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東亞地區的青年與互聯網

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根據香港和東亞其他經濟體的調查數據，本文分析了東亞地區的青年對互聯網的採納與使用，比較了香港青年與東亞其他經濟體的青年在互聯網使用行為上的異同，以及互聯網給青年帶來的影響。雖然本研究的發現不足以代表整個亞洲，但是有關結果為日後更廣範圍的比較研究，提供了可靠與一致的基礎。

關鍵詞：青年、互聯網的採納與使用、互聯網的效果、香港、東亞

Youth and the Internet in East Asia[1]

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Based on survey data collected in Hong Kong and other economies of East Asia, this paper examines youth's access to and use of the Internet and potential consequences of Internet use on youth in the region. The paper compares Internet use by Hong Kong youth with their peers in neighboring economies to help highlight the unique features as well as common practices of Hong Kong youth. The findings, though by no means representative of Asia, provide a set of consistent and reliable benchmarks against which other parts of Asia and beyond could be compared in the future.

Keywords: youth; Internet adoption and usage; Internet effects; Hong Kong; East Asia

1. We define the term "East Asia" as covering China (including Hong Kong, Taiwan, and Macao), Japan, Republic of Korea ("South Korea"), Democratic People's Republic of Korea ("North Korea"), and Mongolia. Because of unavailability of relevant data, North Korea and Mongolia will be excluded from the paper. Following the statistical convention used by International Telecommunication Union (ITU), China is divided into four economies, namely, "China," "Hong Kong, China" ("Hong Kong," hereafter), "Macao, China" ("Macao," hereafter) and "Taiwan, China" ("Taiwan" hereafter). This division is necessitated by the fact that all relevant statistical data used for the chapter have been collected separately by respective authorities in the four economies. In short, the paper deals with six economies in East Asia, including, in alphabetical order, China, Hong Kong, Korea, Japan, Macao, and Taiwan.

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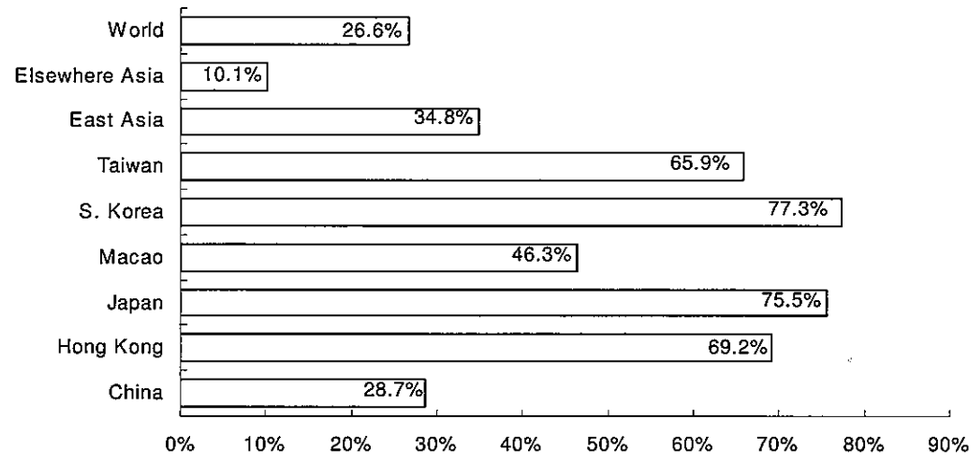
Information and communication technology (ICT) was identified as one of the five new areas of concern in the World Youth Report 2005 (UNDESA, 2005). It was stated that "ICT has contributed enormously to the development of a global media-driven youth culture. The effects of this emerging culture are increasingly identifiable in the lives of many young people and are altering socialization patterns, processes and experiences. The magnitude and implications of this trend make it imperative that a closer look be taken at what it means to grow up in a global media-driven youth culture" (p. 69). Among the diverse domains of ICT, the Internet is much more relevant to the daily life of youth around the world in general and in East Asia in particular.

The Internet is doubtlessly most advanced in East Asia compared with the rest of Asia. According to the data from Internet World Stats (2010), the Internet penetration rate in East Asia (34.8%) was 25% higher than that in the remaining 27 countries in Asia by the end of 2009 (Figure 1). Even the least developed economy in the region, i.e., China, had a higher penetration rate than that in the rest of Asia. As will be shown later, the urban sector of China, which has a population of 500 million, has become fairly well developed in the use of the Internet. As a whole, the Internet penetration rate in East Asia was higher than the overall penetration rate of the whole world (Figure 1). Internet users in East Asia account for 70% of Internet users in Asia and 30% of Internet users around the world.

Moreover, the six economies in the region share *relatively high homogeneity*, not only in terms of cultures and traditions, but also in terms of technological standards. The six economies fall into a very unique category of digital data processing: the so-called CJK (Chinese-Japanese-Korean) system that uses double-bytes for encoding and decoding text data in these languages, as opposite to single-byte

Figure 1: Penetration Rate of the Internet, Dec 2009



Source: Internet World Stats (2010)

system used in most other languages. In fact, the CJK system was a real barrier to computerization and standardization for many years, which actually delayed the widespread use of personal computers and the Internet until fairly recently. As will be shown later, these commonalities provide a desirable "noise-minimal" setting to identify similar patterns in the use and impact of the Internet.

In a nutshell, given the vast size of population, significance of the economy and Internet user population, and the strong development of the Internet in East Asia, it is informative to take a close look at Internet usage patterns and their potential consequences among youth in the region. Moreover, it is significant to compare Internet use by Hong Kong youth with their peers in neighboring regions to help highlight the unique features as well as common practices of Hong Kong youth. The findings, though by no means representative of Asia, provide a set of consistent and reliable benchmarks against which other parts of Asia and beyond could be compared in the future.

Youth's Access to the Internet in East Asia

When discussing the relationship between youth and the Internet, people's attention understandably centers on the impact of the Internet on youth. However, impact requires access and use as prerequisites to exert influences, as proposed by Dutton, Rogers and Jun (1987) and tested by our earlier study of the Internet in Hong Kong (Zhu & He, 2002a). The terms "access" and "use" actually refer to two distinct but sequentially ordered stages of the diffusion-use-effect (DUE) process of the Internet, with the former involving the availability, affordability, or ownership/subscription of the Internet by individuals and the latter pertaining to the actual usage of the Internet after becoming available, affordable, or owned/subscribed.

As in other economies of East Asia, young people in Hong Kong are more likely to have access to and use of the Internet than members of previous generations do. At the end of 2008, as shown in Figure 2, the proportion of the youth population adopting the Internet in Hong Kong (i.e., 99% of young men, 100% of young women, or 99.6% of both sexes) was about 30% higher than that of the general population (68%).

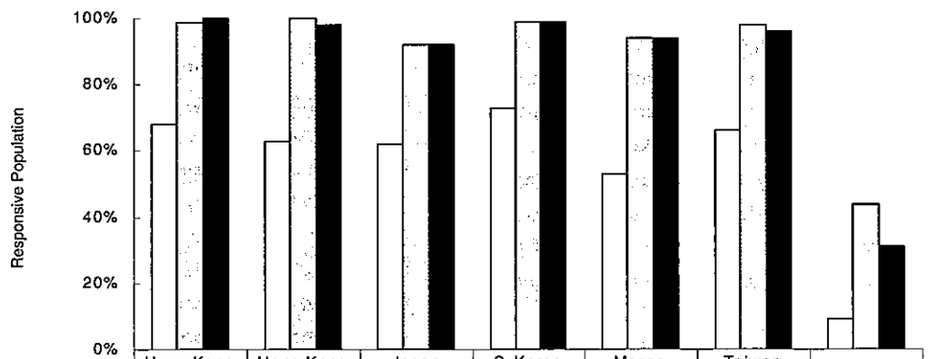
However, the difference between younger and older people is more dramatic in China than in other economies (i.e., Hong Kong, Japan, S. Korea, Macao, and Taiwan), simply because of a "ceiling" effect that the youth population in these economies has already reached the saturation point (ranging from 92% to 100%) in Internet adoption so that there is no room to grow further, whereas the proportion of Internet users in the general population is still going up. Figure 2 also reveals another important finding that, while there was a substantial gap between young men and young women in China, the gender difference no longer exists between male and female youth in Hong Kong and other economies.

The term "Digital Divide" has been perhaps the most popular phrase in public and scholarly debates on information and communication technology (ICT). The term generally refers to the inequality in the access/use of the Internet as well as other ICT media either across nations

in the world (i.e., "Global Divide") or across social groups within a nation ("Domestic Divide") (Norris, 2001). As the data presented earlier show, in most parts of East Asia, the Internet has already been used by virtually every member of the young generation, which implies that the Domestic Divide, usually defined by demographic-social-economic characteristics such as gender, education or income, are no longer an issue of concern.

China presents an exception in the region, with sharp gaps both externally and internally. The external gap in the adoption of the Internet between China and neighboring economies is well known and understandable, given the differences in the economy and other infrastructure. However, when we zero in on the youth, the gap between Chinese youngsters and their counterparts in the region is actually much smaller. While the ratio in adoption rate of the Internet among the general population between China and the other five economies was about 1:7, the same ratio reduced to 1:2 among male youth or 1:3 among female youth (Figure 2). China appears to have developed a model for

Figure 2 : Adoption of the Internet in East Asia



	Hong Kong (2008)	Hong Kong (2005)	Japan (2004)*	S. Korea (2005)	Macao (2005)	Taiwan (2005)**	China (2005)
□Both Sexes 6-84	68%	63%	62%	73%	53%	66%	9%
□Male 15-24	99%	100%	92%	99%	94%	98%	44%
■Female 15-24	100%	98%	92%	99%	94%	96%	31%

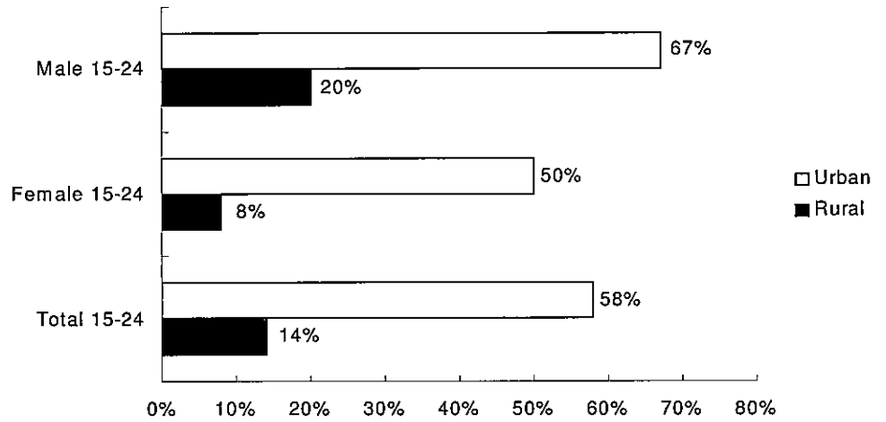
Notes:

* The Japan data were collected by the Ministry of Internal Affairs and Communication of Japan in 2004. (Retrieved from http://www.johotsusintokei.soumu.go.jp/tsusin_riyou/data/eng_tsusin_riyou01_2004.pdf). The age range is 12 and above for the general population and between 13 and 29 for the youth. In the original report, no sex-specific data were given. To be comparable with other economies in the chart, the aggregated rate (92%) is used for both sexes, assuming no gender difference here.

** The age range in Taiwan is 12 and above for the general population and between 16 and 25 for the youth.

Other sources: unpublished data from HKIP (Hong Kong), NIDA (S. Korea), MOIP (Macao), TWNIC (Taiwan), and CNNIC (China).

Figure 3 : Internet Users by Geography in China (2005)



Source: Unpublished data from CNNIC

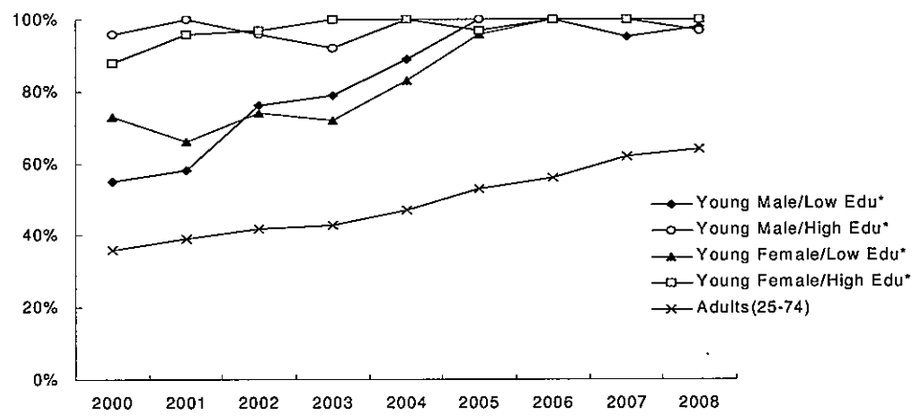
many less developed countries in other parts of Asia. The evidence thus seems to suggest that the global divide, as manifested within East Asia, is a temporal problem that could be solved largely by the natural succession of generations (WIA Report, 2006).

The internal divide between urban and rural sectors in China is perhaps a more enduring issue. While 58% of the urban youth used the Internet at the end of 2005, only 14% of the rural youth did so, which amounts to a ratio of 4:1 between the urban and rural sectors (Figure 3).[2] The gap was somewhat smaller among young men (67% vs. 20%, or a ratio of 3.4) but larger among young women (50% vs. 8%, or a ratio of 6.3). As Figure 3 illustrates, female youth in rural China were the least likely users of the Internet (only 8%). Overall, it is clear that the gap (58% for urban vs. 14% for rural, or a ratio of 4.1) along the geographic line is much sharper than the gap (44% for male vs. 31% for female, or a ratio of 1.4) along the gender line.

Figure 4 provides support for the argument that the digital divide is a temporal issue that will be solved over time. At the outset of the HKIP survey series in 2000, the penetration rate of Internet use was already quite high in Hong Kong as half of the adult population (18-74) were using it (Zhu & He, 2002b). However, there was a significant divide at the time among the youngest segment (18-24) between those with polytechnic/ college education or more, almost all of whom were Internet users, and those with less education, of whom less than two-thirds used the

2. Nevertheless, the gap between the urban youth and the rural youth was still much smaller than that among the general public, in which 17% of the urban residents between 6 and 84 used the Internet, as compared to 3% of the rural residents of the same age being Internet users, or a ratio of 5.7.

Figure 4 : Closing Gap in Internet Adoption in Hong Kong



* The age range for the youth is between 18 and 24 because only 18+ were included in the HKIP surveys in 2000 and 2001.
Sources: Hong Kong Internet Project (2000-2008)

Internet. The divide was gradually closed up in five years simply by the continuous rise of Internet users among the less-educated youth, male or female. As of the end of 2008, the divide disappeared practically in Hong Kong. Although comparable data are not available for Japan, Korea, Taiwan, and Macao, it is reasonable to assume that the trajectory observed in Hong Kong is applicable to these similar economies. Of course, it may take longer to go through the same process in less-developed societies. For example, according to the World Information Access Report Project (2006), the inequality of Internet user population, as measured by GINI Index, among 31 provinces in China at the end of 2004 was an alarmingly high level of 0.42; however, it had dropped from 0.59 in 2000.

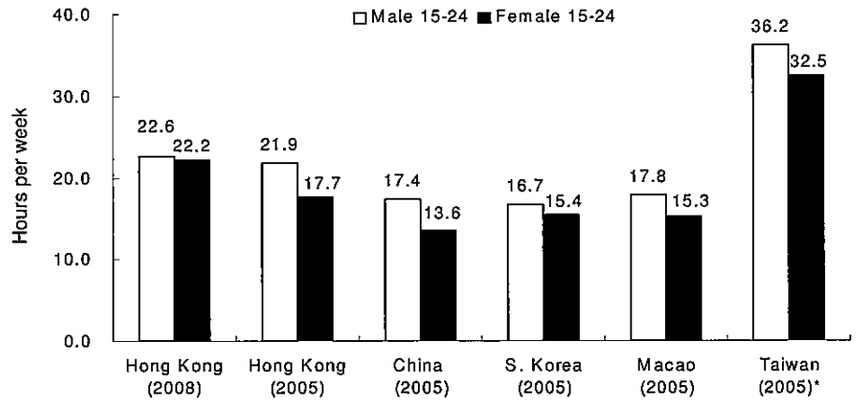
Use of the Internet by Youth in East Asia

Time spent on the Internet

Given the widespread access to the Internet among youth in East Asia, it is important to know what they do with the Internet. Starting with the amount of time spent online, as shown in Figure 5, young users of the Internet across East Asia spend about 15-20 hours per week, or 2-3 hours per day, on the Internet.[3] Not shown in the figure is the fact that youth are online about 20-30% more than that of the general population, except in China where male youth spend 10% more and

3. The online time by Taiwan youth is not directly comparable with that of the other economies because a different measurement method was used in the data collection.

Figure 5 : Time Spent on the Internet



* The time spent on the Internet was directly measured in surveys in China, Hong Kong, S. Korea and Macao; it was not directly measured in Taiwan and then estimated by the data collector.
Sources: unpublished data from CNNIC (China), HKIP (Hong Kong), NIDA (S. Korea), MOIP (Macao), and TWNIC (Taiwan)

female youth 15% less of their time online than the general population.

Another interesting finding from Figure 5 is that in 2005 male youth in all East Asian economies invariantly spent more time online (about 10-30%) than their female counterparts did, which seems to suggest that, while there was no difference between the two sexes in terms of access to or adoption of the Internet, the gender divide is manifested in the intensity of usage, although to a modest degree. That modest difference between the sexes in the intensity of usage evaporates in 2008 in Hong Kong where both young men and young women spend about 22 hours per week on the Internet, which may be a trend to be confirmed in other economies with an updated dataset.

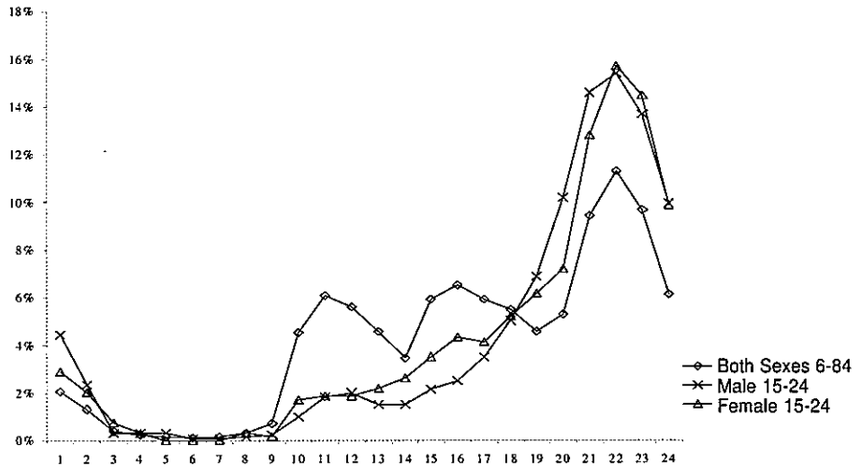
In Hong Kong, young male users and their female counterparts demonstrate similar trends in their online time allocation in the 24-hour cycle, which is a bit different from the trend of the general public, as shown in Figure 6. Most young users are online at night (i.e., from 18:00 to 24:00), while the general public allocate their online time more evenly, as demonstrated by three peak points in a day (i.e., 11:00, 16:00, and 22:00).

Popular Online Activities

Perhaps a more interesting question is what exactly youth are doing on the Internet. Figure 7 shows the five most popular things youth do on the Internet in four economies (i.e., Hong Kong, S. Korea, Macao, and Taiwan).[4] Several

4. Note that users may and in fact do perform multiple activities on the Internet. Therefore, the total percentages for both sexes in Figure 7 all exceed 100%. No comparable data have been obtained on China or Japan.

Figure 6 : Time Spent on the Internet



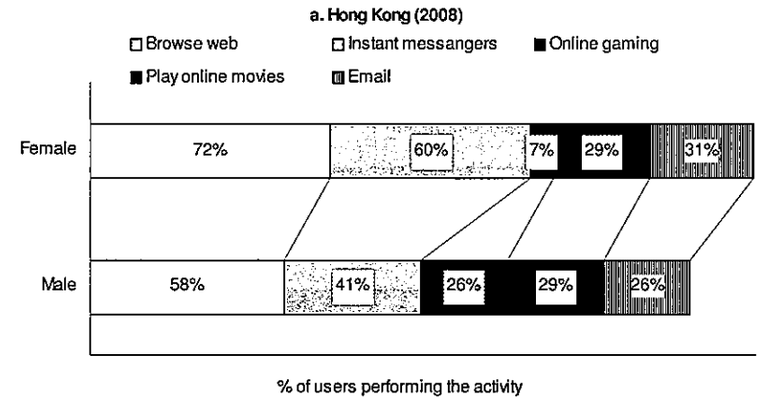
Source: Hong Kong Internet Project (2008)

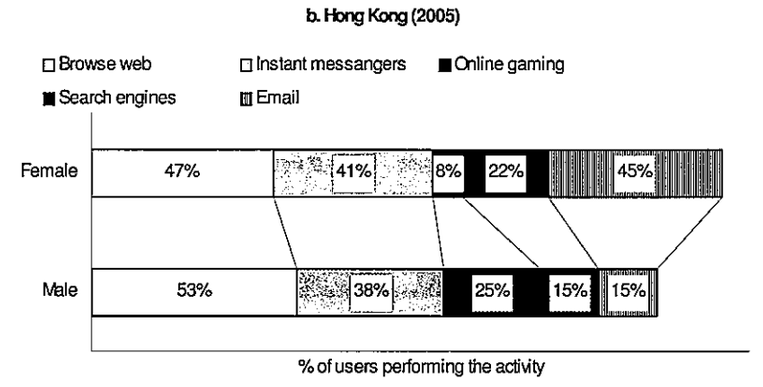
regularities have emerged. First, despite some minor differences in ranking, the top-5 list essentially consists of the following six activities, in a descending order: *Web browsing*, *Email*, *instant messengers*, *entertainment* (e.g., games, playing movies or music), *information search*, and *online shopping*. Second, these six activities could be roughly classified into two categories: *utilitarian* (e.g., browsing, Email, and information search) and *recreation* (instant messengers, entertainment, and online shopping), with about an equal weight as measured by the combined percentages.[5] Third, except in South Korea where no gender difference was observed, male and female youth elsewhere behaved quite differently. For example, as could be expected, male youth were more likely to play online games (in Hong Kong), but less likely to write Emails (in Hong Kong and Taiwan, but not in Macao); on the other hand, female youth were more likely to chat online using instant messengers (in Taiwan and Hong Kong, but not in Macao).

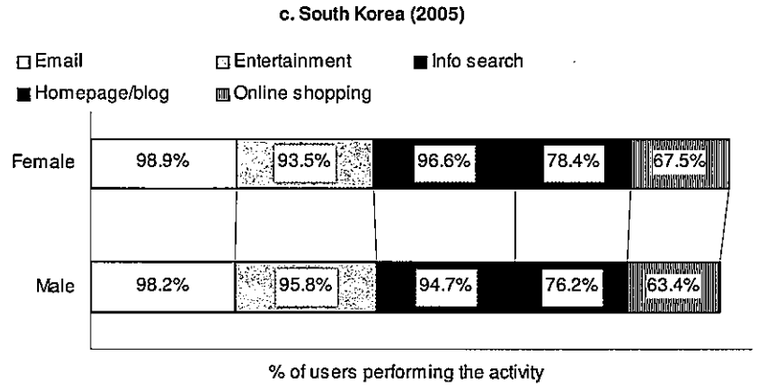
However, some other observed differences between the sexes seem counterintuitive, at least initially. For example, male youth were found to be more likely to go shopping online (in Taiwan), which might be due to the fact that they are either more willing to take risks involved in online shopping or more likely to use the Internet to cut down time on shopping. A higher proportion of female youth used Web browsers (in Macao and Taiwan, but not in Hong Kong) and search engines (in Hong Kong and Macao) more frequently than their male counterparts, which might imply that female youth are more likely to use the Internet for utilitarian purposes whereas male youth are more likely to use it for recreational purposes.

5. Peng, Tsai & Wu (2006) found two similar categories (i.e., functional vs. leisure) among university students in Taiwan.

Figure 7: Top 5 Online Activities

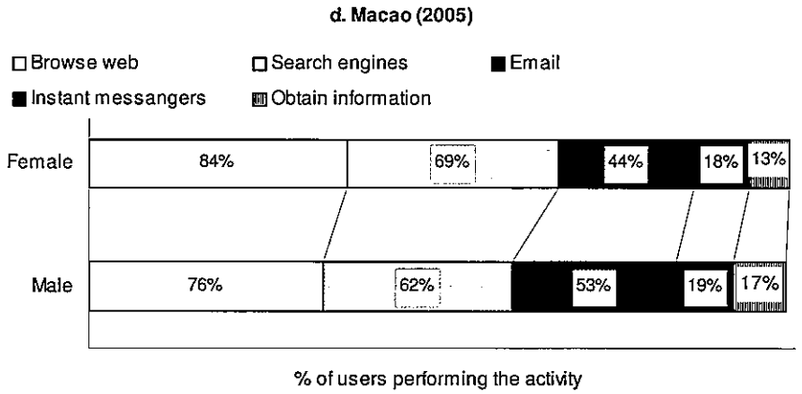


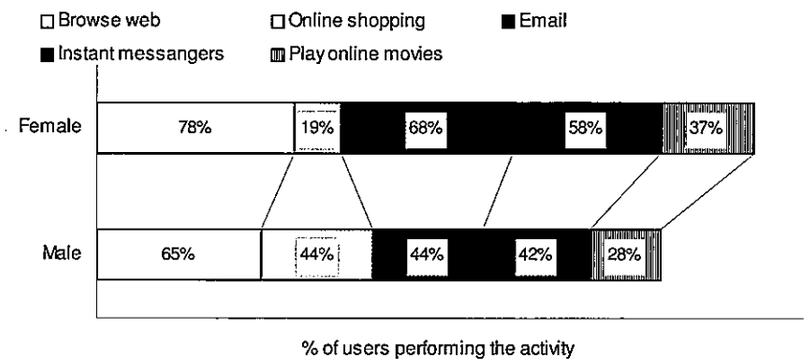




(see next page)

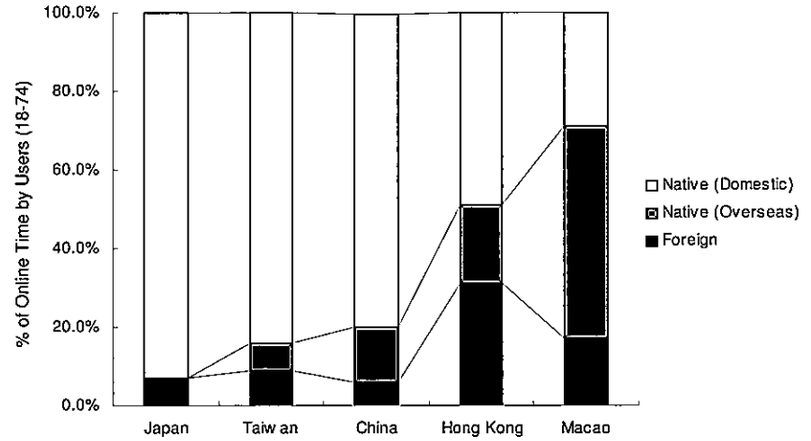
Figure 7 *(continued)* : Top 5 Online Activities





Sources: unpublished data from HKIP (Hong Kong), NIDA (S. Korea), MOIP (Macao), and TWNIC (Taiwan)

Figure 8 : Online Time by Website Language, 2000



Source: Cheong et al. (2003)

Language and Internet Use

Although the Internet provides a global coverage with an unprecedented technological capability, it has largely remained a local medium as far as usage is concerned (Liu et al., 2002). This is perhaps more so the case in East Asia. As shown in Figure 8, Internet users (of all ages) in China, Japan and Taiwan spend 80-93% of their online time on domestic websites in their respective native languages. They allocate only 7-20% of their online time to other websites including domestic websites in foreign languages and overseas websites[6] in both native and foreign languages.

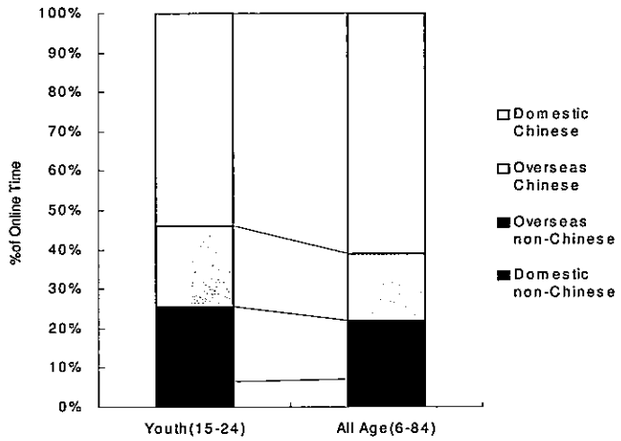
Hong Kong and Macao, former colonies of Britain and Portugal, respectively, present two exceptional cases that are revealing in their respective ways. Users in Hong Kong spend 23% of their online time on websites in foreign languages, two to three times more than their counterparts in China, Japan and Taiwan, and 19% on websites in Chinese hosted outside Hong Kong, in such places as China, Taiwan, Macao and elsewhere. Nevertheless, the share of local websites in Chinese language increased gradually from 50% in 2000 to 60% in 2008 whereas the share of non-Chinese websites (hosted both locally and overseas) declined to 24% and Chinese websites overseas to 16% in the same period (HKIP, 2009).

It should be noted that the data presented above are based on adult users of all age (i.e., 18-74 in 2000 and 6-84 in 2008).[7] Are young users more oriented to websites overseas or in

6. Overseas websites refers to non-local websites.

7. Statistically speaking, it is impossible to find a sizeable amount of online time devoted to overseas websites in non-native languages by youth in China, Japan, and Taiwan in light of the

Figure 9 : Online Time by Website Language in Hong Kong, 2008



Source: Hong Kong Internet Project (2008)

non-native languages, given better foreign language skills and more exposure to foreign cultures among the youth generation? The data from Hong Kong provide only modest support for this assumption. As shown in Figure 9, youth devoted 19% of their online time to non-Chinese websites overseas, 7% non-Chinese websites local, and 20% Chinese websites overseas, or 1-3% more than the general population. The differences are too modest to draw firm conclusions.

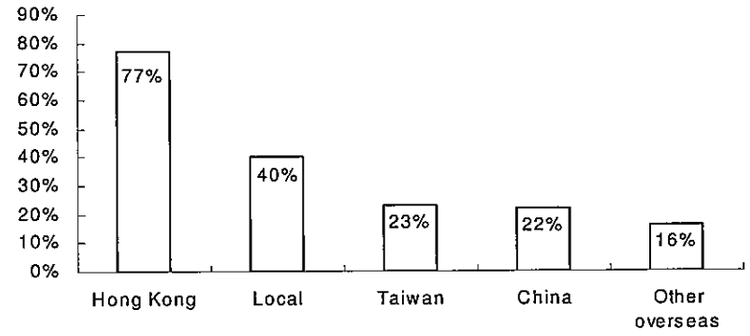
Macao is a story of regionalization in the wake of globalization (Kim, 2004). As a small economy with a population less than half a million, Macao does not host an adequate number of websites for the local users to consume. Consequently, most of the users "travel" to overseas websites. However, as shown in Figure 8, they prefer overseas websites in their native language (Chinese) to other languages by a ratio of 3:1 (i.e., 54% vs. 17%). As found in the 2005 MOIP survey, 40% of users in Macao frequently visited local websites, as compared to 77% of them to websites in Hong Kong, 23% Taiwan, and 22% China (MOIP, 2006) (See Figure 10). The popularity of these "regional" websites leaves only 16% for all other overseas websites combined.

Youth Attitudes Toward the Internet in Hong Kong

Views on technology are supposed to be an area where the Internet could make a big difference simply because users are assumed to be more positive about the benefits of

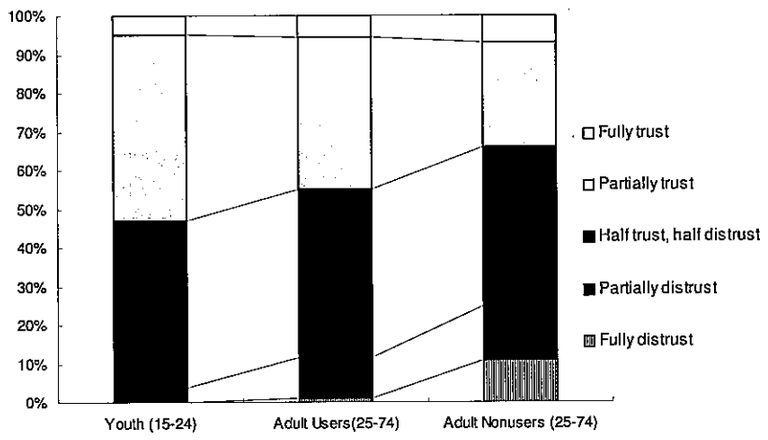
overwhelming proportion of time (80-94%) already spent on domestic websites in native languages by the general population, of which youth account for about 20% in the three economies. Although there are no data on Korea, it is reasonable to assume the same constraints apply equally well there.

Figure 10 : Websites Frequently Visited by Macao Users (age of 6-84), 2005



Source: Macao Internet Project (2006)

Figure 11 : Trust in the Internet in Hong Kong (2008)

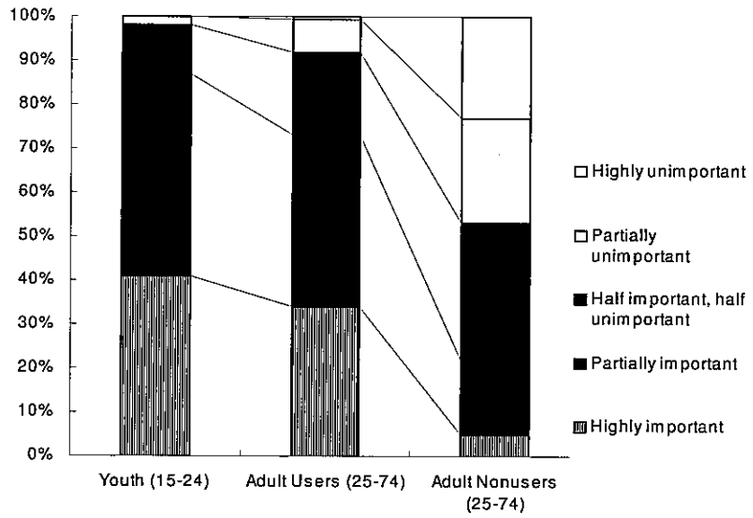


Source: Hong Kong Internet Project (2008)

technology. Our findings in Hong Kong confirmed this assumption. Two types of attitudes toward the Internet are measured in the Hong Kong Internet Project: one is trust and the other is the perceived importance of the Internet.

As illustrated in Figure 11, by the end of 2008, 52% of young users trusted the Internet, which is 7% higher than adult users and 18% higher than adult nonusers. Meanwhile, only 3% of young users distrusted the Internet, which is substantially lower than adult users (12%) and adult nonusers (25%). With regards to the perceived importance of the Internet, a similar pattern is identified, as shown in Figure 12. 86% of young users think the Internet is important in

Figure 12 : Trust in the Internet in Hong Kong (2008)



Source: Hong Kong Internet Project (2008)

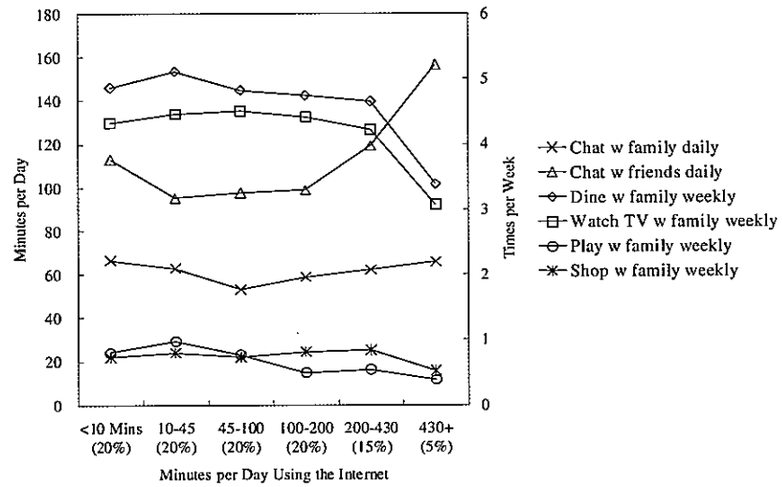
their lives while only 2% of young users think it is not important. Among adult nonusers, 47% think the Internet is not important in their lives and only 21% think it important.

Impacts of the Internet on Youth in Hong Kong

When the Internet first came along, there were already concerns about whether users, especially those who spent an excessive amount of time on it, became cut off from social networks in the physical world (e.g., Kraut et al., 1998). However, as the Internet gradually became a mainstreaming activity engaged by the majority of many developed societies, such concerns were largely eased. For example, in a special issue of the scholarly journal *IT&Soiety*, 20 empirical studies conducted around the world were reported on the relationship between Internet use and sociability, i.e., socializing with family, relatives, friends and other members of social networks (Robinson & Nie, 2002). Of the studies, 3 found a *negative* impact of Internet use on sociability whereas 7 others found a *positive* impact. Still 10 others, including 3 from East Asia, reported no significant relationship between Internet use and sociability (Lee & Zhu, 2002, on Hong Kong and China; Guo & Bu, 2002, on China; Mikami, 2002, on Japan), While all the studies involved adults, many of them did take age into account, finding similar patterns in youth and older generations.

Five years after those studies, as Internet use has now become a universal activity among the youth in East Asia, we collected new data, up to the end of 2005, about Internet use and

Figure 13: Internet Use and Sociability among HK Youth (2002-2005)



Sources: Hong Kong Internet Project (2002-2005)

sociability among Hong Kong youth. As shown in Figure 13, there were negligible differences among the overwhelming majority (i.e., 95%) of users except those who spent more than 7 hours a day. These extremely heavy users, accounting for 5% of youth, were less frequently than their peers to have dinner with family members at home (about 1.3 days per week fewer, the red line) or watch TV with family members (1.5 days per week fewer, the green line). Conversely, they spent more time (about 40 minutes per day more, the blue line) talking to friends offline. Nevertheless, they spent the same amount of time speaking, playing, or shopping with family members. On balance, the patterns are largely consistent with what had been found earlier (e.g., Lee & Zhu, 2002).

In summary, the latest evidence suggests that digital isolation is not a widespread or serious issue for youth as a whole, at least in Hong Kong. The only group that needs some attention is extremely heavy users. Even among them, the problem does not seem to be alarmingly severe, as they still maintain a minimally acceptable level of interactions with family, e.g., dining or watching TV at home about 3 days per week.

Conclusive Remarks

It is found that youth in East Asia, including China, Hong Kong, Japan, South Korea, Macao, and Taiwan, have well embraced the Internet. The adoption rate of the Internet among youth in this region is nearly universal, with the exception of China. Even within China, the least developed

economy in the region, the adoption rate of the Internet has reached 60% among youth in the urban sector, a population of well over 500 million, comparable to the same rates in most developed nations around the world.

Perhaps similar to youth elsewhere, usage of the Internet by the youth in this region, including those in urban and rural China who have adopted the Internet, is extensive and pervasive. On average, they spend 15-20 hours a week on the Internet, which are among the highest levels of usage around the world. It has also been found that youth's online time is split fairly equally between utility (e.g., searching information or exchanging emails) and recreation (e.g., chatting over instant messengers, playing music, videos, or games). We consider it a healthy mix of the online activities, at least at the aggregated level for youth as a whole. Of course, there are misuse and abuse behaviors with undesirable consequences among youth such as spending an excessive amount of time on the Internet, developing romantic or sexual relations online without discretion, and hacking other people's private or confidential information. It is however important to keep the overall picture (e.g., addictive users of the Internet account for a very small proportion of the youth population) in mind before accepting news reports in the popular press about abnormal youth behaviors as a consequence of excessive Internet usage.

Regulators, parents, and teachers understandably and rightfully have maintained serious concerns about the possible negative impacts of the Internet and other ICT media on the young generation. However, we have found limited evidence for an impact, either positive or negative, of Internet use on the daily lives of young people in Hong Kong. The gap in the estimated impact of the Internet between popular beliefs and scientific findings is not new. When earlier ICT media – i.e., radio and TV - came along, there was both amazement and worry, just as there is now over the Internet. Seemingly illustrated by dramatic or sensational events, such as the public panic caused by the radio drama "War of the Worlds" on CBS radio in the United States in 1930s, media analysis was dominated for decades by the "magic bullet" view that considered the electronic media had a direct, instant, and uniform impact on the masses. Only after systematic investigations using scientific methods were conducted, the popular belief in the magic bullet was replaced by more modest estimates of media effects.

To establish the causal effects of Internet use on individuals' perceptions and actions, three conditions are required: first, there should be *correlation* between Internet use and individuals' thoughts and behaviors; second, there also should be *time order* in the correlation with Internet use preceding thoughts and behaviors; and finally, there should be *no alternative* sources of influence confounding the correlation. The data presented earlier in the paper describe the correlation, or the first prerequisite for the impact of the Internet. Even had the correlations been established, we would still be unable to make firm claims because there was no time order in the data. Take the correlation between sports activities and Internet use. It is equally possible that while some users spent less time on exercises because they stayed online too long, other users went online because they did not like doing exercises in the first place. In fact, problems of this nature have troubled media scholars for nearly half a century; for example,

whether people become fearful of the environment because they watch too much violence on TV or whether they watch too much TV because they live in a dangerous environment (Gerbner et al., 1994).

Finally, it is even more challenging to rule out alternative influences that may confound the impact of the Internet on youth, such as their relationship with family or peers, and various other more immediate factors. Altogether, the issue of the Internet's impact on youth is highly complicated, which calls for studies spanning long periods of time in diverse contexts.

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網絡欺凌現象、理解與處理

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本研究對香港網絡攻擊行為作出初步評估，從 7,654 人中揀選 48 位被評定有攻擊傾向的小四至中三學童參與，分析學童作出網絡攻擊行為的程度，及其與操控型攻擊和反應型攻擊的關係。結果發現，中學學童較小學學童多進行網上攻擊，以改受害人花名、取笑別人及散播流言居多，藉以達到不同目的，如報復（反應型攻擊）或炫耀自己（操控型攻擊）。

關鍵詞：網絡欺凌、操控型攻擊、反應型攻擊

The Phenomenon of Cyberbullying: Its Aetiology and Intervention

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This study preliminarily investigated the phenomenon of cyberbullying in Hong Kong. From a pool of 7,654 students, 48 Primary 4 to Form 3 students who were assessed as potential aggressors participated in the study. The purpose was to understand the frequency of cyberbullying behaviours and the relationship between cyberbullying and two types of aggression—proactive and reactive aggression. Results indicated that more cyberbullying behaviours were exhibited among secondary school students than among primary school students, with common practices including name calling, teasing, and gossiping. Emotional ventilation was regarded as the major reason for cyberbullying; for example, revenge was a form of reactive aggression and showing off a form of proactive aggression.

Keywords: cyberbullying; proactive aggression; reactive aggression

一、何謂網絡欺凌？

隨著科技日新月異，網絡的電郵、討論區、即時通訊軟件（如 MSN）、短訊（如 SMS）、社交網站（如 facebook）、日誌（如 xanga）及各式各樣的搜尋器為我們帶來了不少溝通和收發資訊上的便利。但是，網絡世界亦成為了另一個欺凌別人或被人欺凌的平台。

1. 網絡欺凌的定義

何謂「網絡欺凌」？有些學者界定網絡欺凌為利用資訊科技故意羞辱、折

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