscribing to the NT\$201-300 packages, while those in other areas have the highest rates of not knowing which package they subscribe to.

Most people who subscribe to Chunghwa Telecom MOD know that Chunghwa Telecom MOD has recording, pause, catch-up, and information query functions, with the highest rate of $85.8 \%$ in Kaohsiung, Pingtung and Penghu region and the lowest rate of $55.7 \%$ in the Yunlin, Chiayi, and Tainan region.

In terms of usage, Kaohsiung, Pingtung and Penghu (36.2\%) have highest rates using the life information inquiry function, while those in the rest of areas have the highest proportions of not using the above functions, with the highest rate of $51.8 \%$ in Yilan, Hualien, and Taitung and the lowest rate of $38.4 \%$ in Yunlin, Chiayi, and Tainan.
(2) Analysis of basic differences

The result of Chi-square tests indicates that whether people know that Chunghwa Telecom's MOD provides recording, suspension, catch-up and information query features varies significantly by gender and age.

When analyzed by gender, for those who subscribe to Chunghwa Telecom's MOD, men have the highest proportion of not knowing which package they have purchased (24.7\%), followed by $21.9 \%$ of men subscribing to the NT\$201-300 packages, while women have the highest proportion of subscribing to the NT\$201300 packages ( $28 \%$ ). The majority of both men ( $74.7 \%$ ) and women ( $60.1 \%$ ) have
know that Chunghwa Telecom's MOD provides recording, suspension, catch-up and information query features; as for the functions of Chunghwa Telecom's MOD, more men ( $42.4 \%$ ) than women ( $37.7 \%$ ) use these.

When analyzed by age, $37.6 \%$ of those $16-25$ and $22.6 \%$ of $56-65$ subscribe to Chunghwa Telecom's MOD service are the highest proportions purchasing NT\$201300 packages; those $26-35(25.3 \%)$ is the highest proportion purchasing NT\$101-200 packages, and $22.5 \%$ of those $46-55$ year-olds only pay the platform service fee (NT\$89) without additional purchases, while $25.4 \%$ of those $36-45$ and $46.7 \%$ of those 66 and above do not know which package they have.

A majority (54.8) of those aged 56-65 do not know that Chunghwa Telecom's MOD provides recording, suspension, catch-up and information query features, while those in other age groups are more likely to know, with the highest rate $80.3 \%$ among those aged 36-45 and the lowest rate $61.8 \%$ among those 65 and above. As for the functions of Chunghwa Telecom MOD, $49.7 \%$ of those $56-68$ is the highest proportion of those who using the video on demand function, while the other age groups do not use these, with the highest rate $67.1 \%$ of those aged 66 and over and the lowest rate of $32.9 \%$ of those aged 46-55. In addition, people aged 16-25 has highest percentage ( $34.8 \%$ ) of those who using the pause program function than other age groups.

When analyzed by marital status, unmarried people ( $30.1 \%$ ) have the highest proportion purchasing NT\$201-300 packages, $22.6 \%$ of married people do not know which package they have, and widowed/separated people have the highest proportions (34.8\%) who only pay the platform service fee (NT\$89) without additional purchases. Regardless of marital status, people know that Chunghwa Telecom's MOD provides recording, suspension, catch-up and information query features, with the highest rate $74.4 \%$ among those unmarried and the lowest rate $63.9 \%$ of those married. As for the use of functions of Chunghwa Telecom's MOD, the majority by marital status do not use these functions, with the highest rate $44.9 \%$ among those married and the lowest rate $35.8 \%$ of unmarried people.

## Whether people Consider Stopping Subscribing MOD Service Q24 Q25 Q26

## 1. Overall analysis

Only $10.8 \%$ of those who subscribe to Chunghwa Telecom MOD are considering to stop their subscription to the MOD service in the next year, and $79.2 \%$ will continue to subscribe to the MOD service (see Figure 13).


Base: $\mathrm{N}=200$, single-choice (MOD subscribers)
Figure 13 Considering to Stop Subscribing to MOD Service
For those who are considering suspension, the main reasons include that there is no intention to watch TV programs provided by the MOD service ( $47.6 \%$ ), followed by seldom watching MOD (23.3\%) (see Figure 14). Among the respondents who are considering suspension, $32.4 \%$ would consider using a cable TV service, and $29.8 \%$ are considering free online streaming services (see Figure 15).


Base: $\mathrm{N}=22$, multiple-choice (people considering not to subscribe to MOD service in the next 12 months)

Figure 14 Reasons to Stop Subscribing to MOD Service


Base: $\mathrm{N}=22$, multiple-choice (people considering not to subscribe to MOD service in the next 12 months)

Figure 15 Consider Subscribing to other service

## 2. Comparative Analysis

(1) Analysis of regional differences

The majority of people in all regions will continue to subscribe to MOD service in the next year, with the highest rate $97.8 \%$ in Kaohsiung, Pingtung and Penghu, and the lowest rate $63.6 \%$ in Taichung, Changhua and Nantou.

Regarding the main reasons for suspension and other services if considering not to subscribe to MOD service, a sample size of 22 is not enough for comparative analysis because some sample size will be even smaller (less or equal to 5) when broken down into categories.

For those who consider suspension, people in Taichung, Changhua and Nantou ( $71.5 \%$ ) have the highest rate for not intending to watch TV programs provided by MOD service, while the results from other regions were not analyzed due to the small sample size. Among the respondents who are considering suspension, people in Taichung, Changhua and Nantou ( $44.5 \%$ ) have the highest proportion of using cable TV service, with the results from other regions not analyzed due to small sample size.
(2) Analysis of basic differences

When analyzed by gender, $73.6 \%$ of men and $86.4 \%$ of women are considering to continue to subscribe MOD services in the coming year. For those who are considering suspension, both $43.9 \%$ of men and $57.4 \%$ of women think they will not watch TV programs provided by the MOD service. Among the respondents who are considering suspension, $35 \%$ of men would consider using free online streaming series, while $41.1 \%$ of women would consider using cable TV services.

When analyzed by age, the majority of people in all age groups are considering to continue to subscribe to MOD service subscriptions in the next year, with the highest rate $98 \%$ of people aged $56-65$, and the lowest rate $70.7 \%$ of people aged 46-

For those who consider suspension, people aged 26-35 (54.8\%) have the highest proportion of not intending to watch TV programs provided by MOD service, and results from other age groups were not analyzed due to the small sample size. Among the respondents who considered suspension, those aged 26-35 (38\%) have the highest proportion of using free online streaming series, and results from other age groups were not analyzed due to small sample size.

When analyzed by marital status, the majority of people in all marital status have the highest proportions of considering continuing to subscribe MOD service subscriptions in the next year, with the highest rate $84.9 \%$ of those widowed/separated people and the lowest rate $75.3 \%$ of those unmarried people.

For those who are considering suspension, the majorities of those unmarried ( $34.7 \%$ ) think that the internet is convenient, while the married (56.8\%) have the highest proportion of not intending to watch TV programs provided by MOD service. The results from those widowed/separated were not analyzed due to the small sample size. Among the respondents who are considering suspension, the unmarried ( $34.6 \%$ ) have the highest rate using free online streaming series, while the majorities of those married (43.7\%) use cable TV service. The results from those widowed/separated were not analyzed due to the small sample size.

## Connecting the TV via the Networked Device and Viewing the Contents on the TV Screen Q28

## 1. Overall analysis

In terms of the devices through which the TV set is connected and content seen through a TV screen in the past 12 months, the survey results show that the proportion using smart phones ( $37.2 \%$ ) is the highest, followed by through a cable box $(29.9 \%)$. The proportion of the public who will not use any connected devices to connect to the TV and watch online content through a TV is up to $36.2 \%$ (see Figure 16).


Base: $\mathrm{N}=1,053$, multiple-choice (people who have networked devices at home)
Figure 16 In the Past 12 Months, People Connected to the TV Set via a Networked Device and Watched Online Content on a TV Screen

## 2. Comparative Analysis

(1) Analysis of regional differences

When analyzed by region, in the past 12 months, the proportion of people in Taichung, Changhua and Nantou (45.2\%), Yunlin, Chiayi, and Tainan (41.6\%), Yilan, Hualien, and Taitung (41.7\%) regions connecting TV sets through smart phones and watching online content on TV screens are the highest; people in Taipei City, New Taipei City and Keelung ( $40.8 \%$ ) and Kaohsiung, Pingtung and Penghu (45.7\%), who do not use networked device to connect TV sets and watch online content through TV screens have the highest proportion. In addition, people in Taoyuan, Hsinchu and Miaoli (49.4\%) have the highest proportion using a cable box.
(2) Analysis of basic differences

When analyzed by gender, in the past 12 months, $37.8 \%$ of men connected to TVs via smart phones and watched online content on TV screens, while the majority of women did not use any networked devices ( $38.2 \%$ ).

When analyzed by age, in the past 12 months, people aged 56-65 (45.8\%), 66 and over ( $48.8 \%$ ) have a higher proportion of not using any networked devices, while the majority of people in other age groups use smart phones to connect to TV sets and watching online content through a TV screen, with the highest rate of $45.8 \%$ in people aged 16-25 and the lowest rate of $39.2 \%$ in people aged 46-55.

When analyzed by marital status, in the past 12 months, except unmarried people ( $43.5 \%$ ) who have a higher proportion of using smart phones to connect to TV sets
and watching online content through a TV screen, married people (41.2\%) and those widowed or separated ( $38.3 \%$ ) have the highest proportions not using networked devices to connect TV set and watching online content through TV screens.

## Smart TVs Q29 Q30 Q32

## 1. Overall analysis

The survey finds that $78.5 \%$ of people do not have smart TVs (see Figure 17). Of those who do have smart TVs in the home, $70.7 \%$ have their smart TVs connected to the broadband network at home (see Figure 18).


Base : $\mathrm{N}=1,041$, single-choice (having a TV set in the home)
Figure 17 Having a Smart TV at Home


Base : $\mathrm{N}=224$, single-choice (having smart TV at home)
Figure 18 Whether Home Smart TV is Connected to Broadband Network

In the past 12 months, people with smart TVs at home have used smart TVs to watch videos longer than ten minutes on Facebook and YouTube (30.8\%), watch free movies and TV programs provided by OTT TV service providers ( $30.2 \%$ ), and watch short films of less than ten minutes on Facebook and YouTube (29.9\%) (see Figure 19).


Base : $\mathrm{N}=224$, multiple-choice (respondents who have smart TVs at home)
Figure 19 Activities Using Smart TV in the Past 12 Months

## 2. Comparative Analysis

## (1) Analysis of regional differences

The result of Chi-square tests indicates that whether people have a smart TV at home varies significantly by region.

When analyzed by region, the majority of people in all regions have no smart TVs at home, with the highest rate $85.3 \%$ in Kaohsiung, Pingtung and Penghu, and the lowest rate $60.1 \%$ in the Yilan, Hualien, and Taitung region. The highest proportion in all regions have smart TVs connected to a broadband network at home, with the highest rate $85.6 \%$ in Taoyuan, Hsinchu and Miaoli, and the lowest rate $49.7 \%$ in Yilan, Hualien, and Taitung.

In the past 12 months, people with smart TVs at home in Taipei City, New Taipei City ( $47.1 \%$ ) have the highest proportion not using smart TV, and people in Taoyuan, Hsinchu and Miaoli (38.3\%) and in Taichung, Changhua and Nantou (53.2\%) have the highest rates of watching free movies and TV programs provided by OTT TV service providers. People with smart TVs at home in Yunlin, Chiayi, and Tainan ( $46.1 \%$ ) have the highest proportion of using smart TVs to watch videos longer than ten minutes on Facebook and YouTube, and people in Kaohsiung, Pingtung and

Penghu ( $39.9 \%$ ) watch short films of less than ten minutes on Facebook and YouTube. In addition, people in Yilan, Hualien, and Taitung (56.3\%) have the highest proportion of using replay services provided by television operators on the internet

## (2) Analysis of basic differences

The result of Chi-square tests indicates that whether people have smart TVs at home varies significantly by marital status.

When analyzed by gender, $79.4 \%$ of men and $77.7 \%$ of women have no smart TV at home. Both men ( $68.3 \%$ ) and women ( $72.9 \%$ ) have smart TVs connected to a broadband network at home. In the past 12 months, most men ( $34.5 \%$ ) have watched short films of more than ten minutes on Facebook and YouTube, and most women (34.5\%) have used smart TVs to watch free movies and TV programs provided by OTT TV service providers.

When analyzed by age, most have no smart TVs at their homes, with the highest rate of $86.4 \%$ are those aged 66 and above and the lowest rate ( $72.2 \%$ ) aged 16-25. The majority of people in all age groups have smart TVs connected to broadband networks at home, with the highest rate $85.4 \%$ aged $56-65$ and the lowest rate $60.7 \%$ aged 66 and above.

When using a smart TV in the past 12 months, the majority of people aged 16-25 ( $36.3 \%$ ) and 56-65 (34\%) watch free on-demand video content via cable TV operators or MOD, and 26-35 (41.2\%), 36-45(40.9\%) watched videos less than ten minutes on Facebook and YouTube. People aged 46-55 used smart TV to watch free movies and TV programs provided by OTT TV service providers (40\%), and those aged 66 and over have the highest proportion for not using the smart TV in the past 12 months (62.2\%).

When analyzed by marital status, the majority of people regardless of marital status have no smart TVs in their homes, with the highest rate $82 \%$ of those widowed or separated and the lowest rate $74.1 \%$ of unmarried people. The majority of people regardless of marital status have smart TVs connected to broadband networks at home, with the highest rate $72.4 \%$ of married people and the lowest rate of $63 \%$ of those widowed/separated. As for the use of smart TV for the past 12 months, the majority of those unmarried have watched videos of less than ten minutes on Facebook and YouTube (39\%), while those married (32.7\%) and widowed/separated (32.9\%) have the highest proportion of not using a smart TV in the past 12 months.
(3) Analysis of differences in social and economic status

The result of Chi-square tests indicates that whether or not people have smart TVs at home varies significantly by education level.

When analyzed by education level, the majority of people in all education levels have no smart TVs in their homes, with the highest rate (88.5\%) with elementary
school and lower education, and the lowest rate ( $65.3 \%$ ) with a master's degree or higher.

## B. TV and Radio Viewing Behavior and Feelings

## Prime Time for Watching TV Q42

## 1. Overall analysis

The most popular time for watching television is 20:00-21:00, accounting for $51.5 \%$, followed by 19:00-20:00, accounting for $47 \%$, and 21:00-22:00, accounting for $38.7 \%$. The survey result shows that 19:00-22:00 is the prime time for people in Taiwan to watch TV (see Figure 20).


Base : $\mathrm{N}=1,038$, multiple-choice (TV viewers)
Figure 20 Most Frequent Time Slots for TV

## 2. Comparative Analysis

(1) Analysis of regional differences

Except for people in Yilan, Hualien, and Taitung (54.3\%) who mainly watch TV from 19:00 to 20:00, people in other areas mainly watch TV from 20:00 to 21:00, with
the highest rate of $56.7 \%$ in Kaohsiung, Pingtung and Penghu and the lowest rate of $45.7 \%$ in Taoyuan, Hsinchu and Miaoli.
(2) Analysis of basic differences

When analyzed by gender, $50.5 \%$ of men and $52.4 \%$ of women mainly watch TV from 20:00 to 21:00.

When analyzed by age, except for people aged 66 and over ( $60.4 \%$ ) who mainly watch TV from 19:00 to 20:00, people in other age groups mainly watch TV from 20:00 to 21:00, with the highest rate $60.9 \%$ of those aged 46-55, and the lowest rate $43.2 \%$ of those aged 16-25.

When analyzed by marital status, those widowed/separated ( $53.8 \%$ ) mainly watch TV from 19:00 to 20:00, while those unmarried (46\%) and married (55.2\%) mainly watch TV from 20:00 to 21:00.

## Types of TV Programs often Watched Q43

## 1. Overall analysis

Among all the types of programs, social news accounted for $68.1 \%$, the highest, followed by international news (52.9\%), and weather (48.1\%) (see Figure 21).


Base: $\mathrm{N}=1,038$, multiple-choice (TV viewers)
Figure 21 The Top 10 Types of TV Program often Watched

## 2. Comparative Analysis

(1) Analysis of regional differences

Except for people in Taipei City, New Taipei City and Keelung ( $60.2 \%$ ) who mainly watch international news, the most often watched TV programs in other regions is social news, among which the highest is Yilan, Hualien, and Taitung, reaching $83 \%$, and the lowest is Kaohsiung, Pingtung and Penghu (71.9\%).
(2) Analysis of basic differences

When analyzed by gender, social news is the most often watched TV program,
and the percentage is $69.7 \%$ for men and $66.5 \%$ for women. In addition, men often watch TV programs about international news, political news and sports programs; women often watch TV drama, food and family life programs.

When analyzed by age, the most often watched TV programs is social news, with the highest rate $79 \%$ for people aged 66 and above, the lowest rate $52.7 \%$ for people aged 16-25.

When analyzed by marital status, the most often watched TV program is social news, and the highest is $77.6 \%$ of those widowed/separated, and the lowest $60.8 \%$ of those unmarried.

## Quality of TV Programs Q44 Q45 Q46

## 1. Overall analysis

Overall, $58.4 \%$ of people believe that over the past 12 months, the overall quality of TV programs has maintained their original level, while $19.1 \%$ expressed improvement, and $11 \%$ felt quality had become worse (see Figure 22).


Base: $\mathrm{N}=1,038$, single-choice (TV viewers)
Figure 22 Whether Quality of TV Programs have Improved over 12 Months
For those who think the overall quality of TV programs has improved, they think TV programs have improved by providing a variety of programs (70.5\%), making more high-quality drama (43.4\%), and by following the trend of the content (34.4\%) (see Figure 23).

For those who think the overall quality of TV programs has become worse, they are dissatisfied with repeat TV programs (72.8\%), too many political commentary programs (49.8\%) and political bias in reports (48.4\%) (see Figure 24).


Base: $\mathrm{N}=198$, multiple-choice (respondents who think the TV programs have been improved in the past 12 months)
Figure 23 The Items that TV Shows Have Improved over the Past 12 Months


Base: $\mathrm{N}=114$, multiple-choice (respondents who think that TV programs have been worse in the past 12 months)
Figure 24 The Items that TV Shows Have been Worse in the Past 12 Months (Top 10)

## 2. Comparative Analysis

## (1) Analysis of regional differences

The result of Chi-square tests indicates that the perception of TV program quality varies significantly by region.

In all regions, most believe that the overall quality of TV programs is considered to be the same over the past 12 months, with the highest rate $63 \%$ in Yilan, Hualien, and Taitung, and the lowest rate $51.1 \%$ in Taoyuan, Hsinchu and Miaoli.

For those who consider overall quality of TV programs to have improved, the
highest rate (28.4\%) is among people in Kaohsiung, Pingtung and Penghu, while the lowest rate ( $11.2 \%$ ) is among people in Yunlin, Chiayi, and Tainan. For those who think overall quality of TV programs the highest rate (15\%) is among people in Taoyuan, Hsinchu and Miaoli, while the lowest rate (8.5\%) is among those who live in Taipei City, New Taipei City and Keelung.

For those who think the overall quality of TV programs has improved, the majority of people in all regions think the TV programs have improved in providing a variety of programs, with the highest rate $82.5 \%$ in Yunlin, Chiayi, and Tainan and the lowest rate $62.6 \%$ in Taoyuan, Hsinchu and Miaoli. For those who think the overall quality of TV programs have become worse, the majority of people in all regions are dissatisfied about repeat TV programs, with the highest proportion $85.1 \%$ in Taichung, Changhua and Nantou, and the lowest (61.2\%) in Taipei City, New Taipei City and Keelung. In addition, results from people in Yilan, Hualien, and Taitung were not analyzed due to small sample size (less than 5).

## (2) Analysis of basic differences

The result of Chi-square tests indicate that the perception of TV program quality varies significantly by gender.

When analyzed by gender, both men (56.4\%) and women (60.4\%) think that over the past 12 months, the overall quality of TV programs have maintained their original level. In addition, men ( $22.2 \%$ ) has a higher proportion who consider the overall quality of TV programs to have improved compared to women (16\%).

For those who think the overall quality of TV programs have improved, both men ( $72.9 \%$ ) and women ( $67.3 \%$ ) think that TV programs have improved in providing a variety of programs, while those who think the overall quality of TV programs have become worse, men ( $66.7 \%$ ) and women ( $78.3 \%$ ) are both dissatisfied about repeat TV programs.

When analyzed by age, all age groups believe that over the past 12 months the overall quality of TV programs have maintained their original level, with the highest rate $61 \%$ of those aged $56-65$ and the lowest rate $54.6 \%$ of those aged 66 and above.

For those who think the overall quality of TV programs has improved, all age groups think that TV programs have improved by providing a variety of programs, with the highest rate $75.5 \%$ of $16-25$ year-olds and the lowest rate $63.5 \%$ of 46-55 year-olds. For those who think the overall quality of TV programs has become worse, except for people aged $56-65$ ( $82.3 \%$ ) dissatisfied with too many political commentary programs, people in other age groups are dissatisfied about repeat TV programs, with the highest rate $84.9 \%$ of those aged $26-35$ and the lowest rate $63.5 \%$ of those aged 16-25.

When analyzed by marital status, the majority of people believe that over the
past 12 months, the overall quality of TV programs has maintained their original level, with the highest rate $61 \%$ of those married and the lowest rate $55.2 \%$ of those unmarried. For those who think that the overall quality of TV programs has improved, regardless of marital status, all think that TV programs have improved in providing a variety of programs, with the highest rate $74.5 \%$ among those unmarried and the lowest rate of $63.8 \%$ among the widowed or separated. While for those who think the overall quality of TV programs is worse, regardless of marital status, all are dissatisfied about the repetitive TV programs, with the highest rate $100 \%$ of widowed or separated people, and the lowest rate $68.5 \%$ of married people.

## Radio Listening Equipment Q47 Q48

## 1. Overall analysis

According to the survey, people listen to radio programs most often through incar audio (57\%), followed by mobile phones (37.3\%) and radio (28.1\%) (see Figure 25).


Base: $\mathrm{N}=394$, multiple-choice (those who listen to radio)
Figure 25 Radio Listening Equipment

Most people do not have radios in their homes, and that proportion is $74.5 \%$; followed by a radio in the home, the proportion is $20.4 \%$ (see Figure 26).


Base: $\mathrm{N}=1,104$, single-choice
Figure 26 How Many Radios in the House

## 2. Comparative Analysis

## (1) Analysis of regional differences

Except for people in Yilan, Hualien, and Taitung which has the highest proportion of using their mobile phone to listen to the radio ( $38.1 \%$ ), people in all regions most often listen to the radio in the car, with the highest rate $64 \%$ in Taipei City, New Taipei City and Keelung and the lowest rate $53.4 \%$ in Taichung, Changhua and Nantou. A majority in all regions do not have a radio in their home, with the highest rate $85.1 \%$ in Taipei City, New Taipei City and Keelung and the lowest rate $65.7 \%$ in Taichung, Changhua and Nantou.

## (2) Analysis of basic differences

When analyzed by gender, both men ( $59.2 \%$ ) and women ( $54.4 \%$ ) listen to radios through in-car audio, and both have the highest proportion of not having radios at home, with proportion of $73.4 \%$ and $75.5 \%$.

When analyzed by age, people aged 16-25 (62.1\%) most often listen to the radio through mobile phone, people aged 66 and above (59.3\%) listen to the radio through radio, while the other age groups most often listen to the radio through car audio, with the highest rate $71.4 \%$ among people aged $36-45$ and the lowest rate $60.2 \%$ among people aged 46-55. All age groups have the highest proportion of not having radios at home, with the highest rate $84.5 \%$ among those aged $26-35$ and the lowest rate of $65 \%$ among those aged 66 and over.

When analyzed by marital status, except for those unmarried (52.5\%) listening to the radio mainly through mobile phone, those married (62.3\%) and widowed/separated ( $52.5 \%$ ) are most often listen to the radio through car audio. Regardless of marital status, all have the highest proportion for not having radios in their houses, with the highest rate $75.6 \%$ of those unmarried and the lowest rate $73.4 \%$ of those widowed/separated.

## Radio Listening Q60 Q61

1. Overall analysis

Those who listened to the radio at least once a day was $42.8 \%$, followed by those who listen several times a week ( $38.2 \%$ ) (see Figure 27). In terms of the most frequent time slot when listening to the radio, the most common time is 7:00-8:00, with the rate of $26.2 \%$, followed by 17:00-18:00(18.1\%), 8:00-9:00 (17.5\%) and 9:0010:00 ( $17.3 \%$ ). According to the survey results, most people over the age of 16 usually listen to the radio from 7:00 to 10:00 on their way to work (see Figure 28).


Base : N=394 (respondents who listen to the radio)
Figure 27 Frequency of Listening to Radio


Base : $\mathrm{N}=394$, multiple-choice (radio listeners)
Figure 28 The Radio Listening Time Slot

## 2. Comparative Analysis

## (1) Analysis of regional differences

According to the regional analysis of radio listening frequency, people in Taipei City, New Taipei City and Keelung (45\%), Taoyuan, Hsinchu and Miaoli (50.9\%) and Taichung, Changhua and Nantou ( $42.1 \%$ ) have the highest proportion listening to radio several times a week, while people in Yunlin, Chiayi, and Tainan (39.1\%), Kaohsiung, Pingtung and Penghu (59.5\%) and Yilan, Hualien, and Taitung (49.1\%) listen to radio at least once a day.

Regarding the most frequent radio listening time slot, people in Taipei City, New Taipei City and Keelung ( $37.2 \%$ ), Taichung, Changhua and Nantou (29.5\%), and Kaohsiung, Pingtung and Penghu (27.7\%) listen mainly 7:00-8:00; $21.5 \%$ in Taoyuan, Hsinchu and Miaoli listen 16:00-17:00; $18.8 \%$ in Yunlin, Chiayi, and Tainan listen 12:00-13:00. Among those in Yilan, Hualien and Taitung, $35.6 \%$ listen 8:00-9:00, which is close to the proportion of listening 9:00-10:00 (35.5\%).

## (2) Analysis of basic differences

When analyzed by gender, both men ( $42.6 \%$ ) and women ( $42.9 \%$ ) listen to radio at least once a day. In terms of the most frequent radio listening time slot, both men ( $25.9 \%$ ) and women ( $26.5 \%$ ) listen 7:00-8:00.

When analyzed by age, people aged 16-25 (41.3\%) and 26-35 (46.9\%) listen to the radio several times a week; people aged 36-45 (49.5\%), 46-55 (50.6\%) and 66 and above ( $56.1 \%$ ) listen the most, at least once a day; for those aged 56-65, the rate ( $44.7 \%$ ) of listening to radio several times a week is close to the rate ( $44 \%$ ) of those listening to radio several times per week. For the most frequent radio listening time slot, except for people aged 16-25 (27.1\%) for whom it is 18:00-19:00, for other age groups, it is 7:00-8:00, with the highest proportion 31.5\% aged 56-65 and the lowest proportion $20.6 \%$ aged 66 and above.

When analyzed by marital status, $37.5 \%$ of those unmarried listen several times per week, $46.4 \%$ of the married and $58.2 \%$ of the widowed or separated at least once a day. The most frequent radio listening time slot for the widowed or separated $(25.3 \%)$ is $14: 00-15: 00$, and for those unmarried ( $25.5 \%$ ) and married ( $28.4 \%$ ) it is 7:00-8:00.

## (3) Analysis of differences in social and economic status

The result of Chi-square tests indicates that radio listening frequency varies significantly by housing tenure.

When analyzed by housing tenure, home owners (45\%) listen to radio at least once a day, while house renters ( $38.2 \%$ ) listen to radio several times a week.

## Degree of Information Reliance on Radio Broadcasting Q63~Q68

## 1. Overall analysis

As for the degree of information reliance on radio broadcasting, listening to music came first (an average of 6.07 points), followed by obtaining news (an average of 5.09 points), travel and weather information (an average of 4.83 points); recommended products returned the lowest results, with an average of 3.41 points (see Table 9).

Table 9 Degree of Information Reliance on Radio Broadcasting

| Information obtained by radio <br> broadcasting | Degree of information reliance <br> (average points) by radio broadcasting |
| :--- | :---: |
| Listen to music | 6.07 |
| News | 5.09 |
| Travel and weather information | 4.83 |
| Disaster information (floods, typhoons, <br> earthquakes) | 4.80 |
| Other life information | 4.69 |
| Recommended Products | 3.41 |

Base : N=394 (radio listeners)
Source: this research.

## 2. Comparative Analysis

## (1) Analysis of regional differences

The results of the one-way ANOVA analysis indicate that the degree of information reliance on radio broadcasting, including news, tourism and weather information, disaster information (such as floods, typhoons, earthquakes) significantly varies by regions.

As for the degree of information reliance on radio broadcasting, people in Kaohsiung, Pingtung and Penghu have the highest score of obtaining news (6.01 points), while Taoyuan, Hsinchu and Miaoli have the lowest score ( 4.31 points). People in Kaohsiung, Pingtung and Penghu have the highest score of tourism and weather information ( 5.96 points), while Taipei City, New Taipei City and Keelung have the lowest score ( 4.2 points). People in Kaohsiung, Pingtung and Penghu have the highest score of disaster information (such as floods, typhoons, earthquakes) (5.83 points), while Taoyuan, Hsinchu and Miaoli have the lowest score ( 3.98 points). People in Kaohsiung, Pingtung and Penghu have the highest score of listening to music ( 6.84 points), while Yilan, Hualien, and Taitung have the lowest score (5.28 points). People in Kaohsiung, Pingtung and Penghu have the highest score of other life information ( 5.51 points), while Taipei City, New Taipei City and Keelung (4.09 points) and Taoyuan, Hsinchu and Miaoli (4.09 points) have the lowest score. People in Kaohsiung, Pingtung and Penghu have the highest score of recommended products (3.76 points), while Taoyuan, Hsinchu and Miaoli have the lowest score ( 2.81 points).
(2) Analysis of basic differences

The results of the one-way ANOVA analysis indicate that the degree of information reliance from radio broadcasting to obtain news significantly varies by marital status.

When analyzed by gender, more men (3.44 points) than women (3.36 points) rely on radio broadcasting to recommended products, while women are more likely to rely on radio broadcasting to obtain news ( 5.23 points), tourism and weather information
(4.86 points), disaster information (4.91 points), music ( 6.36 points) and other life information ( 4.89 points) than men ( 4.96 points, 4.8 points, 4.7 points, 5.83 points, 4.52 points).

When analyzed by age, as for the degree of information reliance from radio broadcasting, more people aged 66 and over obtain news ( 5.3 points), while people aged $26-35$ have the lowest score ( 4.83 points).

People aged 66 and over have the highest score of tourism and weather information ( 5.2 points), while people aged 26-35 have the lowest score ( 4.56 points). People aged 36-45 have the highest score for disaster information (such as floods, typhoons, earthquakes) ( 5.08 points), while people aged 26-35 have the lowest score ( 4.29 points). People aged $36-45$ have the highest score for listening to music ( 6.43 points), while people aged $56-65$ have the lowest score ( 5.61 points). People aged 66 and over have the highest score of other life information ( 5.06 points), while people aged $26-35$ have the lowest score ( 4.4 points). People aged 66 and over have the highest score for recommended products ( 3.84 points), while people aged 16-25 have the lowest score ( 2.97 points).

When analyzed by marital status, the degree of information reliance from radio broadcasting, those widowed or separated people have the highest score for obtaining news ( 5.18 points), while those unmarried have the lowest score ( 5.04 points). Those widowed or separated have the highest score for tourism and weather information (4.93 points), while those married have the lowest score ( 4.76 points). Those widowed or separated have the highest score of disaster information (such as floods, typhoons, earthquakes) ( 5.05 points), while unmarried people have the lowest score (4.66 points). Unmarried people have the highest score of listening to music ( 6.67 points), while those married have the lowest score ( 5.67 points). Those widowed or separated have the highest score of other life information (4.85 points), while those unmarried have the lowest score ( 4.62 points). Married people have the highest score for recommended products ( 3.42 points), while those unmarried have the lowest score (3.36 points).
(3) Analysis of differences in social and economic status

The results of the one-way ANOVA analysis indicate that the degree of information reliance on radio broadcasting, and obtaining tourism and weather information significantly varies by profession and individual average monthly income; obtaining disaster information and other life information significantly varies by individual average monthly income.

When analyzed by profession, people in the agriculture, forestry, fishery and husbandry industries have the highest score ( 7.77 points) for relying on radio broadcasting to obtain tourism and weather information, while people in the arts,
entertainment and recreation industries have the lowest score ( 2.22 points).
When analyzed by average monthly individual income, those on NT30,00039,999 have the highest score ( 5.65 points) for relying on radio broadcasting to obtain tourism and weather information, while those of no income have the lowest score ( 3.53 points). Those on NT20,000-NT29,999 have the highest score ( 5.47 points) for relying on radio broadcasting to obtain disaster information, while those on NT60,000 and more have the lowest score ( 3.84 points). Those on NT30,000-39,999 have the highest score ( 5.47 points) for relying on radio broadcasting to obtain other life information, while those of no income have the lowest score ( 3.83 points).

## C. TV and Radio Advertising

## Perception of TV Ads Q72 Q73

## 1. Overall analysis

TV commercials have caused problems for the public. The top three reasons are too many advertisements ( $50.6 \%$ ), advertisements that are too long ( $37.1 \%$ ), and advertisements that are repeated too often (33\%), (see Figure 29). Of the types of TV advertisements that have caused problems, the top three are loan/lending advertisements ( $40.7 \%$ ), junk food advertisements ( $22.8 \%$ ), and credit card advertisements ( $10.5 \%$ ), while the proportion of those answered none of them reaches 37.4\% (see Figure 30).


Base: $\mathrm{N}=1,038$, multiple-choice (respondents who watch TV)
Figure 29 The TV Ads that Trouble the Public


Base: $\mathrm{N}=1,038$, multiple-choice (respondents who watch TV)
Figure 30 The Types of TV Ads that Trouble the Public

## 2. Comparative Analysis

## (1) Analysis of regional differences

TV commercials have caused a problem for the public. The majority of people in all regions believe there to be too many advertisements, with the highest rate of $60 \%$ in Taichung, Changhua and Nantou and the lowest rate of $43.3 \%$ in Taoyuan, Hsinchu and Miaoli.

As for the types of TV advertisements that cause problems, except people in Taipei City, New Taipei City and Keelung (45\%) and people in Yilan, Hualien, and Taitung (53.6\%) that think there is no problem, other regions believe loan/lending advertising is a problem, with the highest rate of $47 \%$ in Yunlin, Chiayi, and Tainan and the lowest rate of $42.6 \%$ in Kaohsiung, Pingtung and Penghu.

## (2) Analysis of basic differences

When analyzed by gender, in the case of TV commercials causing trouble to the public, $49.2 \%$ of men and $52.1 \%$ of women believe there to be too many advertisements. As for the type of TV advertisements that cause trouble, loan/lending advertising was the highest rate for women (41.7\%), while both loan/lending advertising ( $39.7 \%$ ) and none of them ( $39.6 \%$ ) are the highest rates for men.

When analyzed by age, in the case of TV commercials causing trouble to the public, the highest proportion of people for all age groups say there are too many advertisements, with the highest rate $54.9 \%$ of those aged 66 and above and the lowest rate of $46.5 \%$ of those $36-45$ years old. The type of TV advertisements that are most trouble for those aged 16-25 (46\%), 26-35 (46.7\%), 36-45 (45.6\%), and 46-55 ( $40.2 \%$ ) are loan/lending advertisements, while for those aged 56-65 (42.9\%) and 66 and above ( $43.1 \%$ ) think that there is no trouble caused by TV commercials.

When analyzed by marital status, in the case of TV commercials causing trouble to the public, the majority of people regardless of marital status have the highest proportion of too many advertisements, with the highest rate of $52.3 \%$ in unmarried people and lowest rate of $48.7 \%$ in widowed/separated people. As for the types of TV advertisements that caused trouble, the unmarried ( $48.1 \%$ ) have the highest rate of loan/lending advertising; the married ( $38.2 \%$ ) and the widowed/separated ( $42.3 \%$ ), with no trouble caused, have the highest proportion.

## D. TV and Radio Program Management

## TV Program Management Q78 Q79 Q80

## 1. Overall analysis

Most people know that TV programs are regulated. Knowing (60\%) is higher than unknown ( $40 \%$ ) (see Figure 31). Of those who know the relevant regulations of TV programs, $59.1 \%$ think that TV program regulation is appropriate, $19.7 \%$ too few, and $9 \%$ too much (see Figure 32). Regarding the responsibility for managing TV programs, $63.8 \%$ answered the NCC, followed by unknown (26.7\%) (see Figure 33).


Base: $\mathrm{N}=1,104$, single-choice
Figure 31 Knowing Whether or not TV Programs have Relevant Regulations


Base: $\mathrm{N}=662$, single-choice (respondents who know there are regulations for TV programs)
Figure 32 Appropriate Regulations of Television Programs Regulations


Base: $\mathrm{N}=1,104$, single-choice
Figure 33 Agency/Organizations Responsible for the Management of Television

## 2. Comparative Analysis

(1) Analysis of regional differences

The result of Chi-square tests indicates that knowing whether TV programs have relevant regulations and the appropriateness of TV program regulations significantly varies by regions.

Regarding knowing whether TV programs have relevant regulations, the majority of people in all regions answered they know, with the highest proportion of $68.7 \%$ in Kaohsiung, Pingtung and Penghu and the lowest proportion of $51.9 \%$ in Taipei City, New Taipei City and Keelung.

As for those who know the relevant regulations of TV programs, the majority of people in all regions have the highest proportions of thinking that the TV program regulation being appropriate, with the highest rate of $73.1 \%$ in Kaohsiung, Pingtung and Penghu and the lowest rate of $45.2 \%$ in Taichung, Changhua and Nantou.

Regarding the responsibility for managing TV programs, the majority of people in all regions have the highest proportions of answering the NCC, with the highest rate $78 \%$ in Kaohsiung, Pingtung and Penghu and the lowest rate $53.3 \%$ in Yilan, Hualien, and Taitung. In addition, people in Yilan, Hualien, and Taitung have a higher proportion of not knowing who is responsible for managing TV programs than other regions (43.4\%).
(2) Analysis of basic differences

The result of Chi-square tests indicates that knowing whether TV programs have relevant regulations and the perception of appropriateness of TV program regulations significantly varies by age and marital status.

When analyzed by gender, $60.9 \%$ of men and $59 \%$ of women know whether TV programs have relevant regulations; $61.9 \%$ men and $56.3 \%$ women consider TV regulations to be appropriate; the proportion of men (68.5\%) consider the NCC to be
responsible for managing TV programs is higher than women (59.3\%).
When analyzed by age, regarding knowing whether TV programs have relevant regulations, except people aged 66 and over ( $56.2 \%$ ) who have the highest proportions of not knowing, those of other age groups have the highest proportion of knowing, with the highest rate $64.6 \%$ of 16-25 year-olds and the lowest rate of $61.2 \%$ of people aged 46-55 year-olds.

Regarding the perception of appropriateness of TV program regulations, all age groups consider there are appropriate regulations of TV programs, with the highest rate $67.2 \%$ of those aged $16-25$ and the lowest rate of $51.8 \%$ of those aged 56-65.

Regarding which unit is responsible for managing TV programs, the majority of people in all age groups have the highest proportions of knowing, with the highest rate of $72.1 \%$ in people aged $26-35$ and the lowest rate of $44.9 \%$ in people aged 66 and above. In addition, people aged 66 and above have higher proportion of not knowing which unit is responsible for managing TV programs (43.9\%).

When analyzed by marital status, $54 \%$ widowed/separated do not know that TV programs have relevant regulations, except, while the proportion knowing that there are regulations are the highest for both unmarried ( $67 \%$ ) and married ( $57.9 \%$ ) groups.

Regarding the perception of appropriateness of TV program regulations, the majority regardless of marital status consider there to be appropriate regulations of TV programs, with the highest rate $71 \%$ of those widowed/separated and the lowest rate $53.3 \%$ of those married. Regarding which unit is responsible for managing TV programs, except those widowed/separated that have the highest rate of not knowing ( $48.9 \%$ ), both unmarried people ( $73.3 \%$ ) and married people ( $61 \%$ ) consider it to be the NCC.

## (3) Analysis of differences in social and economic status

The result of the Chi-square tests indicates that knowing whether or not TV programs have relevant regulations significantly varies by education level and profession; the perception of appropriateness of TV program regulations significantly varies by housing tenure and individual average monthly income.

When analyzed by housing tenure, regarding the perception of appropriateness of TV program regulations, both home owners (55.6\%) and house renters (73\%) consider it to be appropriate, where the latter is significantly higher than the former.

When analyzed by education level, regarding knowing whether TV programs have relevant regulations, except for those with elementary school and lower education ( $60.5 \%$ ) and those with high school and secondary school education ( $51.2 \%$ ) which have higher proportions of not knowing about TV regulations, other groups have higher proportions of knowing about regulations, with the highest rate $73.9 \%$ of those with a master's degree or higher and the lowest rate $58.2 \%$ with senior high and
vocational school education.
When analyzed by profession, those who work in agriculture, forestry, fishery and husbandry (58.4\%), housekeepers (50.7\%) and the retired (54.8\%) do not know that TV programs have relevant regulations, while the majority of other occupation groups do know, with the highest rate $74.1 \%$ of people in the public administration and national defense industries and the lowest rate $52.3 \%$ of people in the transportation and warehousing industries.

When analyzed by individual average monthly income, all groups consider TV program regulations to be appropriate, with the highest rate $66.6 \%$ in the NT20,000NT29,999 group and the lowest rate $44.2 \%$ among those earning NT\$60,000 or more.

## Radio Broadcasting Program Regulations Q81 Q82 Q83

## 1. Overall analysis

Most people do know that there are relevant regulations for radio programs, 52.9\% compared to $47.1 \%$ (see Figure 34).

People who know there are the relevant regulations of radio programs think that the relevant regulations are appropriate ( $58.6 \%$ ), followed by too few ( $13.8 \%$ ), and then too much ( $8.8 \%$ ) (see Figure 35). For which agency is responsible for managing the radio program, $56.4 \%$ answered the NCC as the highest, followed by the unknown (32.4\%) (see Figure 36).


Base: $\mathrm{N}=1,104$, single-choice
Figure 34 Knowing Whether or not Radio Programs have Relevant Regulations


Base: $\mathrm{N}=584$, single-choice (people who know there are relevant regulations for radio programs)
Figure 35 Whether Regulation of Radio Programs are Appropriate


Base: $\mathrm{N}=1,104$, single-choice
Figure 36 Agency/Organizations Responsible for the Management of Radio Programs

## 2. Comparative Analysis

## (1) Analysis of regional differences

The result of Chi-square tests indicates that knowing about the relevant regulations for radio programs significantly varies by regions.

When analyzed by regions, regarding the regions that have the highest proportions of people who know that there are relevant regulations for radio programs are Yunlin, Chiayi, and Tainan (54.2\%) and Kaohsiung, Pingtung and Penghu (63.2\%). On the other hand, people in Taipei City, New Taipei City and Keelung (52.3\%), Taichung, Changhua and Nantou (51.4\%) and Yilan, Hualien, and Taitung (53.8\%) have the highest proportions of not knowing about the regulations.

Regarding the perception of appropriate regulations for radio programs, all regions have greater proportions of appropriateness, with the highest rate $76.1 \%$ in Yilan, Hualien, and Taitung and the lowest rate $45.4 \%$ in Taipei City, New Taipei City and Keelung.

Regarding which unit is responsible for managing radio programs, the majority of people in all regions consider it to be the NCC, with the highest rate $66 \%$ in

Kaohsiung, Pingtung and Penghu, and the lowest rate $48.3 \%$ in Taipei City, New Taipei City and Keelung. In addition, people in Yilan, Hualien, and Taitung have higher proportion of not knowing than the rest of regions (46.3\%).
(2) Analysis of basic differences

The result of Chi-square tests indicates that knowing whether or not there are relevant regulations of radio programs significantly varies by age and marital status; the perception of appropriate regulations for radio programs significantly varies by age.

When analyzed by gender, both men (54.3\%) and women (51.5\%) have a higher proportion who know whether radio programs have relevant regulations. Regarding the perception of appropriate regulations for radio programs, both men (61.5\%) and women ( $55.7 \%$ ) consider the relevant regulations for radio programs to be appropriate. For the unit responsible for managing radio programs, both men ( $60.3 \%$ ) and women ( $52.6 \%$ ) consider it to be the NCC.

When analyzed by age, except people aged 66 and above (61.7\%) who do not know, people in other age groups do know whether radio programs have relevant regulations, with the highest proportion of those aged 16-25 (58.3\%) and the lowest proportion of those aged 36-45 (54.2\%).

The majority of people in all age groups consider the relevant regulations for radio programs to be appropriate, with the highest rate $64.7 \%$ of those aged 16-25 and the lowest rate $46.2 \%$ of those 66 and over. For the unit responsible for managing radio programs, except people aged 66 and over ( $48.7 \%$ ) who do not know, majorities in other age groups consider it to be the NCC, with the highest rate $62.1 \%$ of $36-45$ year-olds and the lowest rate $55.9 \%$ of $56-65$ year-olds.

When analyzed by marital status, except those widowed/separated who have the highest proportion of not knowing (62.8\%), both the unmarried (59.4\%) and the married (51.3\%) know radio programs are regulated.

The highest proportions of people regardless of marital status consider the relevant regulations for radio programs to be appropriate, with the highest rate $62.6 \%$ of those unmarried and the lowest rate $55.3 \%$ of those married. Regarding which unit is responsible for radio programs, except those widowed/separated who have the highest proportion of not knowing ( $55.2 \%$ ), both the unmarried ( $64.5 \%$ ) and the married (53.9\%) consider it to be NCC.

## (3) Analysis of differences in social and economic status

The result of Chi-square tests indicates that knowing whether or not there are relevant regulations of radio programs significantly varies by educational level and profession; the perception of appropriate regulations for radio programs significantly varies by housing tenure and individual average monthly income.

When analyzed by housing tenure, regarding the perception of regulations for radio programs, both home owners ( $56.9 \%$ ) and house renters ( $65.5 \%$ ) consider it to be appropriate.

When analyzed by education level, regarding knowing whether radio programs have relevant regulations, those with the highest rates of not knowing are those with elementary school education and less ( $69.3 \%$ ) and high school and secondary school education (59.2\%); those with other levels of education level have a higher proportion of those who know, with the highest rate $70.7 \%$ of those with a master's degree or higher, and the lowest rate $53.4 \%$ with senior high and vocational school education.

When analyzed by profession, majorities in occupation groups who do not know whether radio programs have relevant regulations are people in the agriculture, forestry, fishery and husbandry industries (53.8\%), manufacturing (54.7\%), construction industry (56.7\%), transportation and warehousing industries (71.1\%), hospitality and catering industries (53.3\%), arts, entertainment and recreation services industries (50.6\%), housekeepers (60\%) and the retired (54.4\%). The highest proportions in other professions do know.

When analyzed by individual average monthly income, regarding the perception of regulations for radio programs, all groups consider it to be appropriate, with the highest rate $68.5 \%$ in the NT30,000-NT39,999 group and the lowest rate $44.4 \%$ in the NT60,000 and more group.

## What Types of Content Make You Feel Upset? Q86-Q89

## 1. Overall analysis

In the past 12 months, whether the public see any objectionable or disturbing content in television programs, $64 \%$ of the respondents had not seen, while $36 \%$ had (see Figure 37).


Base: $\mathrm{N}=1,038$, single-choice (the respondents who watch TV programs)
Figure 37 Have you Seen Something that is Offensive or Disturbing When Watching TV Shows in the Past $\mathbf{1 2}$ Months?

Regarding what people find upsetting, the top three are news reports being repeated ( $53.8 \%$ ), political bias in reports ( $46.6 \%$ ), and politics/political party propaganda ( $45.1 \%$ ) (see Figure 38). Among the programs that people find offensive, the top three are political programs (48.1\%), serial dramas (33.1\%), and news programs (30.1\%) (see Figure 39).


Base: $\mathrm{N}=374$, multiple-choice (respondents who watched TV programs finding there was upsetting content in the past 12 months)

Figure 38 Content that Makes You Feel Upset (Top 10)


Base: $\mathrm{N}=374$, multiple-choice (respondents who watched TV programs finding there was upsetting content in the past 12 months)

## Figure 39 Programs that You Object to (Top 10)

With television broadcast content that is objectionable, the public responded by turning to another channel (84.8\%), switching off the TV (25.8\%), and complaining to other people (13.5\%) (see Figure 40).


Base: $\mathrm{N}=374$, multiple-choice (respondents who watched TV programs finding there was upsetting content in the past 12 months)

Figure 40 How Do You React When the TV Broadcasts Content is Objectionable

## 2. Comparative Analysis

(1) Analysis of regional differences

The result of Chi-square tests indicates that whether people had seen any objectionable content when watching TV programs in the past 12 months significantly varies by region.

Regarding whether people had seen any objectionable content when watching TV programs in the past 12 months, majorities in all regions had not seen objectionable content, with the highest proportion of $72.2 \%$ in Yilan, Hualien, and Taitung and the lowest proportion of $53.1 \%$ in Taichung, Changhua and Nantou.

Regarding the type of content that the people find upsetting, except for the Kaohsiung, Pingtung and Penghu, where the highest proportion was violence ( $62.1 \%$ ), while for other regions, it was the repeated news reporting, with the highest rate of $66.3 \%$ in Yilan, Hualien, and Taitung and the lowest rate of $50.1 \%$ in Taoyuan, Hsinchu and Miaoli.

Regarding content that is objectionable, for $50.2 \%$ people in Kaohsiung, Pingtung and Penghu and $44.8 \%$ people in Yilan, Hualien, and Taitung it is the news, while for other regions, the highest proportion was for political programs, the highest rate $56.2 \%$ in Taipei City, New Taipei City and Keelung and the lowest rate $43.7 \%$ in Taoyuan, Hsinchu and Miaoli.

When TV broadcast content is objectionable, turning to another channel is the most frequently given response, with the highest rate $97.2 \%$ in Kaohsiung, Pingtung and Penghu and the lowest rate $78 \%$ in Taipei City, New Taipei City and Keelung.
(2) Analysis of basic differences

The result of Chi-square tests indicates that whether people had seen any
objectionable content when watching TV programs in the past 12 months significantly varies by age and marital status.

When analyzed by gender, $65.6 \%$ men and $62.4 \%$ women had not seen objectionable content when watching the TV in the past 12 months. Regarding the type of content that the people find upsetting, the most frequent for both men (52.6\%) and women ( $54.8 \%$ ) is repeated news reporting. Regarding content that is objectionable, both men (48.2\%) and women (48\%) consider it to be political programs. When TV broadcast content is objectionable, turning to another channel is the most frequently given response for both genders, $87.1 \%$ and $82.7 \%$.

When analyzed by age, $79.9 \%$ aged $16-25$, the highest rate, and $54.6 \%$ of those 56-65, the lowest frequency, had not seen any objectionable content when watching TV in the past 12 months. Regarding the type of content that people find upsetting, for $56.5 \%$ of those $56-65$ and $50.9 \%$ of those 66 and above it is political bias in reports, but for other age groups it is repeated news reporting, with the highest rate of $69 \%$ in the $36-45$ age group and the lowest rate of $49.3 \%$ in the $46-55$ age group.

Regarding content that is objectionable, for all age groups the highest proportion is for political programs, with the highest rate $55.5 \%$ for $56-65$ year-olds and the lowest rate of $39.9 \%$ for $26-35$ year-olds. When television broadcasts content that is objectionable, the most frequent response for all age groups is to turn to another channel, with the highest rate $87 \%$ for 66 and above and the lowest rate $82.9 \%$ for those aged 16-25.

When analyzed by marital status, regardless of marital status, a majority had not seen any objectionable content when watching TV programs in the past 12 months, with the highest rate $74.5 \%$ among those widowed/separated and the lowest rate $59.4 \%$ among those married.

Regarding the type of content that the people find upsetting, for $54.2 \%$ of those unmarried and $54.6 \%$ of those married it is repeated news reporting, while for $49.9 \%$ of those widowed/separated it is political bias in reports. Regarding content that is objectionable, for majorities regardless of marital status it is political programs, with the highest rate $49.6 \%$ of those widowed/separated and the lowest $44.4 \%$ of those unmarried.

When television broadcast content that is objectionable, the most frequent response regardless of marital status is to turn to another channel, with the highest rate $86.4 \%$ among those married and the lowest rate $76.5 \%$ among those widowed or separated.
(3) Analysis of differences in social and economic status

The result of Chi-square tests indicates that whether people had seen any objectionable content when watching TV programs in the past 12 months significantly
varies by housing tenure and occupation.
When analyzed by housing tenure, both home owners ( $61.7 \%$ ) and house renters (71.6\%) had not seen objectionable content when watching TV programs in the past 12 months.

When analyzed by occupation, regarding whether people had seen any objectionable content when watching TV programs in the past 12 months, except for people who work in education (52.5\%) and health care and social work services (53.3\%), which have the highest proportion saying yes, the highest proportion in the other occupation groups had not.

## Frequency of Sex Appearing in TV Programs Q90

## 1. Overall analysis

Regarding the frequency of sex appearing in TV programs, $72.4 \%$ consider it acceptable; followed by $11.3 \%$ too much and $5.6 \%$ too little (see Figure 41).


Base : $\mathrm{N}=1,038$, single-choice (The respondents who watch TV programs)
Figure 41 Acceptability of Sex appearing in TV Programs

## 2. Comparative Analysis

(1) Analysis of regional differences

When analyzed by region, the frequency of sex appearing in TV programs is considered to be acceptable in all regions, with the highest rate $77.1 \%$ in Yilan, Hualien, and Taitung and the lowest rate $65.3 \%$ in Taichung, Changhua and Nantou.
(2) Analysis of basic differences

The result of Chi-square tests indicates that the frequency of sex seen in TV programs significantly varies by gender and marital status.

When analyzed by gender, most consider sex in TV programs acceptable, 76.2\% of men and $68.7 \%$ of women.

When analyzed by age, a majority in all age groups find the level of sex acceptable, with the highest rate of $76.7 \%$ of those $26-35$ and the lowest rate of $67.1 \%$ of those 66 and over.

When analyzed by marital status, the majority regardless of marital status find it acceptable, with $73.7 \%$ of those unmarried being the highest rate and the lowest rate $69.5 \%$ of those widowed or separated. In addition, married people have the highest proportion (14\%) who consider it to be too much, more than other marital status.

## Frequency of Violence in TV Programs Q91

## 1. Overall analysis

Regarding the frequency of violence in TV programs, $64 \%$ overall consider levels acceptable, followed by too much (25.3\%) and too little (4.8\%) (see Figure 42).


Base : $\mathrm{N}=1,038$, single-choice (The respondents who watch TV programs)
Figure 42 Frequency of Violence in TV Programs

## 2. Comparative Analysis

## (1) Analysis of regional differences

The result of Chi-square tests indicates that the frequency of violence seen in TV programs significantly varies by regions.

When analyzed by regions, the majority of people regardless of regions find the level of violence acceptable, with the highest rate $73.1 \%$ in Kaohsiung, Pingtung and Penghu and the lowest rate $52.3 \%$ in Yunlin, Chiayi and Tainan.

## (2) Analysis of basic differences

The result of Chi-square tests indicates that the acceptability of violence in TV programs significantly varies by gender and age.

When analyzed by gender, $68.4 \%$ men and $59.7 \%$ women find the levels of violence acceptable.

When analyzed by age, the $73.3 \%$ of those $16-25$, is the highest proportion and $60.8 \%$ of those $36-45$ are the lowest proportions.

When analyzed by marital status, $67.6 \%$ of those unmarried was the highest proportion and $61.6 \%$ of those married was the lowest.

## Frequency of Bad Language Appearing in TV Programs Q92

## 1. Overall analysis

Regarding the frequency of bad language appearing in TV programs, most people consider it to be acceptable ( $71.1 \%$ ), followed by too much ( $18.5 \%$ ) and too little (5.3\%) (see Figure 43).


Base : $\mathrm{N}=1,038$, single-choice (The respondents who watch TV programs)
Figure 43 Acceptability of Bad Language Appearing in TV Programs

## 2. Comparative Analysis

## (1) Analysis of regional differences

Regarding the frequency of bad language appearing in TV programs, most people in all regions find it acceptable, with the highest rate $78.9 \%$ in Kaohsiung, Pingtung and Penghu, and the lowest rate $61.9 \%$ in Yilan, Hualien, and Taitung.
(2) Analysis of basic differences

The result of Chi-square tests indicate that the frequency of bad language appearing in TV programs significantly varies by gender, age and marital status.

When analyzed by gender, $75 \%$ men and $67.3 \%$ women find bad language acceptable.

When analyzed by age, most people in all age groups find it acceptable, with the highest rate $77.3 \%$ of those aged $26-35$ and the lowest rate $65.8 \%$ of those aged 46-55.

When analyzed by marital status, regardless of marital status, people find bad language acceptable, with the highest rate $72.5 \%$ of those widowed or separated and the lowest rate $70.8 \%$ of those unmarried.

## E. Privacy Protection

## Public Attitude toward Violating Privacy of Public Figures Q97

## 1. Overall analysis

Regarding whether the TV programs violate the privacy of public figures without consent, most people disagree (66\%) (including strongly disagree and disagree) while
only $15.4 \%$ agree (including strongly agree and agree) (see Figure 44).


Base: $\mathrm{N}=1,104$, single-choice
Figure 44 Attitudes toward Violating Privacy of Public Figures

## 2. Comparative Analysis

(1) Analysis of regional differences

The result of Chi-square tests indicates that whether TV programs can violate the privacy of public figures significantly varies by region.

In all regions, in principle, the rate of disagreement is higher than that of agreement, with the $80 \%$ the highest rate, in Taichung, Changhua and Nantou, and the $56.1 \%$ the lowest rate, in Taipei City, New Taipei City and Keelung.
(2) Analysis of basic differences

When analyzed by gender, the majority of both men (62.6\%) and women (69.4\%) disagree.

When analyzed by age, those aged 16-25 have the highest rate of disagreement (69.8\%) and the lowest rate (63.6\%) are aged 36-45.

When analyzed by marital status, the highest rate of those who disagree are those widowed or separated at $70 \%$ and the lowest rate is $64.3 \%$ of those married.

## (3) Analysis of differences in social and economic status

The result of Chi-square tests indicates that whether TV programs can violate the privacy of public figures significantly varies by individual average monthly income.

All income groups disagree, with the highest rate $76.1 \%$ of those earning NT10,000-NT19,999 and the lowest rate (59.5\%) earning NT30,000-NT39,999.

## Attitude toward Violating the Privacy of the General Public Q98

## 1. Overall analysis

Regarding whether TV programs can violate the privacy of the general public, $76.6 \%$ of the general public disagree (including strongly disagree and disagree), only 9.5\% agree (including strongly agree and agree) (see Figure 45).


Base: $\mathrm{N}=1,104$, single-choice
Figure 45 Attitudes toward Violating Public Privacy

## 2. Comparative Analysis

## (1) Analysis of regional differences

The result of Chi-square tests indicates that whether TV programs can violate the privacy of the general public significantly varies by region.

The majority of people in all regions disagree, with the highest rate $90.8 \%$ in Yilan, Hualien, and Taitung and the lowest rate (62.9\%) in Taipei City, New Taipei City and Keelung.

## (2) Analysis of basic differences

When analyzed by gender, regarding whether TV programs can violate the privacy of the general public, $75.4 \%$ of men and $77.7 \%$ of women disagree.

When analyzed by age, those aged 16-25 have the highest rate of disagreement ( $77.8 \%$ ) and the lowest rate ( $74.5 \%$ ) are those aged 66 and over.

When analyzed by marital status, all disagree with the highest rate of $84.3 \%$ among those widowed or separated and the lowest rate (75\%) among those married.
(3) Analysis of differences in social and economic status

The result of Chi-square tests indicates that whether TV programs are seen as violating the privacy of the general public significantly varies by education level and individual average monthly income.

When analyzed by education level, a majority in all groups disagree, with the highest proportion $79.2 \%$ of those with a bachelor's degree and the lowest proportion $73.2 \%$ of those with high school and secondary school education.

When analyzed by individual average monthly income, the majority in all income groups disagree, with the highest rate $84.8 \%$ in the NT1-NT9,999 group and the lowest rate of $68.7 \%$ in the NT50,000-NT59,999 group.

## The Most Common Media Channel that Violates the Privacy of Public Figures Q99

## 1. Overall analysis

According to the survey results, the public believes that the most common channel that violates the privacy of public figures without prior consent is television, with a rate of $39.2 \%$, followed by magazines ( $16 \%$ ) and news websites/apps ( $9.9 \%$ ), while $18.9 \%$ consider all media channels to be common. In addition, the proportion of emerging media (including news websites/app, other websites/apps and TV websites/apps) ( $17.3 \%$ ) is higher than magazines (see Figure 46).


Base: $\mathrm{N}=1,104$, single-choice
Figure 46 The Most Common Channel that Violates the Privacy of Public Figures

## 2. Comparative Analysis

## (1) Analysis of regional differences

Most regions think that TV is the most common medium that violate the privacy of public figures, with the highest rate $48.3 \%$ in Kaohsiung, Pingtung and Penghu and the lowest rate $33.4 \%$ in Yunlin, Chiayi, and Tainan.
(2) Analysis of basic differences

When analyzed by gender, both $38.1 \%$ of men and $40.4 \%$ of women believe that television is the most common medium that violates the privacy of public figures without prior consent.

When analyzed by age, a majority of people in all age groups consider TV to be the most common way the privacy of public figures is violated without consent, with the highest rate $50.5 \%$ aged 66 and over, and the lowest rate $28.3 \%$ aged 16-25.

Regardless of marital status, all consider TV to be the most common way to expose the privacy of public figures without consent, with the highest rate $45.2 \%$ of widowed/separated people and the lowest rate $30.1 \%$ of unmarried people.

## The Most Common Media Channel that Violates the Privacy of General Public Q100

## 1. Overall analysis

The most common channel for violating the privacy of the general public without prior consent is TV (33\%), followed by magazines (13\%) and news websites/apps ( $10.1 \%$ ), while $16.3 \%$ consider all media channels to be common. In addition, the proportion of emerging media accumulated (including news websites/apps, other websites/apps, TV websites/apps) is $23.2 \%$, exceeding that of the second medium (see Figure 47).


## Base: $\mathrm{N}=1,104$, single-choice

Figure 47 The Channels That Most Violate the Privacy of the General Public

## 2. Comparative Analysis

## (1) Analysis of regional differences

Regarding the most common medium for uncovering the privacy of the general public without prior consent by region, except for people in Taipei City, New Taipei City and Keelung who consider all media channels to be common (27.7\%), the other regions think it is TV, with the highest rate $44.9 \%$ in Kaohsiung, Pingtung and Penghu and the lowest rate of $32.7 \%$ in Yunlin, Chiayi, and Tainan.
(2) Analysis of basic differences

The result of Chi-square tests indicates that the most common channel considered to violate the privacy of the general public without prior consent significantly varies by age.

When analyzed by gender, both men and women consider TV to be the most common channel to violate the general public's privacy without consent, with men accounting for $33 \%$ and women for $33.1 \%$.

When analyzed by age, all age groups consider TV to be the most common
channel to violate the general public's privacy without consent, with the highest rate of $41.9 \%$ among people aged 66 and over and the lowest rate of $27.3 \%$ in people aged 26-35.

When analyzed by marital status, TV is the most common medium to expose the general public's privacy without consent, with the highest rate of $38.1 \%$ of those widowed or separated and the lowest rate $28.4 \%$ of those unmarried.
(3) Analysis of differences in social and economic status

The result of Chi-square tests indicates that the most common channel that violates the privacy of the general public without prior consent significantly varies by housing tenure.

When analyzed by housing tenure, both home owners (34.7\%) and renters $(29.3 \%)$ consider TV to be the most common medium to violate the general public's privacy without consent, with the former a relatively higher rate.


[^0]:    ${ }^{1}$ 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

