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## Children Internet Usage: Opportunities for Self Development

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### Abstract

Children are spending more and more time on the Internet. Are there any opportunities from such exposure to the Internet? This study looks at six types of children positive use of the Internet to measure opportunities gain by children. These are: information, communication, entertainment, participation, creativity and expression. The descriptive analysis of data on children ages 9 to 16 years showed that most children in Malaysia are enjoining opportunities on the Internet through information searching, communication and entertainment activities. Children's online opportunity is inter-related with their availability and capability of the Internet technology. If children enjoy i.e. if there are available Internet technologies with high speed user interface connectivity, children will be more disposed to use the Internet for self development.

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### 1. Introduction

The rapid growth of the Internet through so many devices such as desktop computer, laptop computer, tablets and smart phones has attracted enormous quantities of popular activities among children (Lister et al., 2009). They use Internet to do research, to communicate, to play games and for entertainment. Furthermore, as the technology is developed during their era, youngsters tend to be more online than older people. At the end of 2011, 45 percent of

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the world's over 2.3 billion Internet users were young people (ITU, 2012). The older the children, the more they use the Internet. Study on the use of the Internet all over the world generally found that ages between 15 to 19 years old dominated the Internet usage (Eurobarometer, 2008; MCMC, 2009; Lenhart, Madden, Smith, Purcell & Zickuhr, 2011; De Almeida, De Almeida Alves, Delicado & Carvalho, 2012).

The goal of this study is to find out what opportunity activities Malaysian children's do when they are using the Internet.

## **2. Children online opportunities**

Children are very enthusiastic about Internet technology; they are of the opinion that by using the Internet they could gain greater opportunities (Paus-Hasebrink, Wijnen. & Jadin, 2010). When talking about Internet opportunities for children; it is basically a hope of maximizing the advantages of Internet use for children. Opportunities mainly are measured by children's positive activities online, which can be classified into three categories: (1) Content-based activities, such as school work, play games, watch video clips, read news or download music; (2) Contact/communication-based activities such as, instant messaging, email, chatting or Skype; and (3) Conduct/peer participation activities such as, blogging, post photos or file-sharing site (Pruulmann-Vengerfeldt & Runnel, 2012; Paus-Hasebrink et al., 2010; Livingstone and Haddon, 2009; Kalmus, Pruulmann-Vengerfeldt, Runnel & Siibak, 2009). Livingstone and Helsper (2010) introduce six types of online opportunities, which are: (1) Information, (2) Communication, (3) Entertainment, (4) Participation, (5) Creativity and (6) Expression. According to them, beginning with information-seeking, the children will progress through games and communication, taking on more interactive forms of communication and culminating in creative and civic activities.

Some studies on same subject matter in European countries found that the use of the Internet for school work is the top activity children do online (85%), followed by playing games (83%) and receiving content produced by others (watching video clips, 76%) (Livingstone, Haddon, Gorzig & Olafsson, 2011). A study in Korea also found that, the most frequent online activities were homework and games (Lee & Chae, 2007). Communicating (social networking and instant messaging, 62%) are the next most popular online activities and a highly relevant part of young people's Internet use concerns social websites to keep in touch with friends and family (Paus-Hasebrink et al., 2010; Livingstone et al., 2011). They also use Internet to consult information, download stuff, and do shopping (Shade, Porter & Sanchez, 2005; Arrizabalaga-Crespo, Aierbe-Barandiaran & Medrano-Samaniego, 2010).

Less common activities children do online are the various ways of creating user-generated content such as posting images or messages for others to share, using a webcam, file-sharing sites, spending time in a virtual world or writing a blog (Livingstone et al., 2011). Lee and Chae's (2012) study in Korea found that lower percentage of online participation were taken up by Korean children. Their online participation such as posted writings on blog or personal homepage were at 29.7%; posted writings on a club Website (28.8%); expressed opinions regarding social issues (28.4%); linked useful information to their blog (21.7%); recommended useful information to other users (21.6%); responded to questions posted by other users (29.0%); commented on other users' postings (34.3%) and wrote comments in regard to products they purchased (19.1%).

## **3. Methods**

The study employs a quantitative research design using survey method. The survey conducted in two districts of Selangor (Gombak and Sepang). A total of 384 students, from ages 9 to 16 years [excluded age 12 and 15, who involved with Primary School Evaluation Test (UPSR) and Lower Secondary Assessment (PMR)] participated in the survey. Stratified sampling was used to get this sample from 6,671 students' population ages 9 to 16 year olds in both districts. Criteria which took into consideration when choosing the sample was that the students selected must be using the new media such as using Email, social networking sites, gaming or online chats. The students were recommended by teachers in their schools and classroom-administered survey technique was used to collect the data. The duration of each session was about one hour; where children were assisted by two researchers and the students were free to ask questions for more clarifications.

#### 4. Findings

Result shows that majority of respondents are girls (65.4%), Malays (73.6%) and Muslim (74.7%). Most of them used Internet at home on daily basis (44.3%). Most of respondents access the Internet at night (42.6%) and in the afternoon (39.4%), (after from school hours). Based on Table 1, the children respondent were asked question regarding their participation on online activities using five-point Likert scale ranging from *never* to *very often*. The most popular online opportunities school children in Malaysia took part in was the communication activities, topmost in these activities were communication through the Facebook with (mean=3.65) and Instant Messaging with (mean=3.48). The children said they use Facebook very often (38.3%), often (25.5%) and sometimes (14.1%) meanwhile for 'IM', 31.8% school children said they use it very often while 25% said they use it often and 18.5% said they use it sometimes. For information activities, searching information for further education (mean=3.52) got the top priority: 85.7% said they do it very often, often and sometimes. Searching information regarding school works came second (mean=3.45), meanwhile, 83.6% of them said they search the Internet very often, often and sometimes. For entertainment activity: the most popular activity carried out was for downloading music from the Internet (mean=3.20), 25% school children said very often, 24% said often and 18.2% said sometimes. The rest of online opportunities, especially participation, creativity and expression were not very popular activities among school children in Malaysia (all the means are below 3), most of them said they seldom or never perform these activities.

Table 1. Descriptive statistics for online opportunities

Variables	Never <i>f</i> (%)	Seldom <i>f</i> (%)	Sometimes <i>f</i> (%)	Often <i>f</i> (%)	Very Often <i>f</i> (%)	Mean	SD
<b>Information</b>							
Further Edu.	9 (2.3)	46 (12.0)	139 (36.2)	116 (30.2)	74 (19.3)	3.52	1.01
School Work	16 (4.2)	47 (12.2)	131 (34.1)	127 (33.1)	63 (16.4)	3.45	1.04
News	67 (17.4)	100 (26.0)	139 (36.2)	62 (16.1)	16 (4.2)	2.64	1.08
Hobby	77 (20.1)	107 (27.9)	122 (31.8)	50 (13.0)	28 (7.3)	2.60	1.16
Health	90 (23.4)	124 (32.3)	104 (27.1)	52 (13.5)	14 (3.6)	2.42	1.10
Computer Info.	90 (23.4)	127 (33.1)	106 (27.6)	48 (12.5)	13 (3.4)	2.39	1.08
School Web.	98 (25.5)	130 (33.9)	96 (25.0)	40 (10.4)	20 (5.2)	2.36	1.12
Environment	134 (34.9)	115 (29.9)	95 (24.7)	27 (7.0)	13 (3.4)	2.14	1.08
Government	144 (37.5)	118 (30.7)	86 (22.4)	23 (6.0)	13 (3.4)	2.07	1.07
Homepage	172 (44.8)	95 (24.7)	72 (18.8)	37 (9.6)	8 (2.1)	1.99	1.10
Product/Shop	196 (51.0)	81 (21.1)	63 (16.4)	33 (8.6)	11 (2.9)	1.91	1.13
Child Right	181 (47.1)	118 (30.7)	59 (15.4)	16 (4.2)	10 (2.6)	1.84	1.00
Charity	178 (46.4)	122 (31.8)	61 (15.9)	15 (3.9)	8 (2.1)	1.84	0.97
Overall Mean:31.17 Overall SD:7.73							
<b>Communication</b>							
Facebook	59 (15.4)	26 (6.8)	54 (14.1)	98 (25.5)	147 (38.3)	3.65	1.43
IM	62 (16.1)	33 (8.6)	71 (18.5)	96 (25.0)	122 (31.8)	3.48	1.43
E-mail Site	123 (32.0)	86 (22.4)	77 (20.1)	62 (16.1)	36 (9.4)	2.48	1.33

E-mail	125 (32.6)	101 (26.3)	84 (21.9)	53 (13.8)	21 (5.5)	2.33	1.22
Twitter	200 (52.1)	48 (12.5)	42 (10.9)	25 (6.5)	69 (18.0)	2.26	1.56
Chat	218 (56.8)	55 (14.3)	47 (12.2)	33 (8.6)	31 (8.1)	1.97	1.33
Skype	231 (60.2)	64 (16.7)	50 (13.0)	20 (5.2)	19 (4.9)	1.78	1.16
Overall Mean:17.95 Overall SD:6.60							
<u>Entertainment</u>							
Download Music	80 (20.8)	46 (12.0)	70 (18.2)	92 (24.0)	96 (25.0)	3.20	1.47
Edu. Games	51 (13.3)	92 (24.0)	118 (30.7)	75 (19.5)	48 (12.5)	2.94	1.21
Download Clips	81 (21.1)	66 (17.2)	99 (25.8)	79 (20.6)	59 (15.4)	2.91	1.35
C/T/M Listing	111 (28.9)	103 (26.8)	82 (21.4)	63 (16.4)	25 (6.5)	2.45	1.24
Download Films	145 (37.8)	91 (23.7)	60 (15.6)	43 (11.2)	45 (11.7)	2.35	1.38
Download TV	198 (51.6)	76 (19.8)	61 (15.9)	22 (5.7)	27 (7.0)	1.97	1.24
Overall Mean:15.83 Overall SD:5.39							
<u>Participation</u>							
Quiz	137 (35.7)	113 (29.4)	94 (24.5)	31 (8.1)	9 (2.3)	2.12	1.06
Vote	219 (57.0)	70 (18.2)	56 (14.6)	25 (6.5)	14 (3.6)	1.81	1.13
Send Link	233 (60.7)	58 (15.1)	54 (14.1)	22 (5.7)	17 (4.4)	1.78	1.15
Forums	258 (67.2)	72 (18.8)	37 (9.6)	12 (3.1)	5 (1.3)	1.53	0.89
YT Creation	291 (75.8)	48 (12.5)	26 (6.8)	11 (2.9)	8 (2.1)	1.43	0.90
Overall Mean:8.67 Overall SD:3.39							
<u>Creativity</u>							
Plan Trip	197 (51.3)	65 (16.9)	65 (16.9)	38 (9.9)	19 (4.9)	2.00	1.24
Art	194 (50.5)	75 (19.5)	65 (16.9)	32 (8.3)	18 (4.7)	1.97	1.20
Set up Web	243 (63.3)	73 (19.0)	44 (11.5)	13 (3.4)	11 (2.9)	1.64	1.01
Animation	250 (65.1)	69 (18.0)	33 (8.6)	21 (5.5)	11 (2.9)	1.63	1.04
Upload Creation	293 (76.3)	38 (9.9)	31 (8.1)	13 (3.4)	9 (2.3)	1.46	0.95
Overall Mean:8.69 Overall SD: 3.80							
<u>Expression</u>							
Upload Photo	85 (22.1)	76 (19.8)	103 (26.8)	62 (16.1)	58 (15.1)	2.82	1.35
Give Advice	98 (25.5)	101 (26.3)	96 (25.0)	58 (15.1)	31 (8.1)	2.54	1.24
Story in FB	127 (33.1)	107 (27.9)	80 (20.8)	33 (8.6)	37 (9.6)	2.34	1.28
Story in Twitter	255 (66.4)	36 (9.4)	28 (7.3)	30 (7.8)	35 (9.1)	1.84	1.36
Story in Blog	278 (72.4)	52 (13.5)	30 (7.8)	10 (2.6)	14 (3.6)	1.52	1.00
Overall Mean:11.05 Overall SD:4.43							

\*Note: Edu=Educational; Info=Information; IM=Instant Messaging; YT=Youtube,; C/T/M=Concert, Theatre, Movie; FB=Facebook; SD=Standard Deviation

## 5. Discussion and conclusion

The findings show that the first online opportunity children in Malaysia enjoy was through communication via Facebook. Seventy-eight percent - 78% children took part in this activity online. In Malaysia, Facebook was not only popular among children but also amongst university students (21-40 year olds), where 97% university students in Malaysia use the Facebook (Almadhoun, Lai & Dominic, 2012). Supporting the findings, studies in the U.S and European countries have found that children age 12 to 17 years old are eager to use the Facebook. Facebook has been their main social networking sites (SNS). Facebook enables them to communicate and have fun with friends and also make new friends (Livingstone et al, 2011; Lenhart and Madden, 2007).

Second opportunity Malaysian children gain, was in searching information for further education (86% children took part in this activity). This activity is popular among children age 16 years old. At this age children are busy to search information regarding their tertiary education such as “which universities to attend or what courses to take?” With the Internet, they are able to search information regarding universities (local or abroad) including what they are supposed to put in place as a form of preparation that they were interested in and preparation they need to take up in order to pursue their dream careers (such as preparation for doctor, lawyer or accountant’s examinations and tuition fees). This findings is in accordance to the study conducted by Livingstone, Bober and Helsper (2005) in United Kingdom also found that searching information was more popular among teenagers’ ages 16 to 19 years old compared to children ages 12 to 15 years old. Their searching for information involves education information and entertainment information. In general, 91% children in the European countries use Internet seeking for information (Hasebrink, Livingstone & Haddon, 2008).

Third opportunity gain by Malaysian children, was through Instant Messaging (IM). Comparing the IM with E-mail, Twitter, Chatroom and Skype, children were more interested in using IM. Around 75% children use the IM compared with E-mail (41%), Twitter (38%), Chatroom (29%) and Skype (23%). Hasebrink et al. (2008) also found out those children in Europe 71% children use IM, compared to only 66% who use E-mail and 32% who use Chatroom. The IM has attracted youngsters because its communication is relatively simple. Children can do it instantly by typing text messages into a window and just press “send” for contact buddy to read it. The IM also has awareness information when contact buddy is online or offline.

Fourth, online opportunities are taken up by Malaysia children for seeking school works information (84%). Mostly children searched information regarding school project such as history, culture or fascinating places in the country and around the world. In the UK, this kind of online opportunities is also the most popular activity children ages 12-19 year olds perform online (96%) (Livingstone, Bober & Helsper, 2005). Seeking information for school works is second most popular opportunity activities taken up by children in Hong Kong (91%), in Seoul (96%), in Singapore (84%), in Taipei (94%) and in Tokyo (71%) (Lin, Cheong, Kim & Jung, 2010). Fifth online opportunity Malaysian children perform is the downloading of music - 67%. Downloading music was also among primary opportunity activities children perform in Hong Kong, Seoul, Singapore, Taipei and Tokyo – averagely 87% children in these countries take part in this activity (Lin et al., 2010).

There are many opportunities offer by the Internet, however not all the opportunities have been taken up by Malaysian children, especially the online participation, creativity and expression activities. Even though communication, information and entertainment are now dominant activities children in Malaysia do online, the activities only centered on two types or one type of activities. For example there are so many activities regarding online communication, information and entertainment (see Table 1) thus the children are favourably exposed to Facebook and IM, search for information on further education and school works as well as for downloading music.

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