

## ***DIGITAL CITIZENSHIP SAFETY AMONG CHILDREN AND ADOLESCENTS IN INDONESIA***

### **PERLINDUNGAN PENGGUNA MEDIA DIGITAL DI KALANGAN ANAK DAN REMAJA DI INDONESIA**

**Gati Gayatri, Udi Rusadi, Siti Meiningsih, Dede Mahmudah, Diana Sari,  
Kautsarina, Karman, and Ari Cahyo Nugroho**

Research and Development Agency for Human  
Resource Ministry of Communication and Information  
Technology Jl. Medan Merdeka Barat No. 9, Jakarta,  
Indonesia gati.gayatri@gmail.com

Naskah diterima 8 Juni 2015, diedit 17 Juni 2015, disetujui 29 Juni 2015

#### ***Abstract***

*The study on Digital Citizenship Safety among Children and Adolescents in Indonesia aims to provide vital knowledge on how children and adolescents in Indonesia use social media and digital technology, and why they use those communication channels as well as the potential risks they might face in doing so. The data collection process of the policy research had been carried out in two years, from 2011 to 2012. Results of the study are expected to guide future policies to protect the rights of children to access information and, and at the same time, to share information and express their views or ideas in digital safety. For this, a randomized sample of children and adolescents aged 10-19 (400 in total) was taken spread across the country and spanning a mixture of urban and rural areas. The study finds that social and digital media use is an integral and growing part of the everyday life of young Indonesians. Almost all of the children and adolescents surveyed know about the Internet and most of them are Internet users. For those who are not Internet users, the number is very small. the most common reasons given are that they do not have the equipment or infrastructure to access the Internet or that they are forbidden by their parents to do so. Children and adolescents tend to use personal computers to access internet at internet cafes/vendors and school computer laboratories; laptops at home; and – above all – mobile phones or smartphones during their daily activities. They have three key motivations to access the Internet: to seek information, to connect to friends (old and new) and to be entertained. Their search for information is often driven by school assignments, while their use of social media and entertainment content is driven by their personal preference. The vast majority of their communication is with their peers, followed by their teachers, and that their communication with family members on the Internet is fairly insignificant.*

**Keywords:** *Adolescent, Children, Digital citizenship, Digital media*

#### **Abstrak**

Studi mengenai Keamanan Digital di Kalangan Anak dan Remaja di Indonesia dilaksanakan dengan tujuan mendapatkan pengetahuan penting mengenai bagaimana anak dan remaja di Indonesia menggunakan media sosial dan teknologi digital, dan mengapa mereka menggunakan saluran-saluran komunikasi tersebut serta risiko-risiko yang mungkin mereka hadapi dalam menggunakan media dan teknologi tersebut. Proses pengumpulan data dari riset kebijakan tersebut telah dilaksanakan selama dua tahun, sejak 2011 sampai dengan 2012. Hasil studi diharapkan dapat menjadi acuan kebijakan-kebijakan pada masa selanjutnya untuk tujuan melindungi hak anak dalam mengakses informasi dan, pada saat yang sama, untuk menyampaikan informasi dan mengungkapkan pandangan atau gagasan-gagasan mereka dalam konteks keamanan digital. Untuk tujuan ini, sampel anak dan remaja berusia 10-19 tahun dipilih secara acak sehingga mewakili seluruh wilayah sekaligus mewakili daerah perkotaan dan perdesaan. Studi tersebut menemukan bahwa penggunaan media sosial dan media digital merupakan bagian penting dan terus mengalami perkembangan dalam kehidupan sehari-hari anak-anak muda di Indonesia. Hampir seluruh anak dan remaja yang diteliti mengaku mengetahui tentang internet dan bagian terbesar mereka merupakan pengguna internet. Mereka yang tidak menggunakan internet jumlahnya sangat kecil, dan alasan paling umum mengapa mereka tidak menggunakannya adalah karena mereka tidak memiliki peralatan atau komputer untuk mengakses internet atau karena mereka dilarang oleh orangtua untuk menggunakannya. Anak dan remaja cenderung menggunakan komputer pribadi, di warung-warung internet, di laboratorium komputer di sekolah, laptop di rumah, dan paling banyak melalui telepon mobile atau telepon cerdas untuk mengakses internet dalam aktivitas mereka sehari-hari. Mereka memiliki tiga motivasi untuk mengakses internet, yaitu untuk mencari informasi, untuk berhubungan dengan teman-teman (lama dan baru) dan untuk mendapatkan hiburan. Pencarian informasi mereka sering didorong oleh adanya tugas-tugas dari sekolah, sementara penggunaan media sosial dan konten hiburan didorong oleh adanya preferensi pribadi. Mayoritas komunikasi yang mereka lakukan adalah dengan sesama teman, diikuti dengan guru, dan komunikasi mereka dengan anggota keluarga melalui internet frekuensinya kurang signifikan.

**Kata-kata Kunci:** remaja, anak, Keamanan Digital, media digital



## INTRODUCTION

Children account for almost one-third of Indonesia's 237 million people and, as the population grows by around 3 million each year, their well-being is of critical importance for the social and economic prospects of the world's fourth most populous country. As their numbers increase, they are driving an upward surge in Indonesia's use of digital technology and social media. Children have a basic right to share and receive information – a right that was enshrined in the Convention on the Rights of the Child (CRC) back in 1989. The CRC is clear – children have fundamental rights to:

- express their views and be heard (Article 12)
- freedom of expression, including the freedom to seek, receive and impart information (Article 13)
- freedom of association and peaceful assembly (Article 15)
- information (Article 17)
- education (Article 28) and participation in artistic and cultural activities (Article 31).

There is no doubt that the rise of social media and digital technology has opened up opportunities for children and adolescents to connect to the wider world, and to each other, in ways that were unheard of at the time of the CRC. And, in many ways, this dramatic shift has made it easier for them to claim some of the most fundamental rights to information and free association laid out in 1989. However, the rise of new media carries with it some risks – including risks that could violate some equally important rights contained in the CRC, including:

- the right to protection against any arbitrary or unlawful interference with their privacy, correspondence and unlawful attacks on their honour or reputation (Article 16)
- the right to protection from all forms of violence and abuse (Article 19)
- the right to protection from all forms of sexual exploitation and sexual abuse (Article 34)
- the right to protection from sale, trafficking or abduction (Article 35)

Access by children and adolescents to the world's burgeoning social and digital media should not put them at risk. And their use of this new media should be based on an understanding of its opportunities and dangers, and their ability to filter and use the information they need. If Indonesia's national aspiration to create fair and prosperous community is to become a reality, a strong focus is needed on ways to involve children and adolescents in the development of their communities and in the government of the State. That means that they need knowledge about what is happening – especially as it affects their own lives. For this reason – and many more – they need access to information and to widespread opportunities to express their own views and ideas.

Therefore, strategic policies and concrete steps are needed to protect children's rights in a fast-changing information context, and should be supported and implemented at every level – from a senior policy-maker aiming to mobilize support for a new initiative, to a mother monitoring her son's Facebook page. Digital media – more than any other type of media in the past – is a communication channel that children and adolescents can use, and do use. At no time in history have they had such an opportunity to connect to so many other people and to access so much information. The task ahead is to ensure that they can do so safely, without any risk to their well-being. This requires knowledge on the children and adolescents who are using the Internet (and those who are not), why they are using it, and how they are using it. The study on Digital Citizenship Safety among Children and Adolescents in Indonesia aims to provide that knowledge.

This report focuses on the findings of the Study on Digital Citizenship Safety among Children and Adolescents in Indonesia conducted by the Ministry of Communication and Information Technology (MCIT) of the Republic of Indonesia in 2011 and 2012. The study was commissioned by UNICEF to understand how children and adolescents aged 10-19 in Indonesia use social media and digital technologies, and what opportunities and risks this presents for their rights. The research aimed to gather objective data to guide future policies to protect the right of children to access information and express their views or ideas in safety. It built on previous research to provide the most comprehensive picture to date of the pattern of digital media use among Indonesia's children and adolescents, and in particular: who is using it; what motivates them to use it; what they are using it for; and whether they are using it safely. As such, this research was the first of its kind in Indonesia.

The six key research questions were as follows:

1. What is the pattern of internet use among children and adolescents?
2. What is the pattern of access to internet content among children and adolescents?
3. What is the motivation to use internet?
4. What is the pattern of communication in internet use among children and adolescents?
5. What about the perception to internet content and privacy?
6. What is the form of supervision from parents or school?

The results are intended for use by policy makers to predict the risks children and adolescents may face when using digital media, and to take the necessary steps to reduce these risks.

## Literature Review

Many of previous studies on digital media use have been conducted by researchers with the theoretical perspective of uses-and-gratifications (Blumer & Katz,

197)<sup>1</sup>. Within the studies researchers often place media digital as part of new media. Researchers who assume that audience is active and that media use behaviour is lead by gratification seeking motives have also seen the theoretical perspective to be useful in explaining media use behaviour and its effect. By having clear purposes, the audience can select certain contents and media use pattern to fulfill their gratification expectations. The strength of needs, motives, and expectations is predicted to give effect of media use activities. In general, based on their focus, studies on digital media use can be grouped into four: studies on process, influencing factors, effects, and correlations between one another. Specifically in process studies, the theoretical perspective of uses-and-gratifications has gained much of empirical evidence that satisfaction of media use is correlated with psychological motives. However, the active audience-based perspective still quite often receive criticisms from many experts and researchers for its failure to explain the processes of audience activities in media use.

Responding to the criticisms, Carolyn A. Lin (1993), a researcher from Cleveland State University, conducted a study to develop construct of audience activity as intervening factor in the process of gratification sought by inserting a number of choices of TV contents in various channels environment. The study measured motives, activities, and satisfaction among the first generation of youth at the environment. The main theoretical assumption to test is whether TV viewers with stronger motivations will be more active in the process of TV viewing and then will be more satisfied. Results of the test using a path-analysis in general shows supports to the assumption. However, the role of media exposure in the process of gratification sought creates questions as to the lack of evidence showing causal relationship among several model components. The study proposes a revised theoretical model to help future research that cover components of media use factors, media use effects, and relationship between process, factors, and media use effects.<sup>2</sup>

There has been a lot of studies on the same issue conducted by researchers in many countries, by using different methodology and approach with results indicating similar findings.

Tanya (2009) conduct studies in rural, suburban and urban in 9 teenage Australians and finds that online networks provided valuable opportunities for social inclusion. The key factors to affect network use are needs, interest, ICT capabilities and relationship. In the same year, Seonmi (2009) through survey in 144 middle school students find that perceived risk and information disclosure increased privacy concerns. Survey that conducted by Green et. Al (2011) in 400 children and their

parents found that more children go online at school, at home and when out and about. Three in five children go online via a mobile device. They have more access and more use to the internet which is now taken for granted in their daily life. However, some children still lack key digital and safety skills, especially younger children (11-12 years old). While Maggie et. Al (2012) during their research found that Having a parent on Facebook did not result in perception of greater privacy invasions, but was associated with decreased conflict in the parent-child relationship.

## Methodology and approach

The research targeted a sample of Indonesia's approximately 43.5 million children and adolescents aged 10-19 years in November 2012.<sup>3</sup> The sample of 400 study respondents was developed using multistage area random sampling<sup>4</sup>, and was drawn from a mixture of urban and rural areas spread across 12 provinces as follows (ranging from high to low population density):

1. Jakarta (n= 71)
2. Banten (n= 97)
3. Special Region of Jogjakarta (n= 25)
4. West Nusa Tenggara (n= 41)
5. Lampung (n=68)
6. North Sulawesi (n=19)
7. Gorontalo (n=10)
8. West Sulawesi (n=11)
9. Southeast Sulawesi (n= 22)
10. North Maluku (n=10)
11. Central Kalimantan (n= 19)
12. West Papua (n=7)

The study broke new ground by reaching not only those children and adolescents who use the Internet, but those who do not. This paves the way for further and deeper studies on this particular group, to further illuminate the 'digital divide'.

The research used a positivist approach to reveal the general patterns of use of the Internet and other digital technology by children and adolescents, in which deductive logic and observation are combined to provide empirical evidence of human behaviour, in order to predict general patterns of human activities. Using this approach, researchers can find or confirm causal relationships to predict the general pattern of a human social phenomenon or activity.<sup>5</sup>

<sup>3</sup>The total number of those age group is 43,551,815, according to the 2010 census carried out by *Badan Pusat Statistik (BPS)*.

<sup>4</sup>The sample size of 400 was derived from the calculation of the population of children and adolescents at the national level, with a degree of significance of 95 per cent and a standard deviation of 5 per cent, and using a formula developed by Yamane (?), as recommended by Berkman Center for Internet and Society at Harvard University.

<sup>5</sup>Neuman, W. Lawrence.(2003). *Social research methods qualitative and quantitative approaches*. 5<sup>th</sup> edition. Boston: Allyn and Bacon.

<sup>1</sup>J.G. Blumer, & E. Katz (1974). *The uses of mass communications: Current perspectives on gratifications research*. Beverly Hills, CA: Sage.

<sup>2</sup>Carolyn A. Lin (1993). "Modeling the gratification-seeking process of Television Viewing". *Human Communication Research*, Vol. 20 No. 2, December 1993: 224-244.

The quantitative research approach used for this study was based on a survey to gather data on the use of digital media among the respondents, using a study questionnaire. This was not only applied to the 400 respondents in the field, but was also conducted online to reach a wider audience and sample.<sup>6</sup>

The questionnaire referred to three variables in particular: use, gratification and motivation. In addition, the questionnaire included questions on perceptions about Internet content, communication patterns, and the supervision of parents and teacher in relation to the use of the Internet by the respondents.

This quantitative research was complemented by qualitative information drawn from two rounds of focus group discussions (FGDs), held in six major cities: Balikpapan, Jakarta, Jayapura, Makassar, Medan and Yogyakarta. The first round of five FGDs, held in November and December 2011, covered (1) elementary school students; (2) junior high-school students; (3) high-school students; (4) teachers and parents, and (5) Internet service providers. There were eight participants in each FGD: a total of 240 participants in 30 FGD sessions. The second round of three FGDs, held in August 2012 in the same cities, tested the questionnaire to ensure that it was easy to understand and apply, and covered (1) elementary school students; (2) junior high-school students, and (3) high-school students, with, once again, eight participants in each FGD: a total of 144 participants in 18 FGD sessions.

The findings were used to revise the study questionnaire and enrich the quantitative data gathered by the November 2012 field survey.

### Technique of analysis

Descriptive statistics were used for the analysis of the survey, describing the use of digital media among by children and adolescents systematically and comprehensively in accordance with the following analytical framework:

- The use of digital media among children and adolescents, focusing on:
  - knowledge about the Internet
  - general patterns of Internet use
  - patterns of individual Internet use
  - general patterns of Internet content access
  - motivation to use the Internet
  - patterns of communication
  - perceptions of Internet content
  - privacy
  - supervision

Box 1: What is new about this study?

- Previous studies on the use of the Internet in Indonesia have tended to focus on specific topics, such as technology acceptance and adoption, and on specific groups, such as bloggers. This study deals with what children and adolescents actually do with the Internet and social media – what motivates them to use it and how they use it.
- The study reveals a ‘motivation’ typology that differs from the typological patterns of the past and that reveals three dominant motivations for the use of the Internet among children and adolescents in Indonesia:
  - *Motivation 1*: friendship and companionship
  - *Motivation 2*: entertainment
  - *Motivation 3*: information.
- Previous studies have tended to be solely quantitative in nature. This study provides qualitative, as well as quantitative information. In addition, the quantitative information was gathered online, as well as from the 400 respondents in the field.
- The study covers children and adolescents who do not use the Internet, as well as those who do – an important step towards deeper analysis of the digital divide.

### The context

Indonesia, a nation made up of some 17,500 islands, is the world’s fourth most populous country. Children already account for almost one-third of Indonesia’s 237 million people and, as the population grows by around 3 million each year, their well-being is of critical importance for the future prospects of the country.

As the number of children and adolescents grows, they are, increasingly, driving an upward surge in the use of digital technology and social media.

Indonesia’s information and communication technology (ICT) landscape

The rapid development of Indonesia’s ICT infrastructure by the Government in cooperation with the relevant industries in Indonesia has transformed the pattern of media use in recent years, with the use of wireless Internet and of mobile phones and smartphones far outstripping the use of more traditional cable technology and landlines.

The expansion of telecommunications is illustrated by the dramatic increase in the use of mobile phones in recent years, growing by 52.52 per cent between 2008 and 2011 (16.43 per cent from 2008 to 2009, 29.09 per cent from 2009 to 2010, and 7 per cent from 2010 to 2011. As of 2011, there were 226,085,588 phone subscribers in Indonesia.<sup>7</sup>

<sup>6</sup>The questionnaire drew upon questionnaires applied by the Government of Canada in cooperation with Statistics Canada for research about Canadian Internet use in 2005.

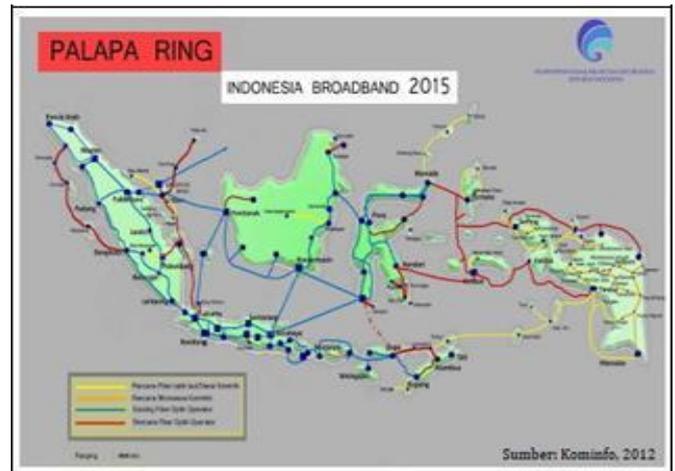
<sup>7</sup>Ministry of Communication and Information Technology, 2012: 25.

Indonesia has more than 300 Internet service providers (ISPs), 35 of which own network infrastructure.<sup>8</sup>PT Telkom and PT Indosat are Indonesia's two largest telecommunications company, with PT Telkom covering 8.6 million fixed-wire-line customers, 14.2 million fixed-wireless customers, and 107 million mobile customers (as of December 2012).<sup>9</sup>Both PT Telkom and PT Indosat were partly privatized in the mid-1990s, but the Government retains shares in both companies, including a more than 50 per cent share in PT Telkom. The growth of Indonesia's media industry has, however, left 12 large conglomerates controlling most of the country's media channels, including broadcast, print, and online media.<sup>10</sup>

Recognizing the importance of high-speed Internet for national development, the Ministry of Communications and Information Technology (MCIT) has launched the Indonesia Connected programme to boost connectivity in border and remote areas. At present, Indonesia's fibre-optic infrastructure is still concentrated on its main islands: with coverage reaching 99% of Java, 72.2% of Sumatra, and 70% of both Kalimantan and Bali-Nusa Tenggara, while in Maluku-Papua there is no fibre-optic infrastructure at all.

The Palapa Ring project (Figure 1), is a government programme to build a fibre-optic backbone that covers every region of Indonesia. This government programme supports the National Development Target of achieving broadband coverage by 2015. There are 497 regencies/ cities<sup>11</sup> to cover, of which 51 are classified as non-commercial, requiring financial aid or ICT funds to establish the fibre-optic infrastructure. PT Telkom, meanwhile, is establishing the network in the other 446 regencies/cities.

According to the Second National Mid-term Development Plan, all regions in Indonesia will have such a network in 2014, and this fibre-optic backbone will cover 88 per cent of regencies/cities.



**Figure 1: The Palapa Ring**

- Figure 1 describes the National Project of Palapa Ring, one of the government programs to build fiber optic network backbone covers all regions of Indonesia. This program is a part of National Development Target towards Indonesia Broadband 2015.
- According to that data, there are 497 regencies/cities to cover, of which 51 regencies/cities classified as non commercial regions and need financial aids or ICT funds to establish the infrastructure facilities. Meanwhile the establishment of fiber optic in 446 regencies/cities is being conducted by PT Telkom till 2015.

### Relevant ICT regulation and legislation<sup>12</sup>

The regulation of ICT in Indonesia falls under the Ministry of Communication and Information Technology (MCIT). In 2005, MCIT assumed responsibility for the Directorate General of Post and Telecommunication (DGPT), which covers general and operational aspects of ICT; surveillance and scrutiny to ensure that telecommunication is conducted within the legal framework; and supervision of all operators and the enforcement of laws covering their operations.

Another key government department is the Indonesian Telecommunications Regulatory Body (Badan Regulasi Telekomunikasi Indonesia, BRTI). The BRTI issues licenses, resolves disputes and advises the Government on telecommunication policy issues.

### Law No. 36 of 1999 on Telecommunications

Law No. 36 of 1999 on Telecommunications<sup>13</sup> allowed major deregulation of the Indonesian telecommunications sector. It does not regulate e-commerce or the specific receiving or sending of

<sup>8</sup>See: <<https://citizenlab.org/2013/10/igf-2013-an-overview-of-indonesian-internet-infrastructure-and-governance/>>

<sup>9</sup>Cisco. (2012). *Cisco Enables PT Telkom to Become a Wi-Fi Leader in Asia*. Source: <http://newsroom.cisco.com/press-release-content?articleId=1114299>, retrieved on 26/01/2014.

<sup>10</sup>Nugroho, Yanuar., Putri, Dinita Andriani., Laksmi, Shita. (2012). *Mapping the landscape of the media industry in contemporary Indonesia*. Jakarta: Ford Foundation.

<sup>11</sup>In Indonesia, a regency and a city are at the same administration level, having their own local government and legislative body. The difference between a regency and a city lies in demography, size and economy. Generally, a regency comprises a larger area than a city, including rural areas, while a city usually relies on non-agricultural economic activities.

<sup>12</sup>IGF 2013: An Overview of Indonesian Internet Infrastructure and Governance. Source: <<https://citizenlab.org/2013/10/igf-2013-an-overview-of-indonesian-internet-infrastructure-and-governance/>>, retrieved on 26/01/2014.

<sup>13</sup>Indonesian Act No. 36/ 1999 on Telecommunication. Official Gazette No. 3881.

information through the Internet. However, the definition of telecommunication in article 1(1) means that the transmission of information through the Internet is covered by the law.<sup>14</sup> This means, in essence, that the development of the Internet remains under the purview of the Government.

**Law No. 11 of 2008 on Electronic Information and Transactions Law**

Law No. 11 of 2008 on Electronic Information and Transactions (EIT)<sup>15</sup> is Indonesia’s first ‘cyber law’ and the main instrument for the regulation of online content.<sup>16</sup> Chapter 7 of the EIT law lists all prohibited acts, which include knowingly and without authority distributing, transmitting, or causing to be accessible in electronic form, records containing:

- material against propriety (article 27(1));
- gambling material (article 27(2));
- material amounting to affront and/or defamation (article 27(3)); and
- extortion and/or threats (article 27(4)).

This law is used for content regulation, together with other laws such as Law No. 44 of 2008 on Pornography, the penal code’s articles 207-208, 310-21, and 335 on defamation, and several Indonesian laws prohibiting blasphemy or ‘defamation of religions’, including Law No. 1/PNPS/1965 (the Presidential Decision). In 2013, the MCIT announced plans to revise the EIT Law to reinforce article 27(2) on defamation.

**Legal Draft on Information Technology Criminal Offense**

The People’s Representative Council (DPR) drafted the Information Technology Criminal Offence Law (RUU Tindak Pidana Teknologi Informasi, TiPiTI) as a response to a proliferation of cybercrime in Indonesia. The bill was finalized in 2012 amid concerns about its implications for freedom of expression, but has not yet entered into law.

**Access to computers, Internet, mobile phones and smartphones**

*Access to computers and computer-based Internet*

Data from the national socio-economic census by the Indonesian Bureau of Statistics show that household computer ownership increased from 4 per cent in 2005 to 14.86 per cent in 2012<sup>17</sup>, with the highest computer ownership found in Java, followed by Sumatra, Kalimantan, and other regions in eastern Indonesia.

<sup>14</sup>Article 1, Article 1 Act No. 36/ 1999 on Telecommunication. Official Gazette No. 3881.

<sup>15</sup>Indonesian Act No. 11/2008 on *Information and Electronic Transaction*, Official Gazette No.4843.

<sup>16</sup>*Navigating Indonesia’s Information Highway*, March 2013. Source: <[http://www.article19.org/data/files/Indonesia\\_Report\\_ENGLISH.pdf](http://www.article19.org/data/files/Indonesia_Report_ENGLISH.pdf)>. Retrieved on 26/01/2014

<sup>17</sup> <[http://bps.go.id/tab\\_sub/view.php?kat=2&tabel=1&daftar=1&id\\_subyek=02&notab=6](http://bps.go.id/tab_sub/view.php?kat=2&tabel=1&daftar=1&id_subyek=02&notab=6)>. Retrieved on 26/01/2014.

Internet access has also increased: in 2005, slightly less than 6 per cent of households had internet access. Just one year later, this had risen to almost 9 per cent. However, by 2012, only around 20 per cent of households had accessed Internet at home in the previous three months (Table 1)<sup>18</sup>.

**Table 1.**  
**Percentage of households that have accessed the Internet in the previous three months (by media used and location) 2005-2012**

Years	Media/location to access Internet					
	House	Internet cafe	Mobile phone	Office	School	Others
2005	29.27	46.36	*	53.55	**	8.54
2006	28.12	49.90	*	57.54	**	9.46
2007	23.59	53.70	*	35.72	25.26	5.26
2008	10.18	45.98	33.43	25.38	16.90	2.54
2009	23.66	57.74	*	29.43	24.71	8.13
2010	16.41	57.16	53.51	22.81	20.81	6.33
2011	20.36	53.64	55.35	21.97	19.83	8.57
2012	19.89	47.33	62.58	20.91	19.25	12.61

Detail: \* Data is not available  
\*\* Combination of media/location office and school  
ources: National Survey on Social Economy by National Statistic Board, 2012

The vast majority of subscribers to ITKP (Internet Telephoni Keperluan Publik or Internet, telephone for public services) live on Java Island: 87.21 per cent in 2011, or 135,459 people, with just 2.79 per cent living on other islands.<sup>19</sup> Home-based access to Internet in Indonesia remains very low in comparison to other countries in southeast Asia, with only Lao PDR, Cambodia and Myanmar having lower rates.<sup>20</sup>

*A surge in mobile-phone penetration*

Mobile-phone penetration in Indonesia increased dramatically between 2005 and 2012. Just under 20 per cent (19.88 per cent) of the population owned mobilephones in 2005. Since then, their expansion has soared, with ownership more than quadrupling: rising to 37.59 per cent in 2007, 61.84 per cent in 2009, and 78.96 per cent in 2011, reaching 83.52 per cent in 2012. Meanwhile the number of landlines fell sharply. In 2005, ownership of phones stood at 13.01 per cent: by 2012, that figure had fallen to 6.31 per cent.<sup>21</sup>

It seems that the Indonesian telecommunications market is unique in ‘skipping’ one step in the usual process. While most consumers around the world buy a landline first, and buy mobile phones later, many consumers in Indonesia have jumped straight to mobile phones as their main communication tool.

With an estimated 278 million mobile subscribers, Indonesia is the fourth largest mobile market in the world and mobile subscribers now completely outnumber the country’s estimated 9 million fixed lines and 12

<sup>18</sup> <[http://bps.go.id/tab\\_sub/view.php?kat=2&tabel=1&daftar=1&id\\_subyek=02&notab=7](http://bps.go.id/tab_sub/view.php?kat=2&tabel=1&daftar=1&id_subyek=02&notab=7)>. Retrieved on 26/01/2014.

<sup>19</sup>Ministry of Communication and Information Technology, 2012: 43

<sup>20</sup>See Ministry of Communication and Information Technology, 2012:58-60, tentang *Perbandingan Internasional*.

<sup>21</sup>Statistics Boards. Source: <[http://bps.go.id/tab\\_sub/view.php?kat=2&tabel=1&daftar=1&id\\_subyek=02&notab=4](http://bps.go.id/tab_sub/view.php?kat=2&tabel=1&daftar=1&id_subyek=02&notab=4)>. Retrieved on 26/01/2014.

million fixed-wireless subscribers. One unusual feature of Indonesia’s mobile market is multiple SIMs. Many subscribers hold two or three *active* SIM cards – and often own two or three phones. So the number of unique users in Indonesia is actually around 165million, which means on average each user holds 1.7 active SIM cards.<sup>22</sup>

Much of the growth in mobile phones has been driven by teenagers, with the majority now having a mobile phone connection. The number of children aged 10-14 with mobile phones has soared, and instant messaging or chatting is the top use of the phones for today’s young Indonesians, who prefer this use of the devices to voice calls or texting.

*Social media trends*

While access to the Internet remains limited in the eastern parts of Indonesia, the use of social media is on the rise around 96 per cent of Indonesian ‘netizens’ are thought to use social media – a rate that outpaces Singapore and Malaysia, as well as India (China is a more difficult comparison, given the preference for local platforms).<sup>23</sup>

Indonesia has the fourth-highest number of Facebook users globally.<sup>24</sup> And Jakarta itself made headlines when, according to Paris-based social media agency SemioCast, the city was named the number one Twitter city in the world. Indonesia has been rumoured to generate more Tweets than anywhere else on earth, with Indonesians thought to send out 15 tweets per second.<sup>25</sup> In addition, data from the Comscore Report (August 2010) show that Indonesia is the country with the highest percentage of Internet users visiting the Twitter micro-blogging platform: almost 21 per cent.

*The digital divide between rural and urban areas*

Indonesia’s Board of Statistics(BPS) has conducted a national household survey on the social economy from 2005-2012, including mobile phone ownership in urban and rural areas. This has revealed a digital divide between urban and rural areas in terms of access to, and use of digital media, particularly mobile phones and the Internet. It seems that rural areas are lagging behind, as shown in tables 2, 3 and 4.

<sup>22</sup>Indonesia mobil’s driven telecom market. Source: <<http://redwing-asia.com/market-data/market-data-telecoms/>>. Retrieved on 27/01/2014.

<sup>23</sup>Saleh, Djohansyah. Indonesia falls for social media: Is Jakarta the world’s number one Twitter city?

<sup>24</sup>Facebook Country Statistics March 2013 – Top 10 Countries And A Comparison Of The U.S. And Brazil. Source: <<http://www.quintly.com/blog/2013/03/facebook-country-statistics-march-2013>>. This information can be found on the publication of webershandwick that showed that Indonesian facebookers are Indonesia is the social media platform’s fourth biggest market. See: <http://webershandwick.asia/indonesia-and-the-facebook-explosion/>

<sup>25</sup>Saleh, Djohansyah. Indonesia falls for social media: Is Jakarta the world’s number one Twitter city?. Source: <<http://www.ipra.org/itl/02/2013/indonesia-falls-for-social-media-is-jakarta-the-world-s-number-one-twitter-city>>, Retrieved on 26/01/2014.

**Table 2.**  
**Percentage of households that have fixed telephone cables, by urban and rural areas (% , 2005-2012)**

Years	Classification by region		Urban + Rural
	Urban	Rural	
2005	25.80	3.37	13.01
2006	22.95	2.35	11.20
2007	24.51	3.72	12.96
2008	20.93	2.91	11.67
2009	18.65	2.56	10.36
2010	16.43	2.56	9.46
2011	13.51	2.30	7.85
2012	10.69	2.00	6.31

Source: national survey on Social economy by statistic Boards, 2012.

**Table 3.**  
**Percentage of households that have mobile phones, by urban and rural areas (% , 2005-2012)**

Years	Classification by region		Urban + Rural
	Urban	Rural	
2005	35.36	8.21	19.88
2006	40.96	12.27	24.60
2007	55.03	24.33	37.59
2008	66.61	38.15	51.99
2009	75.26	49.21	61.84
2010	83.11	61.01	72.00
2011	87.14	70.93	78.96
2012	90.61	76.54	83.52

Source: national survey on Social economy by statistic Board, 2012.

**Children and adolescents in Indonesia**

*National policies and approaches*

As citizens, the rights of children and adolescents to access information and to freedom of expression is protected by the law. The legal protection of children’s rights is stipulated in the 1945 Constitution, especially Article 28 B(2) and a commitment to the fulfilment of their rights has been shown by both the State’s ratification of the Convention on the Rights of the Child (CRC) in September 1990 and the enforcement of Law No. 23 of 2002 on Child Protection.

The Government of Indonesia worked with UNICEF in 2011 to develop a National Plan of Action (NPA) on Children’s Access to Information. The aim was to ensure that children have access to information, knowledge and useful ideas, and to protect children from a number of risks and negative consequences of accessing information.

The further development of the NPA has required the supporting data and information gathered by this study on the use of social media and digital technology by children and adolescents and their motivations for its use. The hope is that this will help to promote and develop child-friendly media – i.e. media that provides useful and accessible information, knowledge and ideas for children.

One-step taken by the Government to accelerate the implementation of the CRC has been to develop the concept of Child-friendly Cities (Box 2), first introduced in 2005 by the State Ministry of Women Empowerment and

Child Protection through the Child Friendly City Policy. One cornerstone of this initiative is the participation of children and adolescents in the decisions made about their communities – participation that requires information and knowledge, as well as effective communication channels that allow them to share their opinions and be heard.

A city or district can be categorized as a Child-Friendly City when it is capable of making policies, institutions, and programmes to respect and fulfil the rights of children. In a Child-Friendly City, children can:

- be involved in policy-making that has an impact on their cities
- express their opinions about their cities
- take an active part in the cultural and social lives of their communities
- have access to basic services, such as health, education, clean drinking water and proper sanitation
- meet and play with their friends in safety
- live in a pollution-free environment
- access every service regardless of their ethnicity, religion, wealth, gender, and disability.<sup>26</sup>

Indonesia has 20 districts/cities that have achieved Child Friendly City status, according to the Minister of Women Empowerment and Child Protection, Linda Amalia Sari.<sup>27</sup> According to the Secretary of Ministry of Women Empowerment and Child Protection, Sri Danti, 76 districts/cities are moving towards Child Friendly City status.<sup>28</sup>

### Challenges

According to UNICEF<sup>29</sup>, Indonesia is considered as a middle-income country, with its Gross Domestic Product (GDP) rising by between 5 and 6 per cent each year over the past ten years. Despite the global economic crisis experienced by many nations, Indonesia has witnessed steady economic growth in the last few years.

However, many Indonesian families have not benefited from this economic progress. While poverty levels have fallen consistently since 1998, it is estimated that as many as half of the population still live below, or dangerously close to, the national poverty line, leaving families acutely vulnerable to economic or social shocks.

The disparities affecting Indonesia also have an impact on its basic indicators, and reflect social and geographic inequities. For example, the infant mortality rate in East Nusa Tenggara province is 57 deaths for every 1,000 live births, three times that of Yogyakarta province. Under-five and infant mortality rates amongst the poorest

households are generally more than twice those in the highest income families. Nearly two-thirds of the poorest families in Java and Bali have access to clean water, while less than 10 per cent of the poorest families in Papua enjoy such access. Almost half of children from poor families do not enrol in junior secondary schools, contributing to the country's high drop-out rates after primary level education.

## 4. Key findings

### Children and adolescents have high access to digital media

The latest data indicate that at least 30 million Internet users in Indonesia are children and adolescents.<sup>30</sup> The use of digital media by children and adolescents in Indonesia is expanding rapidly, with digital media now their preferred communication tool. Regarding mobile phone usage, 67% of child and adolescence in Indonesia have mobile phone and 12% of them have smartphone.<sup>31</sup>

The research revealed two groups within the sample of 400 study respondents: those who use the Internet and those who do not (see Box 3). The study found that 318 use the Internet, while only 82 are non-Internet users.

Internet users and non-Internet users among the research sample by province, revealing significant disparities between the more urban and prosperous parts of Indonesia and its more rural and less prosperous areas.

In the Special Region of Jogjakarta, Jakarta and in Banten, virtually all respondents are Internet users, as are around 80 per cent of respondents in both South and West Sulawesi and in Gorontalo. In Lampung, almost 70 per cent reported using the Internet, falling to around 64 per cent in West Nusa Tenggara and 53 per cent in Central Kalimantan. There is, however, a significant drop-off for North Maluku and West Papua, where less than one-third of the respondents are Internet users (30 per cent and 28.57 per cent respectively).

This study is the first of its kind in Indonesia to gather information on children and adolescents who have never used the Internet – an important step towards analysis of the country's 'digital divide'.

Of the 400 children and adolescents sampled for this research, around 20 per cent (82 in total) have never used the Internet. Of these, 80 per cent are unaware of the Internet, while 20 per cent know about the Internet but do not use it.

The clearest divide is seen between urban and rural areas, with the vast majority – 87 per cent – living in districts, while only a small minority (13 per cent) lived in provincial capitals.

<sup>26</sup>Patilima, Hamid. (2009). *Kota Layak Anak*. <www.kpppa.go.id>

<sup>27</sup>Berita Media Online. (2011). "Kota Layak Anak Masih Kurang," dalam *Harian Seputar Indonesia*, Selasa, 21 Juni 2011. <www.seputar-indonesia.com/ediscetak diakses 21 Juni 2011>

<sup>28</sup>Berita Media Online. (2011). *Puluhan Kota Bakal Jadi Kota Layak Anak*, dalam *Majalah Berita Gatra*, Selasa, 21 Juni 2011. <www.gatra.com/2011-06-21/versi-7\_cetak.php?id=149379 diakses 21 Juni 2011>

<sup>29</sup>The issue of inequity, source: <http://www.unicef.org/indonesia/overview.html>. Retrieved on 27/01/2014.

<sup>30</sup>MCIT, 2012, *ICT White Paper Tahun 2012*, p. 41.

<sup>31</sup>Children use of mobile phones: <http://www.gsmacom/publicpolicy/wp-content/uploads/2012/03/GSMA\_ChildrensMobilePhones2012WEB.pdf>.

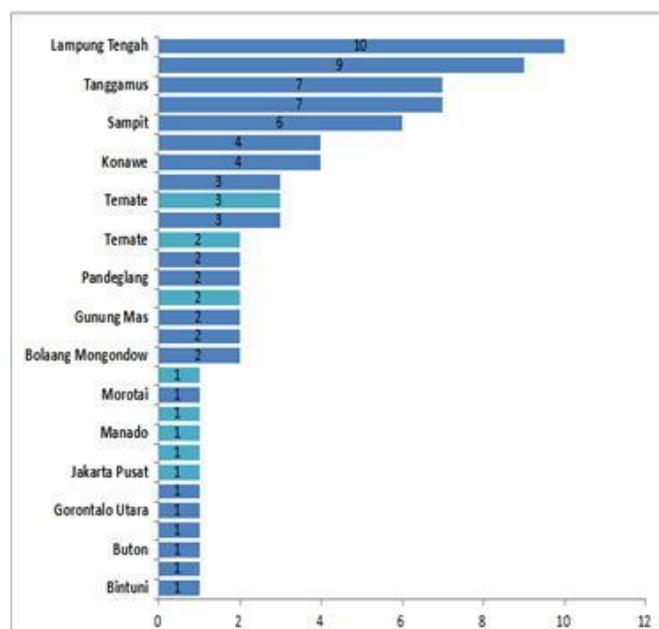
The main reasons for their lack of familiarity with, and use of, the Internet are that they do not have the equipment or infrastructure to access the Internet or that they are forbidden by their parents to do so. The reasons given are as follows:

- no access to a computer ( 34.1 per cent)
- the cost (24.4 per cent)
- not allowed by parents (24.4 per cent)
- no Internet service in their area (23.2 per cent)
- too difficult to use (22 per cent)
- other reasons (19 per cent).<sup>32</sup>

Not surprisingly, the numbers who had never used the Internet dwindled with age (Figure 3). Out of 82 respondents who never use internet, the biggest proportion (45 per cent) were aged 12-13 years, followed by those aged 10-11 years (24 per cent), those aged 16-17 years (15 per cent), those aged 14-15 years (12 per cent), and those aged 18-19 years (4 per cent). There is no significant gender difference, nor is there any marked difference across religions, with the proportions following similar lines to the proportions represented by different religions within society (around 90 per cent Muslim, and the remainder Christian or Hindu). More than two-thirds attend public/ state school, while less than one-third are at a private school, while 81 per cent attend general schools and just 12 per cent and 7 per cent attend religious and vocational schools respectively. There is, however, a marked divide between rural and urban areas. As shown in Figure 4, the vast majority of those who have never used the Internet live in rural areas.

*"I do not use the internet since the internet infrastructure has not reached my village".*

*A student from junior high school in Gunung Arfak, West Papua*



**Figure 2. Age of respondents who have never used the Internet**

<sup>32</sup>The total exceeds 100 per cent because multiple responses were possible.

- Those who use Internet by age, gender, education and religion
- Of the 318 respondents who have ever used the Internet, the biggest proportion (27 per cent) are aged 14-15 years, followed by those aged 12-13 (26 per cent) and those aged 16-17 (23 per cent), as shown in Figure 5.
- By gender, 55 per cent of those who use the Internet are male and 47 per cent are female.
- More than one-third (39 per cent) attend junior high school, while 38 per cent are in senior high school. The rest (22 per cent) are in elementary school, with 1 per cent stating that they have never been to school.
- Three-quarters (75 per cent) attend public schools or state-run educational institutions, with 24 per cent at private schools.
- Most respondents (76 per cent) study at general schools, and 15 per cent and 8 per cent attend vocational or faith-based / religious schools respectively.
- There is no significant variation in Internet usage by religion (Muslim, Christian or Hindu) – the proportions are roughly in line with the proportions within society, with Muslims accounting for more than 90 per cent of respondents, while the rest were Christian (approximately 9 per cent) and Hindus (approximately 0.3 per cent).

Children and adolescents first learned about the Internet from a range of sources, including friends, family, their schools and their own self-directed learning. The survey found that around 47 per cent of those who use the Internet learned about it from friends, 32 per cent from family members and 29 per cent from school, while 22 per cent learned about the Internet by themselves.<sup>33</sup>

*How long they have known about and used Internet*

More than 24 per cent of those who use the Internet report that they have used internet for less than one year, just over 36 per cent say they have used it for 1-2 years, more than 32 per cent have used it for 2-5 years, and more than 9 per cent have known about and used the Internet for more than 5 years.

There is 69 per cent use a personal computer to access the Internet. Around one-third – 34 per cent – use a laptop to do so, and a small minority– just 2 per cent – connect via video games. More than half, however, (52 per cent) use their mobile phones to access Internet, falling to under one-quarter (21 per cent) for smartphones and just 4 per cent for tablets.<sup>34</sup>

There is a marked gender disparity when it comes to the use of hand-held devices (such as smartphones, tablet, game consoles, etc.) and mobile phones. The study finds that 25 per cent of the male respondents used hand-held devices, while 69 per cent used mobile phones. Among the female respondents, 52 per cent used hand-held devices and 19 per cent used mobile phones.

<sup>33</sup>The total exceeds 100 per cent because multiple responses were possible.

<sup>34</sup>As above.

There is little or no difference in the proportion of children and adolescents using hand-held devices across the various age ranges: they are used by around 25 per cent of those aged 10-12, 13-16 and 17-19.

*What motivates children and adolescents to use the Internet?*

The research shows six possible motivations for the use of the Internet by the study respondents. They were asked to select from: (1) friendship (2) information; (3) entertainment; (4) self-protection; (5) escapism; (6) cultural education.<sup>35</sup>

The study finds that 'searching for information' tops the list (80.2 per cent), followed by seeking friendship (78.6 per cent) and entertainment / recreation (73.3 per cent). Only around one quarter (25.6 per cent) access the Internet for escapism, 17.6 per cent for cultural education and just 12.6 per cent for self-protection.<sup>36</sup>

Boys are slightly more likely than girls to seek friendship via the Internet than girls (41.5 per cent and 37.1 per cent respectively), and more likely to seek entertainment (40.3 per cent versus 33.0 per cent).

Girls are, however, a little more likely to use Internet for escapism (13.35 per cent against 12.3 for per cent for boys). There is little gender difference in terms of using the Internet to search for information, for cultural education or for self-protection.

In terms of age range, those aged 13-16 years dominate every category of Internet-use motivation. Those aged 10-12 are very unlikely to use the Internet for self-protection (2.2 per cent) or cultural education(2.5 per cent).

*"I use the Internet as a means of getting entertainment, and of improving my insights to finish learning tasks. I also like to open up the lesson sites, such as Maths."*

*Student from a public junior high-school, Medan*

**Motivation 1: Looking for information**

It seems that the main motivation to use the Internet for children and adolescents is to search for information and, in particular, to find information for their school assignments (75.5 per cent) and searching for learning materials (60.7 per cent). However, only 17.9 per cent say that they use the Internet to exchange information and ideas.

**Motivation 2: Friendship**

More than two-thirds of the children and adolescents who use the Internet use it to increase the number of friends they have in the virtual world (70.13 per cent), while more than half (52.2 per cent) use it to

<sup>35</sup>These options were developed based on survey instruments commonly used in uses-and-gratifications research model and on the results of FGDs conducted before the survey.

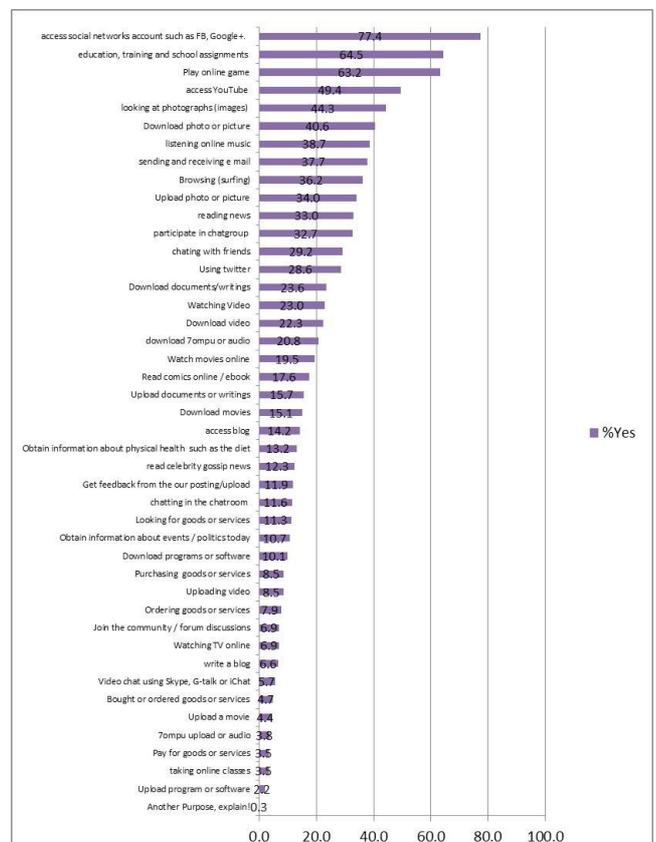
<sup>36</sup>The total exceeds 100 per cent because multiple responses were possible.

interact with their existing friends and more than one third (39.31 per cent) use it to connect to old friends. Less than one-third use the Internet to communicate with family members (31.13 per cent), while less than one quarter (22.33 per cent) use it to strengthen group /organizational cohesion in Indonesia: involvement in certain groups and organizations or school/student committees. There is less motivation to foster romantic relationships (11.01 per cent) or to monitor the activities of romantic partners (16.98 per cent).

**Motivation 3: Entertainment**

Most respondents use the Internet to meet their self-entertainment needs through music (64.5 per cent) and online game (64.2 per cent). They also use it to access videos (39 per cent) and articles (33.6 per cent). Only a small proportion (13.32 per cent) access Internet to follow their favourite artists or idols.

The specific details of how children and adolescents used the Internet in the previous 12 months can be seen in Figure 3. This reveals the dominance of the use of social networks such as Facebook and search engines such as Google (77.4 per cent) and access to content related to education, training and school assignments (64.5 per cent), as well as online games (63.2 per cent). Almost half of those who use Internet had accessed YouTube in the previous 12 months (49.4 per cent).



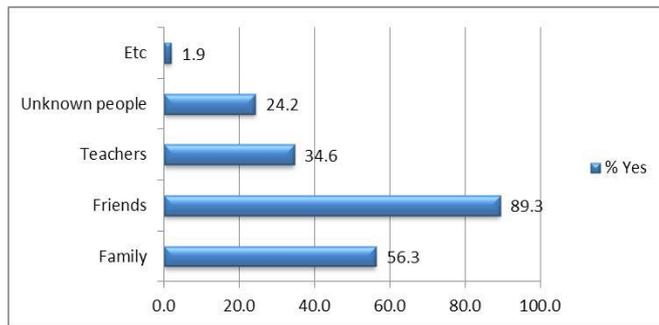
**Figure 3. How respondents used the Internet in the previous 12 months**

**Communication patterns**

*Who they are communicating with*

By analysing who children and adolescents talk to online, what they talk about, and how long they spend online, the study aims to build a picture of their communication patterns. Figure 4 shows that the vast majority (89.3 per cent) communicate online with their friends, while 56.3 per cent communicate with their family and only just over one-third (34.6 per cent) with their teachers.

One area of potential concern is that almost one-quarter – 24.2 per cent – are communicating with people they do not know very well.



**Figure 4. Who children and adolescents communicate with online**

*Communication topics*

*“Usually I use the Internet to chat with my school friends through the classmate group of grade 6 students in Facebook in which my classmates and I can discuss our school homework ...*

*So, if there is an urgent task or an important homework assignment, my friends and I do chatting about it in Facebook.”*

*Student from a public elementary school, Balikpapan*

As far as the topics discussed by children and adolescents are concerned, the study reveals that the topic most often discussion is schoolwork (73 per cent), followed by ‘hanging out’ with friends (59.4 per cent), entertainment (53.8 per cent) and daily life (35.8 per cent). The topics that are the least likely to be discussed are world and political issues, at just 5 per cent.

*Time spent online*

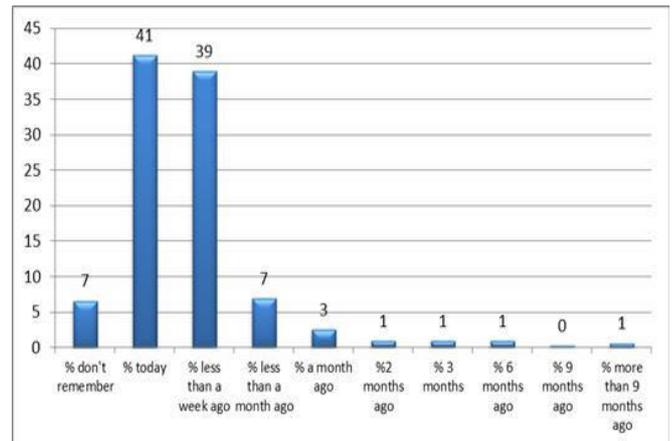
*“In a week, almost every day I use the Internet with a maximum of two hours for each.*

*Every day, I open the internet to check my Twitter, to access YouTube to watch the latest videos. I sometimes use it in my school as well.”*

*Student from a private religious junior high school, Medan*

The study asked children and adolescents when they used the Internet in the previous 12 months, how long they spent online, and where they were at the time.

As shown in Figure 5, 41 per cent of respondents said that they had used the Internet on the day of the survey, and 39 per cent within the previous week. Only very small proportions of respondents (stated that they had used the Internet in the month or two months before the survey (3 per cent and 1 per cent respectively). Equally, only 1 per cent said that they had last accessed the Internet six to nine months before the survey.



**Figure 5. How often children and adolescents accessed the Internet in the previous 12 months**

Of those who had used the Internet on the day of the survey, 23 per cent were aged 13-16, 10 per cent were aged 10-12 and 8 per cent were aged 17-19. There was little disparity by gender.

The largest proportion of respondents use internet at least once each month (38.68 per cent), with 23.9 per cent going online at least once a day, and 19.5 per cent accessing Internet several times each day. Only 1.26 per cent stated that they accessed the Internet less than once a month.

More than half (52.8 per cent) of the respondents said that they access the Internet for less than 5 hours each week, while 23.9 per cent are online for 5-9 hours and 15.1 per cent for 10-19 hours. Among those who spend far longer online: 4.4 per cent are online for 20-29 hours each week, 3.1 per cent for 30-39 hours and 0.6 per cent for 40 hours or more.

*Location*

*“I usually use the Internet facility in my own school.*

*When there were difficulties in accessing the internet with the facility, I can use my modem or go to a cyber cafe close by. There is a lesson of using the Internet given once a week in my school which uses Wi-Fi to connect to the Internet.”*

*Student from a public junior high school, Medan*

The survey asked children and adolescents where/ how they had accessed Internet in the three months preceding the survey, with the following results:

- 94.3 per cent at locations with hotspot facilities
- 86.2 per cent at home
- 69.5 in their own room at home
- 73.6 per cent via their mobile equipment (smartphones, tablets, etc.)
- 72.3 per cent at school
- 65.7 per cent through an Internet café/kiosk (known as a *warung internet*, or *warnet*).<sup>37</sup>

### Perceptions of risk and the safe/unsafe use of digital media

*"... each site in the Internet may consist of positive and negative contents ... which one will affect us depends on ourselves ... whether or not we want to use it."*

*Student from a public vocational high school, Makassar*

The study examined the risks that children and adolescents take when they are online. It found, for example, that 41 per cent lie about their age – raising concerns for their safety when combined with the fact that around one-quarter interact online with people they do not know.

*"... if I join in a social networking community, I will provide uncorrect data or information, including that concerned with my age and personal photographs."*

*Student from a private senior high school, Jakarta*

The survey reviewed the perceptions of children and adolescents on the ethics of language on the Internet (the use of rude/impolite words) and the use of vulgar/inappropriate photos. It also assessed whether they were aware of (and approved/disapproved of) online pornography and whether they or their friends had been exposed to such material. Finally, it gathered information on their awareness and experience of cyberbullying and of violations of privacy.

The findings raise some concerns, with very low awareness about the possible risks and consequences of unsafe digital behaviour, with children and adolescents often sharing personal information, including phone numbers and addresses.

#### *The ethics of language and photos*

When asked about the use of rude/impolite words, such as cursing and insults, an overwhelming majority (94 per cent) are opposed to the online publication of such words. A similar proportion (96 per cent) are opposed to the uploading of inappropriate images and photographs.

<sup>37</sup>The total exceeds 100 per cent because multiple responses were possible.

### *Online pornography*

The survey found that 64 per cent of the children and adolescents who use the Internet are aware of the existence of online pornography, and that 96 per cent disapprove of such content. It also revealed, however, that 14 per cent have accessed online pornographic content at some time.

It should be noted that the survey makes a distinction between those who have accessed pornographic content deliberately, and those who have stumbled across such content accidentally. It seems that around 52 per cent of the respondents have seen pornographic content – either in the form of text, image, photographs or videos– but that few open the content deliberately. Many of those who had seen such material reported having seen advertisements with a pornographic nuance, having opened content accidentally when browsing or having opened a link sent to them via email that has led them to a pornographic site.

Respondents were asked if they had school mates or friends who have ever sent or uploaded pornographic images using Internet-based technology. Most respondents (59 per cent) said “no”, with the remaining 41 per cent aware of such activity on the part of their friends.

### *Cyberbullying*

Violence or bullying is fairly commonplace in the virtual world in Indonesia, as in other countries, with children and adolescents particularly vulnerable, but also acting as perpetrators on occasion.

The survey found that 42 per cent of respondents are aware of cyberbullying, with 58 per cent unaware of its existence – meaning that they may not have understood the term or that the language used was common parlance among their peers. It then went further, asking those who know about cyberbullying whether they have experienced it themselves in the previous three months: 87 per cent have not, but 13 per cent have. Of these, 5 per cent have been victimized more than once.

Of those who have been bullied, the largest single proportion – 8.2 per cent – have been bullied via social networks/media and 4.4 per cent via SMS messages.

The survey also asked children and adolescents whether they had ever used digital media themselves humiliate or anger another person. Only 1 per cent admitted that they had sent an email to upset another person, while 9 per cent admitted that they had sent such a message via a social media network and 14 per cent said that they had sent such a message via SMS.

*"I have been bullied by one of my friends. Without giving any reason he made jokes on my name and wrote threatening statements in FB ... He also invited me to do fighting as well."*

*I was so threatened there at FB."*

*Student from a private junior high school, Makassar*

### *Violations of privacy*

*"I have ... been threatened on the Internet, in FB, by a woman who wrote threatening words on my wall ..., she ask me to do fighting with her without any reasons that I know ...."*

*Student from a private senior high school, Medan*

The children and adolescents who use the Internet were asked whether they had ever taken a photo of another person and published it virtually without their consent. Around 8 per cent had done so. It seems that only 61 per cent of the respondents are aware of the need to protect their privacy when using the Internet, meaning that they understand the kinds of information that can be shared safely and the kind that cannot.<sup>38</sup>

The remaining 39 per cent are not aware of their privacy and do not mind when someone else wants to know which websites they have visited or when other people read their personal email.

The children and adolescents were asked whether or not they were concerned about password selection for their emails or social networks. While 78 per cent answered "yes" and were aware of the need for privacy when it comes to password selection, 22 per cent answered "no", having no concerns about this.

The survey found that more than half of the respondents (50.6 per cent) have shared information about their school contacts, almost one-quarter (24.5 per cent) have shared their phone number and address, 22.3 per cent have shared personal photographs and almost one-fifth (17.9 per cent) have shared information about their families.

### Box 4. The parent gap

*"My son ... plays online games till midnight, wakes up late and often feels reluctant to go to school. He has even been off school for four days"*

*Father of a junior high school student, Jakarta*

The survey has revealed a potential lack of supervision by parents when it comes to what their children are doing online. Only just over half of respondents (50.9 per cent) feel that their Internet use is supervised and regulated by their parents. Only 20.8 per cent report that their parents are with them when they access the Internet, and only 16.7 per cent include their parents in their 'friend' lists in social networks. Not surprisingly, parents are far more likely supervise their children's Internet use when they are at home than when they are going online elsewhere. Even so, only just over one quarter (26.1 per cent) of parents actually do supervise their children when they are online at home.

<sup>38</sup>During the fieldwork, surveyors generally translated the word 'privacy' into terms familiar to children and adolescents or provided practical examples, including cases of privacy violation on Facebook.

### **A lack of regulation in schools?**

In all, around two-thirds of the children and adolescents surveyed (64.6 per cent) say that they have Internet access in their schools and those whose schools have Internet access were asked whether its use was regulated/rationed.

Most of those from public schools (59.6 per cent) say that their schools do not impose any time limits for Internet access. This figure is almost reversed in private schools, where 56.6 per cent of respondents say that there are limits on Internet access hours.

*"... students might be supervised by the teachers. Internet can only be used to access those things relevant with the lessons."*

*Student from a private religious elementary school, Balikpapan*

When asked about prohibition on specific Internet content in schools – particularly pornography – 56.6 per cent of the respondents from public schools say that there is no such prohibition. Again, the figure is reversed in private schools, where 56.6 of respondents say that there are rules in place to prohibit access to and use of such material.

The study also explored the prohibition of open social network sites at school, with 78.3 per cent of those from public school reporting no such prohibition, compared with 67.1 per cent of those from private schools.

There is less of a disparity when it comes to whether or not children and adolescents can use online game sites in school: 68.3 per cent of respondents from public schools and 63.2 per cent of respondents from private schools say that there is no prohibition.

Nevertheless, the data does, in general, suggest that 25 per cent of public schools impose some limitation on the data that can be accessed, while 42.1 per cent of private school set such limits.

Children and adolescents from public schools seem to be less likely to have had any guidance in using the Internet from their teachers (28.3 per cent, compared with 42.1 per cent of the respondents from private schools).

## **5. Conclusions and recommendations**

### **Conclusions**

Ten key conclusions have emerged from this study.

1. Social and digital media use is an integral and growing part of the everyday life of young Indonesians. The study found that 98 per cent of the children and adolescents surveyed know about the Internet and that 79.5 per cent are Internet users.

2. For the approximately 20 per cent who do not use the Internet, the most common reasons given are that they do not have the equipment or infrastructure to access the Internet or that they are forbidden by their parents to do so.
3. The changing media landscape in Indonesia, particularly with the growing use of mobile phones, has transformed internet digital media access and use among children and adolescents, who tend to use: personal computers to access internet at internet cafes/vendors and school computer laboratories; laptops at home; and – above all – mobile phones or smartphones during their daily activities.
4. Children and adolescents have three key motivations to access the Internet: to seek information, to connect to friends (old and new) and to be entertained. Their search for information is often driven by school assignments, while their use of social media and entertainment content is driven by their personal preference.
5. The study's assessment of the communication patterns of children and adolescents on the Internet finds that the vast majority of their communication is with their peers, followed by their teachers, and that their communication with family members on the Internet is fairly insignificant.
6. In general, on privacy issues, the study found that there are many children and adolescents who share personal information such as their home address, contact number, organization address or school address. It also found that most are aware of the need for password selection. Almost all of them were opposed to pornography on the Internet. However, a substantial proportion have been exposed to such content, especially when it appears accidentally or in advertisements that have a pornographic nuance.
7. Most are, however, aware of the importance of having a password for their email or social media networks.
8. In addition, most are opposed to pornographic content on the Internet. However, a substantial proportion have been exposed to such content, especially when it appears accidentally or appears in advertisements that have a pornographic nuance.
9. Parents may lag behind their children when it comes to understanding and using digital media, few supervise their children when they access the Internet and few become their children's 'friends' in social networks.
10. There is growing recognition of the value of digital media in aiding education and learning among both parents and teachers. The latter, for example, now advise their students to gather information from the Internet for various assignments. This is a welcome development, with potential for the greater use of the Internet as an educational tool.

## Recommendations

While the use of social and digital media is expanding rapidly among adolescents, parental support and the integration of digital media in education are lagging behind. It is time to catch up.

Ten key recommendations emerge from this study for consideration.

1. Since the Internet has become an integral and growing part of everyday life for children and adolescents in Indonesia, efforts are needed to improve their awareness, knowledge and skills in relation to Internet safety. This could be achieved through socialization, improving the ICT literacy and training. It is important to understand digital use and digital safety – first and foremost – from the perspective of children and adolescents, before designing the content of digital safety information programmes. This includes understanding the way in which they define and use digital technologies, online contacts and risky or unsafe behavior.
2. Children and adolescents are interested in learning about Internet safety. Any campaigns or programmes designed to meet this need should be based on evidence and should be developed in collaboration with children and adolescents to ensure that they are relevant.
3. Parents and teachers should supervise and accompany children and adolescents on their digital journey, and get involved in the Internet activities of their children. One simple way in which a parent, in particular, can be involved is to become their child's 'friend' in their social network account, as this is where children and adolescents 'play' in the virtual world. Parents can join them here, communicating intensively with them to create a safe and positive environment for their growth and development of children in the cyber world.
4. Those who are in charge of the security of Internet content – ISPs and Government – should improve content security / protection so that the virtual world is a safe and positive place for children and adolescents to live and grow. This study has found that many children are exposed to negative Internet content, much of which has been foisted upon them without their consent through pop-up negative contents or through misleading links.
5. There needs to be a focus on providing information to children and adolescents on the very real dangers of meeting those they meet online in the real world.
6. Parents and teachers need to be aware of, and involved in, digital safety programmes aimed at children and adolescents.
7. Messages about digital media safety need to be balanced by an emphasis on the usefulness of the Internet in such areas as education, research and commerce.

8. Children and adolescents should be encouraged to see and use the Internet as a valuable resource, and to make use of digital technologies in general for their own education, information, opportunity and empowerment.
9. Online and offline digital safety campaigns need to be created for placement across the full spectrum of traditional and digital media outlets, such as television channels, radio shows, websites and on the social media platforms that children and adolescents commonly access and use.
10. A cadre of young digital safety champions needs to be nurtured – children and adolescents who can speak to their peers about these issues through digital media, through audio and video spots on the mass media, and in offline spaces such as schools and universities.

## BIBLIOGRAPHY

- A, Robert. (2004). Evaluating Consumer Informatics: Learning from Health Campaign Research. *Medinfo*, 1147-1151.
- Alty, James. L., Beacham, Nigel. (2004). An investigation into the effects that digital media can have on the learning outcomes of individuals who have dyslexia. *Computers & Education*, 47, 74–93. doi:10.1016/j.compedu.2004.10.006
- Annharrell, Blythesuez. (2000). *Uses and Gratifications of the Internet*. Master Thesis. Faculty of Arts, Texas Tech University.
- Berita Media Online. (2011). "Kota Layak Anak Masih Kurang," *Seputar Indonesia*, Tuesday, June 21, 2011. [www.seputar-indonesia.com/ediscetak](http://www.seputar-indonesia.com/ediscetak), retrieved on Tuesday, June 21, 2011
- Badan Pusat Statistik. (2010). *Hasil Sensus Penduduk*. Jakarta: BPS.
- \_\_\_\_\_. (2011). *Potensi Desa*. Jakarta: BPS.
- \_\_\_\_\_. (2012). *Survei Sosial-Ekonomi Nasional*. Jakarta: BPS.
- Borders, Lawson Gracia. (2006). *Media Organizations and Convergence: Case Studies of Media Convergence Pioneers*.
- Mahwah, New Jersey, London: Lawrence - Erlbaum Associates, Publishers
- Buente, Wayne dan Alice Robbin. (2008). "Trends in Internet Information Behavior: 2000-2004". *Journal of the American Society for Information Science*, diakses tanggal 9 Juni 2008.
- Broadcasting Board Governor. (2011). "Media Consumption During the Uprising in Egypt". [www.bbb.gov](http://www.bbb.gov).
- Cho, Jaeho. , Zúñiga, Gil De. , Rojas, Hernando. , Shah, Dhavan V. (2003). Beyond Access: The Digital Divide and Internet Uses and Gratifications. *IT & SOCIETY*, 1, 46-72. Stanford University.
- Choi, Eun-Jung., Rose, Robert La., Lee, Doo-Hee. (2003). A Cross-Cultural Comparison of Internet Usage: Media Habits, Gratifications, and Addictions In Korea and The US. *Internet Conference WWW/Internet 2003*, pp. 963-966, retrieved, June 21, 2011.
- Conrady, Nina. (2009). *Inhibition and Its Correlation with the Uses and Gratifications of Internet Use*. Thesis. Faculty of Behavioural Science. University of Twente.
- Creswell, John W. (2010). *Research Design: Pendekatan Kualitatif, Kuantitatif, dan Mixed*. Indonesian Translation. Third Edition. Yogyakarta: Pustaka Pelajar.
- Cummings, Nicholas Michael. (2008). *The Uses and Gratifications of Communicaton in Virtual Spaces: Media Depictions of Second Life, 2002-2008*. Master Thesis. School of Journalism and Communication, University of Oregon.
- Deng, Liqiong., Sun, Jun. Turner, Douglas. , Prince, Bradley. (2009). "Motivations for Using Short Messaging Service". Southeast Decision Science Institute Proceedings.
- DiMaggio, Paul, Hargittai, Eszter, Neuman, W.Russell, and Robinson, John P. (2001). *Social Implications of The Internet, Annual Review of Sociology*, 27 pp. 307-36.
- Edgar, Patricia. , Edgar, Don. (2008). Television, Digital Media, and Children's Learning. [http://www.vcaa.vic.edu.au/Documents/earlyyears/Edgar\\_Paper\\_20081223.Pdf](http://www.vcaa.vic.edu.au/Documents/earlyyears/Edgar_Paper_20081223.Pdf).
- Elihu Katz; Jay G. Blumler; Michael Gurevitch. (1974). Uses and Gratifications Research. *The Public Opinion Quarterly*, Vol. 37, No. 4. 509-523.
- Federman (1998). Gratification and Seeding Behavior of Online Adolescent. *National Television Violence Study Vol 3*. Thousand Oaks, CA: Sage.
- Ferguson, D.A., & Perse, E.M. (2000). *The World Wide Web as a Functional Alternative to Televisio*. *Journal of Broadcasting & Electronic Media*.
- Flanagin, Andrew. , Metzger, Miriam Z. (2001). Internet Use in the Contemporary Media Environment. *Human Communication Research*, 27/1, 153-181.
- Flow, Terry. "New Media An Introduction". ([http://phase1.nccr-trade.org/images/stories/flew\\_new\\_media\\_chapter%201%20and%202\\_smaller.pdf](http://phase1.nccr-trade.org/images/stories/flew_new_media_chapter%201%20and%202_smaller.pdf)) diakses tanggal 22 September 2011 pukul 12:06 WIB.
- Giordano, Carolyn. , Giordano, Christine. (2011). Health Professions Students' Use of Social Media. *Journal of Allied Health*, Vol 40/ No 2.
- Greenberg, Bradley S. (2012). Media Use and Believability: Media Use and Believability: Some Multiple Correlates. *Journalism Quarterly*. [www.sagepub.com](http://www.sagepub.com).
- Green, Lelia, Danielle Brady, Kjartan Olafsson, John Hartley & Catharine Lumby (2011). Risk and safety for Australian children on the internet – Full findings from the AU Kids Online survey Of 9-16 years olds and their parents. [www.eukidsonline.net](http://www.eukidsonline.net), accessed on 26 October 2011.

- Guo, Zixiu., Tan, Felix B. (...). Determining University Students' Motivations for Using Computer-Mediated Communication Technologies. *11th Pacific-Asia Conference on Information Systems*.
- Guo,Zixiu., Zhang,Ying. J Stevens, Kenneth. (2009). A 'uses and Gratifications' Approach To Understanding The Role Of Wiki Technology in Enhancing Teaching And Learning Outcomes. *17th European Conference on Information Systems*
- Horrigan, John B. (2002). "New Internet Users: What They Do Online, What They Don't, and Implications for the 'Net's Future", accessed 8 September 2002.
- Infante, Dominic A., Rancer, Andrew S., Womack, Deanna F. (1990). *Building Communication Theory*. Prospect Heights IL.: Waveland
- Kanter, Maggie, Tamara Afifi, & Stephanie Robbins (2012). "The Impact of Parents "Friending" Their Young Adult Child on Facebook on Percetions of Parental Privacy Invasions and Parent-Child Relationship Quality", *Journal of Communication* 62: 900-917.
- Kementerian Komunikasi dan Informatika (2012). *ICT White Paper*. Indonesian Edition. Jakarta: Badan Litbang SDM.
- \_\_\_\_\_. (2012). Laporan Penelitian mengenai Palapa Ring.
- Kementerian Komunikasi dan Informatika dan PT TELKOM. (2013). Laporan Penelitian mengenai Infrastruktur: Jaringan Backbone Serat Optik.
- Liu,Vera Youling. , Dimitrova, Daniela. (2007). The Uses of and Gratifications Derived from Bulletin Board Systems (BBS) in Chinese Youth. *Journal of China Media Research*, 3 (2), 41-52.
- Mantella, Dana G. (2007). *Pro-Ana Web-Log Uses And Gratifications: Towards Understanding The Pro-Anorexia Paradox*. Master Thesis. Faculty of Arts and Sciences, Georgia State University.
- McQuail, Dennis. (2010). *Mass Communication Theory, 6th Edition*. London: Sage Publication Ltd.
- Ministry of Communication and Information Technology. (2010). *Indonesia ICT Whitepaper. English Edition*. Jakarta, Jakarta: ICT and Human Resource Research and Development Agency.
- Mondi, Makingu., Woods, Peter. , Rafi, Ahmad. (2008). A 'Uses and Gratification Expectancy Model' to predict students' 'Perceived e-Learning Experience'. *Educational Technology & Society*, 11 (2), 241-261.
- Neuman, W. Lawrence. (2003). *Social Research Methods - Qualitative and Quantitative Approaches*.5th Edition. Boston:Allyn and Bacon.
- Notley, Tanya (2009). "Young People, Online Networks, and Social Inclusion", *Journal of Computer-Mediated Communication* 14: 1208-1227.
- O'Keeffe. (2011). Clinical Report: The Impact of Social media on Children, Adolescents, and Families..*Journal of the American Academy of Pediatrics*. Retrieved from <http://www.pediatrics.org> on Mar 28, 2011.
- Palmgreen, Philip, Lawrence A. Wenner & Karl Erik Rosengren. (1988). "Uses and Gratifications Research: The Past Ten Years," in Palmgreenet.al., *Media Gratifications Research*, Beverly Hills:Sage.
- Patilima, Hamid. (2009). *Kota Layak Anak*, www.kpppa.go.id
- Peter, Jochen & Patti M. Valkenburg (2006). "Adolescents' Exposure to Sexually Explicit Online Material and Recreational Attitudes Toward Sex", *Journal of Communication* 56: 639-660.
- Price,Laura. Leong, Elaine. , Ryan, Maria. (2005). Motivations For Social Internet Use .*ANZMAC Conference*, 264-269.
- Rice, Eric (2014). "Internet and Social Media Use as a Resource Among Homeless Youth", *Journal of Computer-Mediated Communication* 19: 232-247.
- Rice, Ronald E dan Williams, Frederick. 1984. "*Theories Old and New: The Study of New Media*". In Ronald E. Rice & Associates.*The New Media*.Beverly Hills, New Delhi. London: Sage Publications.
- Stafford, Thomas F. , Gillenson, Mark L. (2004). Motivations for Mobile Devices: Uses and Gratifications for M-Commerce. *Proceedings of the Third Annual Workshop on HCI Research in MIS*, 70-74. Washington, D. C. , December 10-11, 2004.
- Sun,Tao., Zhong, Bu., Zhang, Jun. (2006). Uses and Gratifications of Chinese Online Gamers. *China Media Research*, 1(2), pp 58-63.
- Tsao, James C. , D, Stanley. (2004). Readership of free Community Papers as A source of Advertising Information: A Uses and Gratifications Perspective. *Journalism & Mass Communication Quarterly* , Vol. 81 No. 4 Winter, 766-787.
- UNICEF. (2004). Children Youth and Media around the World-UNICEF - An Overview of Trends & Issues. *4th World Summit on Media for Children and Adolescents*, Rio de Janeiro, Brazil.
- Utomo, Iwu Dwisetyani,et al (2010). The 2010 Greater Jakarta Transition to Adulthood.TeleponSelular, Internet, danSentuhan Media. Study Policy Brief No. 4
- Weng, Dennis, Peng, Jeng. (2007). Factors Affecting Consumers' Uses and Gratifications of the Internet: A Cross-Cultural Comparison among Taiwan, Hong Kong and China. *IJCSNS International Journal of Computer Science and Network Security*, Vol. 7 No. 3.
- Yamane, Taro. (1967). *Elementary Sampling Theory*. Englewood Cliffs Prentice Hall.
- Youn, Seounmi (2009). "Determinants of Online Privacy Concern and Its Influence on Privacy Protection Behaviors Among Young Adolescents", *Journal of Consumer Affairs* 43 (3): 389-418.

