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# Becoming Citizens: Youths' Civic Uses of New Media in Five Digital Cities in East Asia

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## Abstract

Asian youths are embracing communication technologies at a burgeoning rate, yet interesting differences in Internet access and use exist among this younger generation. Our empirical investigation provides a rich and comparative look into what Asian youths do online, with an emphasis on an understudied area: their civic uses of new media. Data collected among youths aged between 12 and 17 in Hong Kong, Seoul, Singapore, Taipei, and Tokyo in 2007 show that this 'digital generation' has grown up with computers and the Internet, with 96% of them being internet users, and having 6 years of computer experience on average. Our results suggest that the Internet may facilitate citizenship among Asian youths although entertainment-related activities such as downloading music or playing games remain the most popular activities online. Sixty-five percent of them read online news, almost half of them have ever cast a vote on the Internet, and every one in five has signed an online petition. Differences in Internet usage and civic behaviors among youths in five cities are presented, suggesting the contextual nature of Internet use influenced by civic culture. The paper concludes with a discussion of differences in Internet use among Asian youths between 2001 and 2007, together with research implications for better understanding this population.

## Keywords

civic engagement, internet, positive youth development, East Asia

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Civic engagement is built upon knowledge, skills, attitudes, and habits, all of which start before adulthood (Flanagan & Sherrod, 1998; McLeod, 2000; Shah, Cho, & Kwak, 2005; Yates & Youniss, 1998). To be responsible citizens later in their lives, it is essential for the youth to learn and practice core values such as participation, deliberation, and services when they are still young. Political socialization theory has suggested that youths learn civic skills and engage in civic activities primarily through the family, the school, and the media, where they are trained to formulate and express opinions and to understand and tolerate diverse points of view (Flanagan, Bowes, Jonsson, Csapo, & Sheblanova, 1998; McLeod, 2000; Shah et al., 2005; Torney-Purta, Schwille, & Amadeo, 1999). As new media advance rapidly, it opens up the debate of whether these media offer new space for promoting civic engagement among the youth.

In the present study, we do not focus on formal political engagement such as voting or campaigning, of which teens may not be able to play a significant part, but on civic activities such as community services, attending boys or girls scouts, or working on campus newspapers, where youths learn to participate in public affairs in the process. In particular, we have two goals in the current research. First, we would like to know the extent to which the Internet is utilized by the youth as a tool for civic deliberation and discussion. Second, we want to identify whether and how adolescents' connections to the Internet are related to their civic participation in the real world, if at all.

Five cities in East Asia—Hong Kong, Seoul, Singapore, Taipei, and Tokyo—are chosen as the research context because of their high Internet penetration rates and similar government policies in the active promotion of e-society and information technology industry. According to the most recent report by the Internet World Statistics ("Internet Usage in Asia," 2008), Internet users in Japan have reached 94 million with a penetration rate of 74%. South Korea has more than 34 million Internet users, or 71% of the total population. Hong Kong registered a similar Internet penetration rate of 70%, with more than 4.8 million users. Taiwan's Internet penetration has more than doubled, from 31 to 67% (or 15.4 million) of the total population, over the past 5 years. With 2.7 million users, Singapore has an Internet penetration rate of 59%. In addition, the broadband connections in these high-digital areas are also among the top of the world. The report released by Point Topic, a global marketing and research firm, reveals South Korea having the world's highest broadband penetration rate of 83% of all households, and Taiwan and Singapore at approximately 65%, compared to only 46% in the United Kingdom and 44% in the United States (Albrecht, 2006). In this light, the East Asian context is an ideal place to examine the ways in which new media are associated with developing civic skills and advancing democratic practices, hence providing a non-Western perspective in new media studies.

## Civic Engagement and Youth

*Capturing the nature of youth engagement today is important both for what it tells us about where we are going and what it reveals about where we've been.* (Zukin, Keeter, Andolina, Jenkins, & Delli Carpini, 2006, p.48)

In this section, we will review the literature on the relationship between the Internet and civic engagement in general and then focus on the impact of new media on the youth, in particular. Civic engagement in this article is not limited to official forms of political participation such as elections and campaigns, where youths can hardly become a significant part. Rather, we include organized voluntary activities aimed at problem solving and helping others as forms of civic engagement (Zukin et al., 2006).

## The Internet and Civic Participation

Scholars have long been interested to explore the impact of information and communication technologies (ICTs) on citizen participation as they penetrate into people's everyday lives. A few researchers have attempted to establish a positive association between communication technology and participation (e.g., Bennett, 2000; Danziger, Dutton, Kling, & Kraemer, 1982; Gibson, Lusoli, & Ward, 2005; Hill & Hughes, 1998; Lupia & Philpot, 2005; Norris, 2000; Stanley & Weare, 2004; Swanson, 2000). They address new media's greater capacities to retrieve, store, and disseminate information associated with different forms of civic engagement. New ICTs also facilitate civic deliberation and communication, which is essential for citizens to engage in public policy debate and the decision-making process. In particular, the Internet is believed to have lowered the cost of obtaining information, provided additional channels for minority groups to voice their concerns, and expanded communication networks (e.g., Itoi, 2000; Jones & Rafaeli, 2000; Lin & Dutton, 2003; Stanley & Weare, 2004).

However, conflicting results exist regarding the impact of the Internet in the political process. Earlier studies tended to find either no relationship between Internet use and civic participation (e.g., Hill & Hughes, 1998; Kohut, 2000; Wyatt, Katz, & Kim, 2000) or negative "Net" effects on social connections (e.g., Kraut et al., 1998; Nie & Erbring, 2000). More recent studies that focused on experienced Internet users have found that Internet use is positively associated with political involvement, such as political interest and campaign exposure (Lupia & Philpot, 2005; Nisbet & Scheufele, 2004; Scheufele, Nisbet, Brossard, & Nisbet, 2004; Shah et al., 2005; Shah, Schmierbach, Hawkins,

Espino, & Donovan, 2002; Stanley & Weare, 2004; Tolbert & McNeal, 2003). Aside from formal political participation, heavy Internet use was also found to positively correlate with increased involvement in voluntary organizations (Shah et al., 2002; Wellman, Haase, Witte, & Hampton, 2001). In a similar vein, researchers have demonstrated a positive relationship between Internet connectedness and community participation in multiethnic communities. Individuals with higher embeddedness on the Internet were more likely to engage in civic actions after the September 11 terrorist attacks in 2001 (Kim, Ball-Rokeach, Cohen, & Jung, 2003).

Given the inconclusive empirical results on the effect of the Internet on citizen participation, researchers have started to investigate the factors that may contribute to these mixed findings. They discover that the Internet may not have a direct, linear impact on civic engagement. Rather, the effect is moderated by other variables, for instance, the ways in which individuals orient themselves to the media, their interests, as well as their motivations (e.g., Holland, 2005). For instance, motivation was found in Shah and colleagues' study (2001) as a condition for the relationship between Internet connection and civic engagement. Specifically, individuals who used the Internet for information purposes would tend to have higher levels of social capital and participation, whereas those who used the Internet primarily for entertainment purposes showed a decreasing level of civic engagement. Other scholars have also found existing social ties or connections to the community storytelling network as conditional factors that contribute to the Internet's effect on civic engagement (e.g., Kim, 2004; Monge & Matei, 2004).

## **The Wired Generation: Net Consumers or Net Citizens?**

Despite the ample empirical studies discussed earlier, it is only until recently that scholars expand this line of research to address younger groups, especially teens, who in fact form the most connected group across all age sectors. The Pew Internet and American Life Project, for instance, have regularly studied the Internet population for more than a decade, targeting adults aged 18 or older. Separately, the team conducted a number of surveys on American teenagers' Internet connections in 2001, 2005, and 2008. Their reports clearly indicated that teenagers led all age groups in Internet connections (Lenhart, Kahne, Middaugh, McGill, & Evans, 2008; Lenhart, Madden, & Hitlin, 2005; Lenhart, Rainie, & Lewis, 2001). In Europe, the effort made by Livingstone and associates has resulted in a series of reports on U.K. children's Internet behaviors. They discovered that nearly all surveyed teens (98%) aged 9 to 19 years had Internet access, and approximately 75% had Internet

access at home (e.g., Livingstone & Bober, 2003, 2004; Livingstone, Bober, & Helsper, 2004). Even though comparable figures are not readily available in Asia, evidence of teens' Internet dependency has gradually emerged. In Singapore, for example, a focus group interview with 24 teenagers pointed to their intensive use of the Internet (Rainie & Horrigan, 2005). A survey conducted by the Taipei Youth Activity Center (2004) indicated that more than 70% of teenagers in Taipei browsed the Internet on a daily basis, and they spent an average of 3 hr each day online. Moreover, teens in Japan were described as "*adolechnic*" as technology was heavily embedded in their lives (Holden, 2006).

Given that new media have penetrated into teens' lives, what do they do on the Internet then? To what extent does this wired generation engage in civic and political activities online? The Pew Internet reports (2001, 2005, & 2008) discovered that, sending or receiving e-mails, playing online games, and visiting websites about movies, TV shows, music groups, or sports stars, were the most popular activities among U.S. teens. Many studies have also showed that teens are the group that uses the Internet mostly for entertainment and communication purposes (Jones & Fox, 2009). When it comes to politics, however, researchers have found that teens had little interest in the possibility of political participation via the Internet and were cynical about the likelihood that politicians would listen to them (Livingstone & Bober, 2005; Livingstone et al., 2004).

On the other hand, there are also studies reporting more encouraging results. In the same project, Livingstone and colleagues (2004) discovered that 54% of those surveyed teens had ever visited civic or political websites, such as charity, government, environment, and human rights sites, or sites for improving conditions at school or work. This suggests that teenagers may use the Internet for civic purposes but in unconventional ways. For instance, teens already used new media to form communities and create public forums for self-expression (Montgomery, 2000). The expansive and interactive nature of the web is fostering the growth of a new civic media culture that might not be captured by traditional conception of civic participation but could still contribute to the building of a civil society.

Based on the previous discussion, we thus seek to examine whether teens use the Internet as a tool to engage in civic activities. Apart from conventional measures of political participation such as elections, scholars have demonstrated that attention to hard news (e.g., Keum, Devanathan, Deshpande, Nelson, & Shah, 2004; McLeod, Scheufele, & Moy, 1999; Norris, 1996; Scheufele, 2000; Shah et al., 2001) and discussions about public concerns (e.g., Ball-Rokeach, Gibbs, Jung, Kim, & Qiu, 2001; Hardy & Scheufele, 2005; McLeod et al., 1999; Nisbet & Scheufele, 2004; Scheufele, 2000;

Wyatt et al., 2000) are key components for civic participation. Therefore, we propose to ask the following questions:

*Research Question 1:* To what extent do teens connect to the Internet to engage in civic activities, compared to other activities? In particular, how often do they go online to read news, discuss public affairs, visit civic websites, and engage in online voting and petitions?

*Research Question 2:* Is teens' Internet connection related to their civic participation in the real world?

Specifically, on the basis of the previous discussion, we would like to explore whether any conditional factor may impact the relationship between teens' Internet use and civic participation in their lives. Many studies in political communication have suggested that individuals' interest in politics serve as a powerful indicator of their actual participation (Chaffee, Zhao, & Leshner, 1994). We thus propose the following hypothesis:

*Hypothesis 1:* Teens' Internet connection is positively related to their civic participation if they are interested in politics.

## A Tale of Five Digital Cities

Various large-scale surveys and marketing reports such as Nielsen/ NetRating and Internet World Stats (2008) indicate that the ownership of personal computers and the Internet penetration rates in East Asia top major countries in the world. Some digital cities in this region, such as Seoul, Singapore, Taipei, Hong Kong, and Tokyo, place great emphasis on the IT sector. Historically, most of these places were under colonial rules at different time points during the 20th century, which makes these societies more open to the outside world. Economically, they all depend heavily on foreign trade, with major exports and imports of information technologies and electronic products. This open exchange, as a result of moderate-to-high degrees of economic freedom in these markets (Heritage Foundation, 2008), largely facilitates their IT development as well.

Nonetheless, these cities differ in political regimes and the degrees of civil liberties. According to the Freedom House ("Freedom in the World," 2008), a nonprofit organization that has published country ratings of political freedom since 1972, Taiwan, South Korea, and Japan received a score of 1.5 (free), whereas Hong Kong was scored at 3.5 (partly free) and Singapore at 4.5 (partly free). Japan has had a representative democracy since its overhaul after World War II. The new constitution of 1947 established popular sovereignty,

made the emperor a figurehead, and established extensive guarantees of civil rights. As a relatively young democracy, Taiwan has enjoyed high degrees of freedom and political rights since the late 1990s and has witnessed political mania during election times. Getting through the rules by authoritarian governments during most of the 20th century, South Korea has settled as one of the most dynamic democratic systems since 1987. On the other hand, Hong Kong's "democratic deficit" has a long history (economist.com, 2007). The Chinese government, pointing to Hong Kong's success as an undemocratic British colony for nearly a century, is intended to block direct elections of this special region's chief executive until at least 2017. In the case of Singapore, it has a full slate of democratic mechanisms. Nonetheless, under the one-party political structure, the government has been able to limit the opportunities for extraparliamentary protest and manage alternative focuses of opposition activity, with little real political competition and a strong authoritarian bent (Kluver & Banerjee, 2005, p. 32).

Given the similarities and differences discussed previously, we seek to explore whether there will be any difference in youths' Internet connections in these cities. We thus ask:

*Research Question 3:* Are there differences in teens' civic activities on the Internet, comparing Hong Kong, Seoul, Singapore, Taipei, and Tokyo?

## Method

As a continual effort to investigate the ways in which new media are embedded into youths' lives (Jung, Kim, Lin, & Cheong, 2005; Lin, Kim, Jung, & Cheong, 2005), we conducted surveys in five East Asian cities: Hong Kong, Seoul, Singapore, Taipei, and Tokyo, where Internet penetration rates are among the highest in the world. In each city, a multistage-cluster-sampling method was used on the basis of different school districts and levels of school resources. In Seoul, we divided a total of 26 school districts into 3 groups—rich, medium, and poor—in view of the presence of area-based inequality that leads to a difference in economic resources available in different groups of schools. In each cluster, we selected two middle schools, and from each of these six schools, two second-year classes (equivalent to the eighth grade in the United States) were chosen. In the cases of Hong Kong, Taipei, Tokyo, and Singapore, where economic resources vary more prominently between public and private schools than between geographical areas, we classified schools into public and private ones, and proceeded to choose classes from each category. In all, we obtained a sample of 1,875 students, of which 318 came

from Hong Kong, 437 from Seoul, 401 from Singapore, 398 from Taipei, and 321 from Tokyo.

A questionnaire was first developed in English and then translated into Korean for Korean respondents, Chinese for Taiwan and Hong Kong students, and Japanese for Tokyo teens by respective native speakers who were fluent in English. For Singaporean students, we used an English version as it was their first language. Pilot studies were conducted in each city and revisions were made accordingly.

## **Measures**

Respondents were asked about their computer and Internet history, Internet activities and goals, and their community services. Internet use was a frequency measure on a 5-point scale: How often do you go online in a week? The response options were 1 = *7 days a week*, 2 = *5 to 6 days a week*, 3 = *3 to 4 days a week*, 4 = *1 to 2 days a week*, and 5 = *less than once a week*. *Online activities* were frequency measures, which include chatting, playing games, listening to music, and reading news, which teens checked the answer on a 4-point scale. Online discussions were measured on a 4-point scale (1 = *not at all*, 2 = *not very often*, 3 = *often*, and 4 = *all the time*) by asking, "How often do you engage in discussions with other people on the Internet about the following issues—political issues, economic issues, international events, entertainment, sports, and shopping?" Teens were also asked to identify whether they had ever visited civic websites (yes/no), including charity, human rights, environment, religion, improving conditions at school, or government-related pages (Livingstone & Bober, 2003). Lastly, civic engagement was measured by several dimensions. Teen's extracurricular activities were measured by asking, "Do you currently participate in any extracurricular activities (such as a drama or language club, sports program, or school band) on campus (yes/no)?" Community participation was measured by asking, "Have you participated in any volunteer activities in your neighborhood outside your school (yes/no)?" We also added a novel measure of civic engagement concerning teens' participation of recycling (Schudson, 2007): "Have you ever participated in recycling newspapers, bottles and cans, batteries, or other home appliances in the past 3 months (yes/no)?"

## **Data Analysis and Results**

Our findings profile a wired generation that is highly connected in the 21st century. As our data reveal, more than 95% of the teens in our sample had computer experiences and their average computer history was 6 years.



**Table 1.** Sample Characteristics of Teens in Five Cities (% Response Within Each City)

	Hong Kong	Seoul	Singapore	Taipei	Tokyo	Total
Number of respondents	318	437	401	398	321	1875
Age (M)	13.6	13.5	14.2	14	14.5	14
Gender (female, %)	33	51	66	55	49	52
Used a computer (%)	99	97	99	99	83	96
Computer history (years)	6	5	6	6	6	6
Internet user (%)	98	93	98	96	98	96
Internet access at home (%)	97	98	94	97	98	97
Internet usage						
7 days a week (%)	62	37	25	18	25	33
5-6 days a week (%)	13	22	23	14	16	18
3-4 days a week (%)	12	21	32	25	22	23
1-2 days a week (%)	10	15	16	33	23	19
Less than 1 day a week (%)	3	5	4	10	14	7
Mobile phone user (%)	88	87	97	84	89	89
Mobile Internet (%)	66	52	48	68	88	63

With regard to their Internet connections, 96% of all respondents used the Internet, and more than half of them were regular users, meaning that they were connected at least 5 days a week. For those who reported using the Internet on a daily basis, the average time they spent online was more than 3 hr per day. Internet access at home reached as high as 97%. Home appears to be the most favorable place for them to surf the Internet, compared to the school, the library, and the Internet café. In addition, approximately 89% of the teens in our study used the mobile phone, and two thirds of them ever surfed the web via their mobile devices. We also found that the young generation did not quite enjoy traditional media as much as they did with new media. They still watched TV frequently (85%), but only 49% reported reading the broadsheet newspaper on a regular basis, and even fewer (37%) listened to the radio. Table 1 summarizes the characteristics of the respondents in our sample.

To answer our first research question—to what extent do teens connect to the Internet to engage in civic activities, compared to other activities—we found that teens in our sample appeared to engage in similar activities in the virtual world, compared to those teens in the West. Listening to music or downloading music (89%), chatting (86%), and playing games (84%) were primary activities teens did online. It was also common for them to e-mail (82%), send instant messages (78%), and watch TV or movies (78%) online. To what extent did they use the Internet for civic purposes? For the majority of the surveyed teens, reading news online appears to be a more common form of

engagement than other online activities. Our data showed that 65% of the teens ever read news on the Internet. Approximately half of them ever visited civic websites focusing on topics such as charity, environment, or government; 45% ever cast a vote on the Internet to reflect their opinions; and almost every one in five respondents ever signed a petition online. On the other hand, many teens in our sample rarely discussed civic issues online. Active discussants on international affairs comprised of 11%, which was 8% for politics 8%, and only 4% in the case of economics, and teens tended to talk about entertainment (52%), sports (31%), or shopping issues (27%) more frequently.

To answer the second research question whether teens' Internet connection related to their civic participation in the real world, we first ran a correlation analysis and discovered that Internet use was positively related to teens' participation in campus activities ( $r = .051, p < .05$ ), their participation in community services ( $r = .048, p < .05$ ), as well as their involvement in recycling ( $r = .085, p < .01$ ). To further investigate whether this positive relationship will be moderated by teens' interest in politics, we performed a regression analysis. As the model reflects, the predictive power of Internet use on teens' civic participation increased when their interest in politics was considered ( $F = 7.161, p < .001$ ). In other words, for those who were interested in politics, the Internet facilitated their civic participation, more so than those who were not interested in politics. Our hypothesis is thus supported.

Our final research question intends to uncover the difference, if any, in teens' civic activities on the Internet, comparing Hong Kong, Seoul, Singapore, Taipei, and Tokyo. Overall, our findings suggest that their patterns of Internet connections differed, despite the respondents in the five cities were all well connected. For instance, teens in Hong Kong used the Internet more frequently than those in the other four cities. Specifically, 74% of teens in Hong Kong connected to the Internet at least 5 days a week, compared to 59% of such frequent users in Seoul, 48% in Singapore, 41% in Tokyo, and 32% in Taipei. The difference is statistically significant ( $F = 49.403, p < .001$ ). Access locales also differed among youths in different cities. In general, although home is the most popular place to surf the Internet, more than 84% of the teens in Singapore also reported using the Internet in school, and 61% of the teens in Seoul chose to go online from a cybercafé.

With regard to teens' civic activities on the Internet, differences exist in five cities (see Table 2), illustrating the rich heterogeneity of contextual, mediated practices of "Asian youths." First, more than 70% of teens in Seoul, Hong Kong, and Taipei ever accessed news online, followed by 64% of news readers in Singapore, and a much lower rate of 36% in Tokyo ( $\chi^2 = 1.789, df = 4, p < .001$ ). Second, whereas the majority of teens in all five cities were equally interested in discussing entertainment and leisure issues online, they

**Table 2.** Youths' Online Activities in Five Cities (% Response Within Each City)

	Hong Kong	Seoul	Singapore	Taipei	Tokyo	Total
Listen to/download music	91	94	94	96	66	89
Conduct school research	91	96	84	94	71	88
Email	94	81	99	96	57	86
Play games	97	76	96	97	51	84
Seek information	84	69	79	86	84	80
Instant message/chat	88	71	94	93	40	78
Watch TV/movie	87	78	85	82	54	78
Personal website/blog	68	64	73	64	19	59
Shopping	47	61	24	45	29	42
Make phone calls	50	10	29	43	6	27
Read news	75	77	63	70	32	65
Vote	82	54	46	48	21	45
Sign a petition	19	26	27	13	6	19
Visit civic websites	37	48	52	45	48	46

**Table 3.** Youths' Online Discussion in Five Cities (% Response Within Each City)

	Hong Kong	Seoul	Singapore	Taipei	Tokyo	Total
Entertainment	74	74	81	84	64	76
Sports	59	54	71	63	58	61
Personal	56	56	71	54	61	60
Computer	70	22	70	69	47	55
Shopping	55	50	62	46	33	50
International affairs	41	31	42	37	23	35
Politics	32	25	34	35	29	31
Economics	23	19	28	15	21	21

showed different levels of interest in public affairs. Teens in Singapore appeared to discuss international events more often than their counterparts in the other four cities ( $F = 5.931$ ,  $p < .001$ ), whereas respondents in Tokyo showed the least interest in discussing political and international issues (see Table 3). Third, more teens in Seoul and Singapore ever signed a petition online compared with all other respondents ( $\chi^2 = 86.262$ ,  $df = 4$ ,  $p < .001$ ). Fourth, we found more teens in Seoul having voting experiences online than teens in other cities ( $\chi^2 = 46.742$ ,  $df = 4$ ,  $p < .001$ ).

In addition to the variations in their online civic engagement, differences were also found in youths' social capital building practices in the real life (see Table 4). For instance, participants showed the least interest in the following

**Table 4.** Youths' Real-Life Civic Activities in Five Cities (% Response Within Each City)

	Hong Kong	Seoul	Singapore	Taipei	Tokyo	Total
School extracurricular activities	74	31	72	69	88	65
Off-campus community services	36	25	26	13	7	21
Participation in recycling	48	89	87	82	80	78

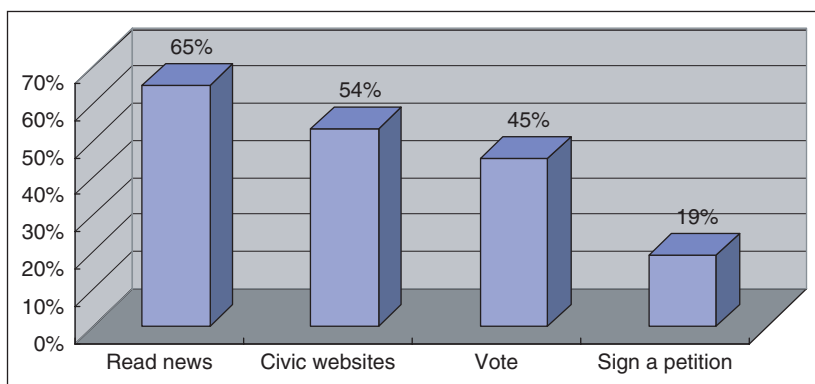
locales and in various types of activities listed as follows: respondents from Seoul participated in school extracurricular activities the least ( $\chi^2 = 46.742$ ,  $df = 4$ ,  $p < .001$ ), those from Tokyo and Taipei reported having engaged in community services the least ( $\chi^2 = 99.972$ ,  $df = 4$ ,  $p < .001$ ), and those from Hong Kong participated in recycling cans or bottles the least, compared to all other respondents ( $\chi^2 = 2.191$ ,  $df = 4$ ,  $p < .001$ ).

## Discussion

Teens in these five cities under study are a fruitful sample for examining mediated communication practices as they are mostly computer and Internet literate. Compared to the data collected in 2001 (Jung et al., 2005; Lin et al., 2005), we have observed significant changes in teens' new media connections over time. First, teens' computer history has increased from 4 years to 6 years on average, meaning that most of the kids have started to use the computer as early as 8 years of age. Second, the rates of Internet access at home have also increased from 90% in 2001 to 97% in 2007. This reflects very high computer ownership and Internet access in these digital cities, even higher than the rates in most of the Western countries (e.g., Lenhart et al., 2008). Third, teens' mobile phone use, too, was on the rise over the years, and the increase of using their mobile phone to surf the Internet was even more remarkable, which ranged from 45% to 63%.

### *Digital Teens: Net Citizens or Consumers?*

It is not surprising then that entertainment and leisure activities still dominate the cyberspace. However, our data provide some evidence to show that the commercialization of media does not necessarily diminish youths' civic-mindedness altogether. Most significant, if we compare our findings with the data in 2001, significant changes are observed. For instance, we found approximately 65% of the teens reading news on the Internet, a sharp increase from 31% in 2001 (Lin et al., 2005). The amount of teen civic discussion on



**Figure 1.** Youth civic activities online

the Internet was also on the rise over the years. More than half of the teens in our sample discussed public affairs to a larger or lesser extent. In 2001, however, only slightly more than 10% surveyed teens ever discussed political, economic, or international issues on the cyberspace (Lin et al., 2005). This remarkable increase may well be a factor of teens' more frequent and regular involvement with the technology, leading to a broader scope of online activities, including civic and political functions. In addition, as the web pages have grown phenomenally with better designs and richer contents, the increase in participation opportunities online conceivably will facilitate their engagement in various aspects. Figure 1 highlights youths' civic activities on the Internet.

Moreover, the young generation seems to be finding other, unconventional ways to participate, such as through fandom, making contacts with friends or strangers, or even expanding peer-to-peer file sharing networks for music downloads. Social networking can potentially be transformed to mobilizing forces when the time comes. In this study, we also identify an important factor, teens' interest in politics, which moderates the relationship between youths' Internet connection and their civic engagement. This finding echoes a group of scholars (e.g., Kavanaugh & Patterson, 2001; Kim, 2004; Shah et al., 2001) who champion for Internet's conditional effects, rather than linear effects, on civic participation. In other words, we do not argue that heavier use of the Internet would necessarily lead to more participation. Rather, the Internet may enhance civic engagement to a large extent for those who are politically interested and civic-minded.

## ***Convergence and Divergence: A Comparison of Five Cities***

As discussed earlier, there are multiple implications of Internet use for youth civic engagement, as their online connections is embedded and situated within local political cultures. One of the interesting findings in comparing the five cities is the higher level of online civic discussion and participation in petitions in Singaporean youths. Compared with the other four cities in our sample, Singapore is known to have a more strongly regulated media and political environment and legal restrictions that may dampen individuals' political discussions and participation in the community (e.g., Kluver & Banerjee, 2005). Thus, our findings suggest that some Singaporean youths may be utilizing the Internet as an alternate civic space, to express ideas and opinions that may be otherwise discouraged or even censored in the real world.

For youths in Seoul and Taipei, two democratic societies with high degrees of freedom, the Internet appears to reinforce what they have already exercised in the real world. The majority of them accessed the Internet regularly for news. They also liked to discuss politics. Paradoxically, teens in Tokyo expressed high interest in politics, but they showed little involvement in civic engagement online. Whereas they discussed public affairs the least on the Internet, they also did not visit civic websites as much as other teens did. For them, the Internet neither replaces nor reinforces their everyday practices. The underlying mechanism of this paradox needs further investigation. Nonetheless, it reflects certain cultural sensitivities in using the Internet that are not explained by pure technological advancement. As scholars have pointed out, "Political culture has an inordinately large role in defining the parameters for how the Internet is deployed and that social factors are more important than technological ones in predicting how technologies will be used" (Kluver & Banerjee, 2005, p. 76). In this backdrop, variations and gaps in Asian youths' Internet connections may be viewed as reflective of cultural choices.

## **Conclusion**

Our study fills in the research hole in existing new media studies, which often adopt adult- and West-centric approaches. In all, our findings confirm the Internet's potential to engage teenagers in becoming citizens even though commercial and entertaining activities remain dominant on the cyberspace. In addition, our study suggests that young people seem to be finding other, nonconventional ways to participate. They discuss public affairs, seek out civic or political information, or network with friends or strangers on the cyberspace. Social networking can potentially be transformed to mobilizing forces when the time comes.

There are some suggestions for future studies. First, scholars may further expand teens' participation measures in ways that encompass the scope and intensity of teens' civic involvement. Second, future studies on new media's social and political impact can compare levels of civic interest and engagement between youths and adults to draw insight on the generational effect.

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### References

- Albrecht, S. (2006). Whose voice is heard in online deliberation? A study of participation and representation in political debates on the Internet. *Information, Communication & Society*, 9(1), 62-82.
- Ball-Rokeach, S., Gibbs, J., Jung, J.-Y., Kim, Y.-C., & Qiu, J. (2001). *The globalization of everyday life: Visions and realities* (Metamorphosis Project White Paper No. two). Los Angeles: Annenberg School for Communication.
- Bennett, W. L. (2000). Introduction: Communication and civic engagement in comparative perspective. *Political Communication*, 17, 307-312.
- Chaffee, H., Zhao, X. & Leshner, G. (1994). Political knowledge and the campaign media of 1992. *Communication Research*, 21(3), 305-324.
- Danziger, J. N., Dutton, W. H., Kling, R., & Kraemer, K. L. (1982). *Computers and politics: High technology in American local governments*. New York: Columbia University Press.
- economist.com. (2007). *Hong Kong's democratic deficit*. Available from [http://www.economist.com/displayStory.cfm?Story\\_ID=E1\\_JQDSRTV](http://www.economist.com/displayStory.cfm?Story_ID=E1_JQDSRTV)
- Flanagan, C. A., Bowes, J. M., Jonsson, B., Csapo, B., & Sheblanova, E. (1998). Ties that bind: Correlates of adolescents' civic commitments in seven countries. *Journal of Social Issues*, 54, 457-475.
- Flanagan, C. A., & Sherrod, L. R. (1998). Youth political development: An introduction. *Journal of Social Issues*, 54, 447-456.
- Freedom in the World*. (2008). Available from <http://www.freedomhouse.org/research/index.htm>
- Gibson, R., Lusoli, W., & Ward, S. (2005). Online participation in the UK: Testing a "contextualised" model of Internet effects. *The British Journal of Politics & International Relations*, 7, 561-583.

- Hardy, B. W., & Scheufele, D. A. (2005). Examining differential gains from Internet use: Comparing the moderating role of talk and online interactions. *Journal of Communication*, 55(1), 71-84.
- Hill, K. A., & Hughes, J. E. (1998). *Cyberpolitics: Citizen activism in the age of the Internet*. Lanham, MD: Rowman & Littlefield.
- Holden, T. J. M. (2006). The social life of Japan's adolechnic. In P. Nilan & C. Feixa (Eds.), *Global youth? Hybrid identities, plural worlds* (pp. 72-90). New York: Routledge.
- Internet Usage in Asia*. (2008). Retrieved September 30, 2008, from <http://internetworldstats.com/stats3.htm>
- Itoi, K. (2000, April 17). Political apathy? Japan's young people speak out online: A web of uncensored debate. *Newsweek*, p. 54.
- Jones, Q., & Rafaeli, S. (2000). Time to split, virtually: "Discourse architecture" and "community building" as means to creating vibrant virtual publics. *Electronic Markets: The International Journal of Electronic Commerce and Business Media*, 10, 214-223.
- Jones, S., & Fox, S. (2009). Generations Online in 2009. Pew Internet and American Project. Retrieved from <http://www.pewinternet.org/Reports/2009/Generations-Online-in-2009.aspx>.
- Jung, J.-Y., Kim, Y.-C., Lin, W.-Y., & Cheong, P. (2005). The influence of social context on Internet connectedness of adolescents in Seoul, Singapore and Taipei. *New Media & Society*, 7(1), 64-88.
- Kavanaugh, A. L., & Patterson, S. J. (2001). The impact of community computer networks on social capital and community involvement. *American Behavioral Scientist*, 45, 469-509.
- Keum, H., Devanathan, N., Deshpande, S., Nelson, M. R., & Shah, D. (2004). The citizen-consumer: Media effects at the interaction of consumer and civic culture. *Political Communication*, 21, 369-391.
- Kim, Y.-C. (2004, May). *Internet connectedness and civic engagement: A multilevel approach*. Paper presented at the Annual Conference of the International Communication Association, New Orleans.
- Kim, Y.-C., Ball-Rokeach, S. J., Cohen, E. L., & Jung, J.-Y. (2003). Communication infrastructure and civic actions in crisis. In B. S. Greenberg (Ed.), *Communication and terrorism* (pp. 289-304). Cresskill, NJ: Hampton Press.
- Kluver, R., & Banerjee, I. (2005). Political culture, regulation, and democratization: The Internet in nine Asian nations. *Information, Communication & Society*, 8(1), 30-46.
- Kluver, R. (2005) Political Culture in Online Politics. In Allen, M. & Convalso, M. (Eds.) *Internet Research Annual, Vol. 2*, (pp. 75-84). Peter Lang Publishers, New York.
- Kohut, A. (2000). Internet users are on the rise, but public affairs interest isn't. *Columbia Journalism Review*, 38(5), 68-69.



- Kraut, R., Lundmark, V., Patterson, M., Kiesler, S., Mukopadhyay, T., & Scherlis, W. (1998). Internet paradox—a social technology that reduces social involvement and psychological well-being. *American Psychologist*, 53, 1017-1031.
- Lenhart, A., Kahne, J., Midaugh, E., Macgill, A. R., Evans, C., & Vitak, J. (2008). *Teens, video games, and civics: Teens gaming experiences are diverse and include significant social interaction and civic engagement*. Washington, DC: Pew Internet & American Life Project.
- Lenhart, A., Kahne, J., Midaugh, E., McGill, A., & Evans, C. (2008). *Teens, video games, and civics*. Washington, DC: Pew Internet & American Life Project.
- Lenhart, A., Madden, M., & Hitlin, P. (2005). *Teens and technology: Youth are leading the transition to a fully wired and mobile nation*. Washington, DC: Pew Internet & American Life Project.
- Lenhart, A., Rainie, L., & Lewis, O. (2001). *Teenage life online: The rise of the instant-message generation and the Internet's impact on friendships and family relationships*. Washington, DC: Pew Internet & American Life Project.
- Lin, W.-Y., & Dutton, W. H. (2003). The 'net' effect in politics: The 'stop the overlay' campaign in Los Angeles. *Party Politics*, 9(1), 124-136.
- Lin, W.-Y., Kim, Y.-C., Jung, J.-Y., & Cheong, P. H. (2005, May). *Growing up digital: Exploring youth's civic uses of the Internet in digital cities of East Asia*. Paper presented at the International Communication Association, New York.
- Livingstone, S., & Bober, M. (2003). *UK children go online: Listening to young people's experiences*. London: London School of Economics and Political Science.
- Livingstone, S., & Bober, M. (2004). *UK children go online: Surveying the experiences of young people and their parents*. London: London School of Economics and Political Science.
- Livingstone, S., & Bober, M. (2005). *UK children go online: Final report of key project findings*. London: London School of Economics and Political Science.
- Livingstone, S., Bober, M., & Helsper, E. J. (2004). *Active participation or just more information? Young people's take up of opportunities to act and interact on the Internet*. London: London School of Economics and Political Science.
- Lupia, A., & Philpot, T. S. (2005). Views from inside the net: How websites affect young adults' political interest. *The Journal of Politics*, 67, 1122-1142.
- McLeod, J. M. (2000). Media and civic socialization of youth. *Journal of Adolescent Health*, 27(Suppl. 2), 45-51.
- McLeod, J. M., Scheufele, D. A., & Moy, P. (1999). Community, communication, and participation: The role of mass media and interpersonal discussion in local political participation. *Political Communication*, 16, 315-336.
- Monge, P., & Matei, S. (2004). The role of the global telecommunications network in bridging economic and political divides, 1989 to 1999. *Journal of Communication*, 54(3): 511-531.

- Montgomery, K. (2000). Youth and digital media: A policy research agenda. *Journal of Adolescent Health, 27*(Suppl. 2), 61-68.
- Nie, N. E., & Erbring, L. (2000). *Internet and society: A preliminary report*. Los Altos, CA: Stanford Institute for the Quantitative Study of Society.
- Nisbet, M. C., & Scheufele, D. A. (2004). Political talk as a catalyst for online citizenship. *Journalism and Mass Communication Quarterly, 81*, 877-896.
- Norris, P. (1996). Does television erode social capital? A reply to Putnam. *PS: Political Science and Politics, 29*, 474-480.
- Norris, P. (2000). *A virtuous circle: Political communications in postindustrial societies*. Cambridge, UK: Cambridge University Press.
- Rainie, L., & Horrigan, J. (2005). *The mainstreaming of online life. A decade of adoption: How the Internet has woven itself into American Life*. Washington, DC: Pew Internet & American Life Project.
- Scheufele, D. A. (2000). Talk or conversation? Dimensions of interpersonal discussion and their implications for participatory democracy. *Journalism and Mass Communication Quarterly, 77*, 727-743.
- Scheufele, D. A., Nisbet, M. C., Brossard, D., & Nisbet, E. C. (2004). Social structure and citizenship: Examining the impacts of social setting, network heterogeneity, and informational variables on political participation. *Political Communication, 21*, 315-338.
- Schudson, M. (2007). Citizens, consumers, and the good society. *Annals of the American Academy of Political and Social Science, 611*, 236-249.
- Shah, D., Cho, J., Eveland, Jr., W.P. & Kwak, N. (2005). Information and expression in a digital age: Modeling Internet effects on civic participation. *Communication Research, 32*(5), 531-565.
- Shah, D., McLeod, J. M., & Yoon, S. H. (2001). Communication, context, and community: An exploration of print, broadcast, and Internet influences. *Communication Research, 28*, 464-506.
- Shah, D., Schmierbach, M., Hawkins, J., Espino, R., & Donavan, J. (2002). Nonrecursing models of Internet use and community engagement: Questioning whether time spent online erodes social capital. *Journalism and Mass Communication Quarterly, 79*(4), 964-987.
- Stanley, J. W., & Weare, C. (2004). The effects of Internet use on political participation: Evidence from an agency online discussion forum. *Administration & Society, 36*, 503-527.
- Swanson, D. L. (2000). The homologous evolution of political communication and civic engagement: Good news, bad news, and no news. *Political Communication, 17*, 409-414.
- Tolbert, C. J., & McNeal, R. S. (2003). Unraveling the effects of the internet on political participation? *Political Research Quarterly, 56*, 175-185.

- Torney-Purta, J., Schwille, J., & Amadeo, J.-A. (1999). *Civic education across Countries: Twenty-four national case studies from the IEA Civic Education Project*. Amsterdam, Netherlands: IEA.
- Wellman, B., Haase, A. Q., Witte, J., & Hampton, K. (2001). Does the Internet increase, decrease, or supplement social capital? Social networks, participation, and community commitment. *American Behavioral Scientist*, 45(3): 436-455.
- Wyatt, R. O., Katz, E., & Kim, J. (2000). Bridging the spheres: Political and personal conversation in public and private spaces. *Journal of Communication*, 50(1), 71-92.
- Yates, M., & Youniss, J. (1998). Community service and political identity development in adolescence. *Journal of Social Issues*, 54(3), 495-512.
- Zukin, C., Keeter, S., Andolina, M., Jenkins, K., & Delli Carpini, M. X. (2006). *A new engagement? Political participation, civic life, and the changing American citizen*. New York: Oxford University Press.

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