Sri Lankan Youth and their Exposure to Computer Literacy

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Abstract

The general objective of this study is to elucidate the level of computer literacy and exposure to the internet among Sri Lankan youth aged 15-29 years based on their main economic activity. In order to achieve this objective a two-layered data collection approach was adopted as the overall methodology of the 2009 National Youth Survey. Quantitative data was collected from a randomly selected sample of 3000 households covering 22 districts out of a total of 25 districts. The conclusions reached from this study were that out of 2921 respondents 57% of youth were computer literate. Out of the 18-24 age group 65% could manage basic functions of the computer as opposed to the 25-29 year olds where only a 43% demonstrated knowledge in computer usage. This indicates that the older group had a lesser opportunity at gaining computer knowledge, which is a fairly recent development in Sri Lanka. It was also revealed that 33% of youth who have a basic knowledge in computer usage have their own computers while 33% have used the internet. In terms of usage and frequency out of the 57% youth who are computer literate 50% use their computers on a daily/weekly basis.

Keywords: Economy; Economic Development; Globalization; ICT; IT Literacy; Knowledge

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Introduction

It is evident that technological advancement and innovation are the long term boosters of economic development. For a developing country like Sri Lanka it is important to lay a strong foundation for building its capacity to acquire and create knowledge in order to take opportunities offered by globalization. Within the present environment of knowledge-economy, Information and Communication Technology (ICT) knowledge among school children and youth is fundamentally crucial for the future wellbeing of the people of Sri Lanka (United Nations Development Program [UNDP], 2004).

During the past, all governments attempted to improve computer literacy among Sri Lankans through various policies and programmers. Yet, expected results have not been very encouraging. Modern day youth are the potential labor force of future Sri Lanka, provided, they are capable of participating productively in the knowledge-economy (De Silva, 2008). Such participation is expected to be greatly governed by the required ICT knowledge of youth in all segments of Sri Lankan society. The general objective of this study is to elucidate the level of computer literacy and exposure to the internet among Sri Lankan youth aged 15-29 years based on their main economic activity - student, employed, unemployed inactive household members. For the purpose of this study, a person is deemed IT literate if a person can operate any function on a computer on their own.

The Department of Censes and Statistic of Sri Lanka [DCSSL] conducted two household surveys on computer literacy in 2004, and 2006/2007. In 2009, a third Computer Literacy Survey (CLS) was conducted for further findings. A nationally distributed sample of 10,150 households with 31,302 persons aged 5 – 69 years were enumerated for this issue of the CLS and all the districts were covered other than those in the Northern Province.

The results of the 2009 CLS, revealed that on average, at least one computer is available in one out of ten household in Sri Lanka. The availability of computers in the urban household sector is 23.6% where a computer is available in one out of four households. This is much higher than in the rural sector, which is 9.2% and in the estate sector which is 3.1%. Considering the households that have acquired the first computer during the last five years, the rural sector shows a recent higher acquisition of 75% than the urban sector of 66%.

Computer literacy reported in 2009 in Sri Lanka was 20.3% and shows a 25% increase from 16.1% reported in 2006/07. Also, there were highly significant differences in computer literacy across the residential sectors. The highest computer literacy 31.1% was reported from the urban sector households and the lowest 8.4% was reported among the estate sector household population. However, the estate sector showed the highest growth of above 50% in both computer literacy and awareness during the period from 2006 to 2009. Among the provinces the highest level of computer literacy was also reported from the Western Province 28% and the least level was in the Eastern Province 13%.

Computer literacy among males 22% was only a little higher than that of females 19% in 2009. The younger generation aged 15–19 years showed the highest computer literacy rate among all the age groups from 5 to 69 years, and, the older age groups beyond 50 years showed a comparatively lower computer literacy rate.

Computer literacy among the employed population in Sri Lanka was above 40% in 2009. It was evident that a higher computer literacy rate was achieved as the employed population reached a higher position such as Senior Officials and Managers 86%, Professionals 72%, Technical and Associate Professionals 70% and Clerks 77%. However, a nearly 20% computer literacy rate was reported by individuals engaged in the category of elementary occupations as well.

Further, 13% of the population aged 5 to 69 years used the Internet facility at least once during the last twelve months. The pattern of using the Internet among provinces was similar to the pattern of using e-mail. It is important to note that the higher use of the Internet correlates to the higher use of e-mail. In the urban sector, where facilities are commonly available, a higher use of both email and Internet is evident than in the non-urban sectors.

Data and Methodology

National Youth Survey II in 2009 was carried out through a representative random sample of 3000 households distributed in 22 accessible districts. Household members aged 15-29 years were taken as youth in this study. Only one eligible youth in a selected household was interviewed, selecting randomly.

The sample was distributed in all the accessible districts with probability proportion to size, taking the household as the Primary Sampling Unit (PSU). PSUs were selected at random employing multi-stage and cluster sampling techniques.

Finally, two households were selected at random as sample points, taking the Electoral Register of the Commissioner of Elections as the sample frame. A cluster of 10 households were enumerated around the sample point. The estate was selected at random taking the list of estates in a district as the sample frame.

Quantitative data as well as qualitative data were collected. Quantitative data were collected administrating a pre-coded questionnaire to selected respondents, whereas qualitative data were collected through conducting several Focus Group Discussions and in-depth interviews with youth, other relevant persons, and by using key information.

Results

Altogether 3,000 respondents between 15-29 years of age were enumerated as the national sample, out of which 2,997 schedules were selected for analysis and three were rejected due to incomplete data.

An overwhelmingly large proportion of youth interviewed 77% at the selected households in the survey were living with their parents, while about another 5 per cent were with their relatives. Out of the total 2997 youth interviewed, only 4% were reported as the head of the household.

Demographic Characteristics

Out of the total youth enumerated in the survey, 58% were female while 42% were male as in Table 1. In all the districts where the survey was conducted the number of females enumerated was higher than that of males. Excess number of female respondents could be partly due to higher migration among males internationally for education, employment and security reasons. Also, for many decades male youth mortality was higher than that of their female counterparts.

As far as the age distribution of the respondents is concerned, almost 37% were between 15-19 years while another 30% was be-

tween 25-29 years. The remaining youth 33% belonged to the 20-24 age groups. Age distribution of males and females remain more-or-less common for the sample. Civil status of the respondents indicates that almost a three-quarter of them were never married while only 26% were currently married. A significantly small number of respondents were separated/divorced/widowed.

Table 1: Distribution of Youth by Demographic Characteristics

Variable	Percentage	Number
Sex		
Male	42.2	1264
Female	57.8	1733
All	**100.0**	**2997**
Age		
15-19	36.9	1105
20-24	32.6	978
25-29	30.5	914
All	**100.0**	**2997**
Marital Status		
Never Married	73.4	2195
Currently Married	26.1	780
Separated / Divorced	0.5	14
Widowed	0.1	3
All	**100.0**	**2992**

Source: National Youth Survey – II, 2009, Conducted by Faculty of Arts, University of Colombo

Socio - Economic Characteristics

Almost 72% of the youth respondents in the survey were living in rural areas of the country while 20% were in urban setting. The balance 8% resided in various locations in the estate sector of the country Table 2. Representing the national picture of ethnicity in the Sri Lankan population, 75% of youth in the sample claimed that they were Sinhalese. Among the other ethnicities, 17% were Tamil while 7.5% were Moors. An insignificant number of youth belonged to other ethnic groups.

Demonstrating the impact of free educational policies and programmes whereby students have the opportunity to receive an education from kindergarten to university, three quarter of the youth in Sri Lanka have formal education at least up to General Certificate of Examinations Ordinary Level. The proportion of youth who have never attended formal school is less than one percent while over four percent are graduates as in Table 2. Apart from formal school education, only one third of youth in the sample have had some level of technical education.

A noteworthy fact revealed through the survey of the youth group aged 15-29, concerning occupation was that the highest proportion of youth 34% were students, while 23% claimed to be unemployed. Almost one-third of the youth interviewed were employed and another 11% were engaged in household activities. The latter group that was not seeking employment at the moment was mostly female.

Exposure to Computer Literacy

Out of the 2921 respondents, 57% answered in the affirmative to the question as to whether they have computer knowledge. When youth are categorized into three age groups, the highest level of computer literacy was evident amongst the 18–24 age group in Table 3. From this age-group 65% could manage basic functions of the computer. Interestingly however, in the next advanced group aged 25–29 only 43% of youth demonstrated computer knowledge.

This pattern indicates that the older-group has not had as considerable exposure to computers as the younger group because the emergence of technology is a fairly recent development in Sri Lanka. As mentioned earlier, when demarcated by the main economic activity, it became evident that the student population had the highest level of exposure to knowledge in computers with over 75% being computer literate.

The lowest attainment of computer literacy was demonstrated by the category of persons who were engaged in household work, of whom only 30% were computer literate. It is worth mentioning that a significant proportion of respondents belonging to this category were housewives. This indicates that a large proportion of the housewives lack the ability to operate computers in Sri Lanka.

Table 2: Distribution of Youth by Socio-Economic Characteristics

Variable	Percentage	Number
Residence		
Urban	20.0	600
Rural	71.9	2156
Estate	8.1	241
All	**100.0**	**2997**
Ethnicity		
Sinhalese	75.0	2247
Tamil	17.3	518
Moor	7.5	226
Other	0.2	6
All	**100.0**	**2997**
Education		
Never been to School	0.6	19
Primary (Year 1-5)	1.0	31
Secondary (Year 6-10)	23.5	704
G.C.E. (O/L)	35.9	1077
G.C.E. (A/L)	34.6	1037
Higher Education	4.1	124
Other	0.2	5
All	**100.0**	**2997**
Main Activity		
Student	33.6	996
Unemployed	22.9	677
Employed	31.6	935
Household Work	11.2	332
Other	0.7	20
All	**100.0**	**2960**

Source: National Youth Survey – II, 2009, Conducted by Faculty of Arts, University of Colombo

Table 3: Percentage of Youth with Computer Literacy by Age and Economic Activity

Economic Activity	15-17 Years (%)	18-24 Years (%)	25-29 Years (%)	All (%)	(N)
Student	62.4	88.6	68.8	75.3	988
Employed	25.0	47.5	45.6	46.0	930
Unemployed	41.3	61.6	49.4	56.3	672
Household Work	50.0	31.5	28.8	30.2	331
All	58.1	64.5	42.8	56.6	2921
(N)	**597**	**1427**	**897**	**2921**	

Source: National Youth Survey – II, 2009, Conducted by Faculty of Arts, University of Colombo

In concurrence with the demographic characteristics of the survey it was assessed that the number of female respondents were higher than the male respondents. However, as depicted in Figure 1, the percentage of male respondents with computer knowledge is higher than the female respondents. Almost 60% of the male respondents were computer literate when compared to the 55% of computer literate females. This pattern is recurrent in all the age-groups except the 25–29 age group. Thus one can conclude as illustrated from the graph below that the male respondents have had more opportunities in acquiring basic computer knowledge than the female youth population in the sample.

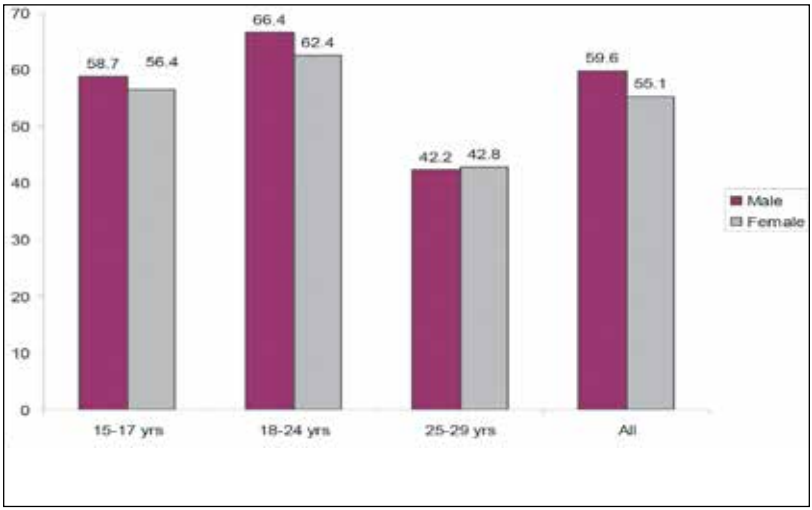
Ownership of Computers

From the data in Table 4, it is evident that of the youth who have a basic knowledge in computer, 33% have their own personal computers. According to the computer literacy table mentioned above the highest percentage of computer ownership of almost 56 % rests with the 18-24 age group. Comparatively, in the other two age categories a low percentage of youth claim ownership to computers.

When the main activity of youth was juxtaposed with ownership of a computer, the employed category of youth had the highest percentage of almost 38% of computer ownership. This is a contrasting variation from the previous observation where the student category acquired the highest percentage in computer literacy. Hence, one can af-

firm that ownership and maintenance of a personal computer requires a steady monthly income.

Figure 1: Percentage of Youth with Computer Literacy by Age and Sex



Source: National Youth Survey – II, 2009, Conducted by Faculty of Arts, University of Colombo

Table 4: Percentage of Youth Owning a Computer by Age and Economic Activity

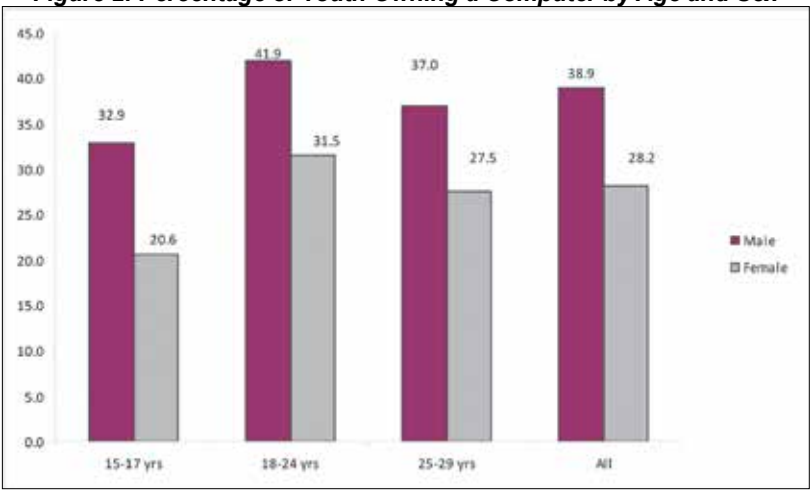
Economic Activity	15-17 Years (%)	18-24 Years (%)	25-29 Years (%)	All (%)	(N)
Student	27.1	36.7	33.3	32.7	746
Employed	0.0	40.2	34.9	37.9	430
Unemployed	20.0	34.8	27.5	31.9	379
Household Work	0.0	24.2	21.3	21.4	98
All	26.2	55.7	31.2	33.0	1653
(N)	**349**	**919**	**385**	**1653**	

Note: Response was sought only from those who possessed basic computer knowledge

Source: National Youth Survey – II, 2009, Conducted by Faculty of Arts, University of Colombo

By looking at Figure 2 it is evident that out of the male youth population who have a basic knowledge in computers, 39% own their computers, while for the female youth population it is 28%. The same pattern is imprinted on the other three age groups where a higher percentage of male youth, compared to their female counterparts have ownership of computers. The disparity in computer ownership according to gender widens deeply at the youngest age group where almost one-third of males possess a computer while the corresponding figure for females is 21%.

Figure 2: Percentage of Youth Owning a Computer by Age and Sex



Source: National Youth Survey – II, 2009, Conducted by Faculty of Arts, University of Colombo

Computer Usage

As displayed in Table 5, the frequency of computer usage is categorized according to Daily/Weekly, Occasionally and Never basis. From the computer literate group of youth aged 15-29, 50% uses the computer on daily/weekly basis. Hence it can be argued that youth who have a basic knowledge in handling computers tend to use their computers more frequently.

Table 5: Percentage Distribution of Youth According to How Often they Use a Computer

Economic Activity		15-17 Years (%)	18-24 Years (%)	25-29 Years (%)	All (%)	(N)
Student						
	Daily/Weekly	55.9	58.5	54.5	57.4	225
	Occasionally	38.9	37.8	45.4	38.4	182
	Never	5.1	3.7	0	4.2	24
Employed						
	Daily/Weekly	16.7	54.2	51.5	52.2	156
	Occasionally	66.7	39.1	44.2	42.2	185
	Never	16.7	6.8	4.3	5.6	23
Unem-ployed						
	Daily/Weekly	29.7	46.1	38.4	42.8	420
	Occasionally	56.8	48.4	56.2	50.8	281
	Never	13.5	5.5	5.5	6.3	31
Household Work						
	Daily/Weekly	33.3	24.3	20.3	22.1	23
	Occasionally	46.2	51.4	57.8	55.8	58
	Never	20.5	24.3	21.9	22.1	23
All						
	Daily/Weekly	52.3	52.7	43.9	50.5	824
	Occasionally	41.5	41.6	48.8	43.2	706
	Never	6.2	5.7	7.3	6.2	101
	Total	**100.0**	**100.0**	**100.0**	**100.0**	**1631**

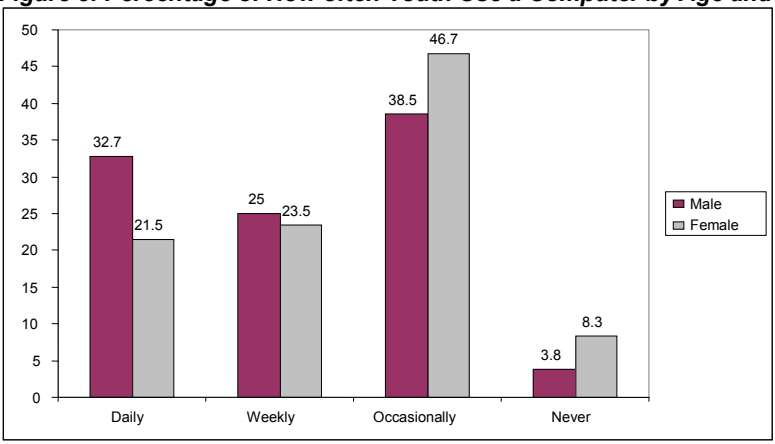
Note: Response was sought only from those who possessed basic computer knowledge

Source: National Youth Survey – II, 2009, Conducted by Faculty of Arts, University of Colombo

Since the percentage of youth who have never used a computer is as low as 6 % it can be acknowledged that almost 94% of youth use computers regularly for their daily work. In relation to main economic activity, more than 55% of students in all age groups use computers on a daily/weekly basis, compared to youth engaged in other activities. Regrettably, among the youth who are unemployed and engaged in household activities, over 22% have never used computers.

When comparing the frequency of computer usage by gender, one-third of the male respondents tend to use computers daily, as opposed to the 21% of females as in Figure 3. A large proportion of male and female youth use computers occasionally. Only a small percentage of youth have never used a computer, of whom the majority is female.

Figure 3: Percentage of How often Youth Use a Computer by Age and



Source: National Youth Survey – II, 2009, Conducted by Faculty of Arts, University of Colombo

Internet Usage

According to the questionnaire administered in this survey internet usage is a non – filtering question, which means that almost all the participants have answered this question As shown in Table 6, the total youth population, one-third had used the internet. Irrespective of whether they have prior knowledge in handling a computer, 33% of youth have used the internet.

With respect to main economic activity, the highest percentage of internet usage 42% is observed among students, while the lowest is among the unemployed household members.

Table 6: Percent of Youth who Have Used Internet by Age and Economic Activity

Economic Activity	15-17 Years (%)	18-24 Years (%)	25-29 Years (%)	All(%)	(N)
Student	26.3	56.2	62.5	42.1	920
Employed	12.5	31.3	30.7	30.6	807
Unemployed	12.1	36.8	37.9	34.2	565
House hold Work	0.0	11.2	13.5	12.4	274
All	23.7	40.6	28.6	33.5	2566
(N)	**527**	**1270**	**769**	**2566**	

Source: National Youth Survey – II, 2009, Conducted by Faculty of Arts, University of Colombo

As depicted in Figure 4, it is apparent that the clear majority of internet users are male respondents. The same pattern reoccurs throughout various age categories. It is again the males aged 18-24 who reported the highest 44% usage of internet which is a 12% increase from that of the females.

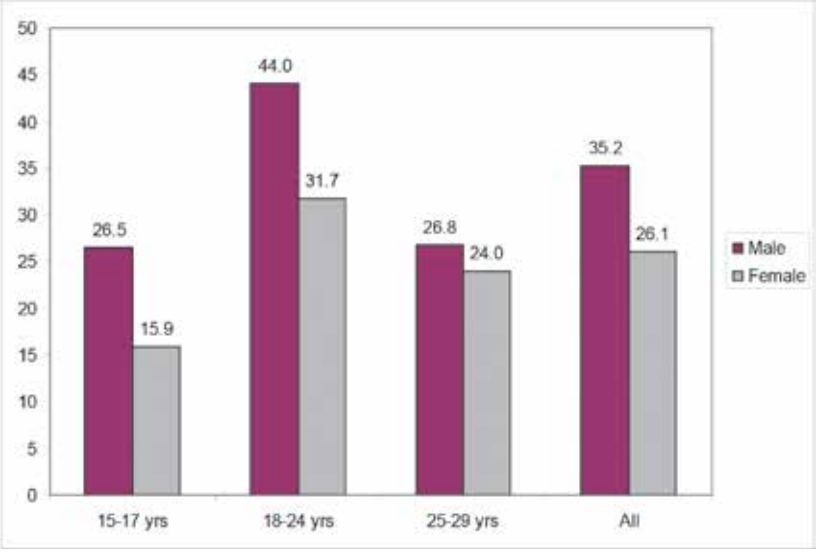
Purpose of Internet Use

Information was tabulated from the responses given by the participants of the survey on purpose of using internet[1]. With reference to Table 7, the responses were categorized according to five main purposes of using the internet, such as: emailing, web browsing, professional, academic and games. In total 35% and 26% of internet users used it for academic purposes and web browsing respectively.

Predictably, half the students interviewed used the internet for academic purposes, but rather significantly, one-third of the unemployed youth also used the internet for academic reasons. The highest proportion of internet users belongs to the employed category and uses it for web browsing. When casting a cursory glance on the purposes of internet usage, the least popular reasons for using the internet seem to be for professional work and games.

1. < PDF, http://www.allacademic.com/meta/p182446_index.html >

Figre 4: Percentage of Internet Usage of Youth by Age and Sex



Source: National Youth Survey – II, 2009, Conducted by Faculty of Arts, University of Colombo

Time Spent on Internet

The respondents who used the internet were asked how much time they spend online during a week, as is demonstrated in Table 8. Of the youth who have accessed the internet, 91% have spent less than 5 hours a week as in Table 8. Whilst observing the tabulated data the most remarkable feature is that in all except one age group, irrespective of their occupation, the youth do not use internet for more than 5 hours a week. Out of this exceptional group of students aged 15-17, almost 9% spent five hours or more on the internet, which is significantly higher than their older counterparts.

Internet Access

Table 9 indicate the various locations where the respondents accessed the internet. According to the information provided, students have the most amount of access to the internet via their school or university. This implies that they have access to internet from their educational institutions free of charge. Accordingly, almost 52% of students have the opportunity to access internet through their learning centres.

Table 7: Percentage Distribution of Youth According to the Purpose of

Internet Use			
Economic Activity		**Total**	**(N)**
Student	Email	19.5	76
	Web Browsing	20.8	81
	Professional	1.0	4
	Academic	48.7	190
	Games & Other	10.0	39
Employed	Email	22.9	59
	Web Browsing	29.8	77
	Professional	20.2	52
	Academic	16.3	42
	Games & Other	10.8	28
Unemployed	Email	27.0	54
	Web Browsing	29.0	58
	Professional	4.5	9
	Academic	30.5	61
	Games & Other	9.0	18
Household work	Email	13.9	5
	Web Browsing	27.8	10
	Professional	11.1	4
	Academic	36.1	13
	Games & Other	11.1	4
All	Email	21.9	194
	Web Browsing	25.6	226
	Professional	7.8	69
	Academic	34.6	306
	Games & Other	10.1	89
Total		**100.0**	**884**

Source: National Youth Survey – II, 2009, Conducted by Faculty of Arts, University of Colombo

Table 8: Percentage Distribution of Youth According to Time Spent on

Internet Per Week

Economic Activity		15 -17 Years	18 -24 Years	25 -29 Years	All	(N)
Student	Never	0	1.1	0	0.8	3
	Less then 5 hrs	91.3	91.8	100	91.9	361
	5 hrs or more	8.7	7.1	0	7.3	29
Employed	Never	0	1.8	0.7	1.2	3
	Less then 5 hrs	100	90.8	87.2	88.9	224
	5 hrs or more	0	7.4	12.1	9.9	25
Unemployed	Never	0	1.5	0	1.0	2
	Less then 5 hrs	100	91.0	93.8	92.1	174
	5 hrs or more	0	7.5	6.2	6.9	13
Household Work	Never	0	9.1	0	3.03	1
	Less then 5 hrs	0	81.8	100	93.94	31
	5 hrs or more	0	9.1	0	3.03	1
All	Never	0	1.5	0.4	1.0	9
	Less then 5 hrs	92	91.2	90.5	91.2	790
	5 hrs or more	8	7.3	9.1	7.8	68
Total		**100.0**	**100.0**	**100.0**	**100.0**	**867**
(N)		**125**	**520**	**222**	**867**	

Source: National Youth Survey – II, 2009, Conducted by Faculty of Arts, University of Colombo

Based on the main economic activity, the most number of respondents who seek internet access through internet cafés are the employed category. While 27% of employed respondents access internet through cafés, over 16% of students also access the internet via the same source. A most number of unemployed respondents have also mentioned that the most popular internet access is through internet cafés.

Table 9: Percentage Distribution of Youth According to the Places of

Internet Access

Place of Access	Unemployed	Employed	Household Work	Student
School/University	23.6	15.0	20.6	51.7
Internet Café	26.7	26.8	23.5	16.2
Home	14.6	16.1	20.6	12.3
Place of Work	0.0	18.9	11.8	0.0
Community Center	11.8	0.0	0.0	0.0
Other	23.1	23.2	23.5	19.8
All	100.0	100.0	100.0	100.0
Total	**195**	**254**	**34**	**389**

Source: National Youth Survey – II, 2009, Conducted by Faculty of Arts, University of Colombo

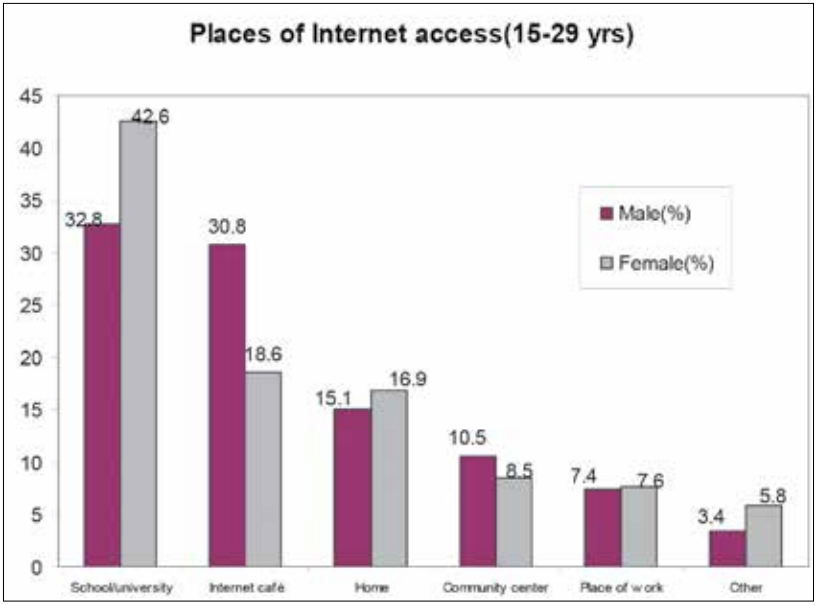
Figure 5 differentiates the various places where youth from the age of 15-29 access the internet against the gender of the participants. Most youth gain internet access through schools or universities. A higher proportion of interviewed females use the internet in such academic institutions much more than the male respondents. However, the opposite pattern emerges when accessing internet through internet cafés. The pattern re-emerges regarding internet access from home or work place, when more female respondents do so than the males.

Internet Access of the Youth by Age and Sex

Since most youth aged 15-17 are schooling, it is evident that they use school computers to access the internet as in Figure 6. Of this, a significantly large proportion of female participants amounting to 83 % reported usage of internet in schools. In contrast, out of the male participants belonging to the same age group, only 56% declared that they access internet from school.

It also shows that none of the female respondents use an internet café in this student age group. There are a significantly higher percentage of male respondents accessing the internet from their home computers when compared to the females.

Figure 5: Percentage of Access Places of Internet by Age and Sex



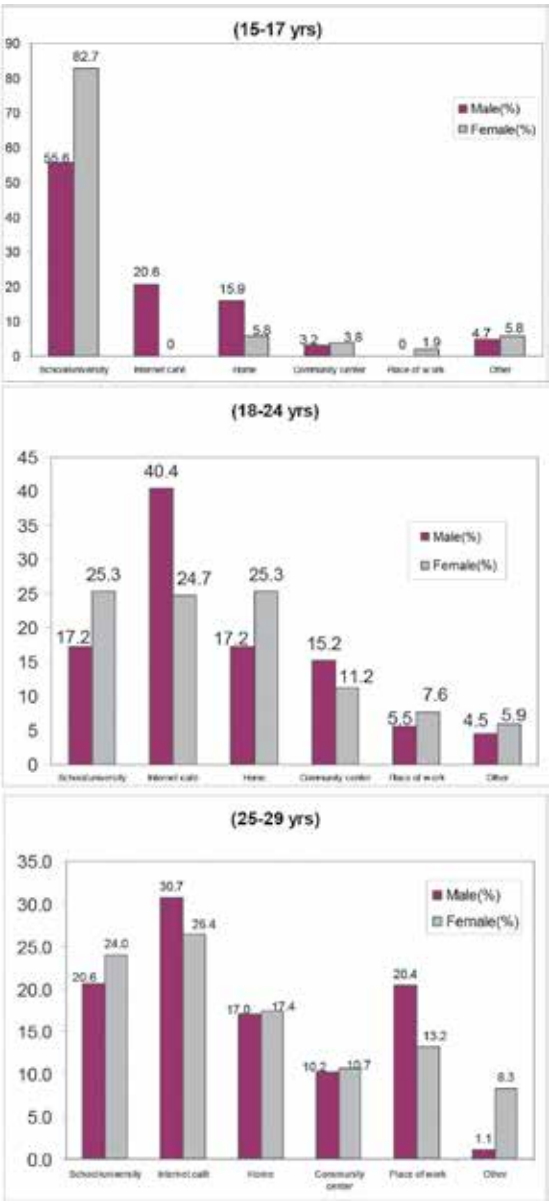
Source: National Youth Survey – II, 2009, Conducted by Faculty of Arts, University of Colombo

More gender based differences could be observed from the next age category i.e. 18-24 years, than in the 15-19 group. In this group, a higher percent of males 40% and females 25% use internet cafés as their internet accessing source. According to the graph, it can be argued that the dominating party in some places is the male population, whereas in some places it is the female population. A decline in accessing internet via office space is evident among both sexes. This may be due to work place restrictions of unlimited access to the internet during their working hours.

Finally in the 25–29 age group, a strong distribution of internet access sources could be noted. It seems that irrespective of gender, the most popular internet access source of this age cohort is the internet café. This narrows the gender gap where usage of internet cafés is concerned, and 31% of the male participants and 26% of the female participants access the internet in cafés. When considering the percentage of youth accessing internet from home, it is remarkable that the gender gap decreases, as the age increases.

Figure 6: Percentage Distribution of Access Places of Internet by Age

and Sex



Source: National Youth Survey – II, 2009, Conducted by Faculty of Arts, University of Colombo

Figure 6 indicates that male adolescents tend to flock to inter-

net cafés to use the internet. This can lead to addiction and cause a negative influence to the youth of Sri Lanka. Whereby they could be susceptible to the many ill effects of cyber space such as; pornography, cyber violence, cyber bullying and addiction to games where youth could develop bad habits to last their entire lives. In addition, they could end up with addiction to alcohol, drugs, smoking and prostitution etc. This could destroy the welfare of the most important segment of the population of the country.

Discussion

Arrival and use of Information and Communication Technology (ICT) has altered human life from a simple function of talking to people living abroad to fulfilling fundamental needs, such as education, health or governance. Youth have turned to technology when it comes to fulfilling financial, political and social tasks. With the increasing demand for labor and outsourcing of labor, an economic dimension via the use of technology has come into place, in the outsourced companies in Sri Lanka (De Silva, 2012). This has become a new and lucrative trend, which came into existence rapidly with the turn of the century among the Sri Lankan youth.

According to the IT survey conducted by the ICTA[2] in terms of employment, there has been a 40% increase in the IT sector from 2004 to 2008. Creating new political trends, the presidential candidates for the 2010 election were advertising and campaigning on social networking, specifically to target the youth, while social networking sites like face book, my space, twitter, gtalk, and yahoo messenger has become the pulse of the young people. This is evident from the fact, that in this survey 48% among the youth who possess computer literacy claimed that they use the computer for web browsing and emailing.

Sri Lanka boasts of the highest literacy rate in South Asia, thus indicating that literacy is of importance to its populace. Like for any other global language proficiency, there is a growing demand and thirst for the Microsoft language. The household computer literacy survey, conducted by the Department of Census and Statistics of Sri Lanka, 2008, indicates that the household computer literacy rate increased from 9.4% in 2004 to 16% by 2006/2007. The level of literacy depends on usage, while usage depends on availability and accessibility to ICT

2. http://www.icta.lk/index.php/get/category/3-p

tools. To determine the level of computer literacy among youth aged 15-29, this survey used indicators such as computer usage and internet usage, for this survey deems a person IT literate if a person can operate any function on a computer by him/herself.

One of the crucial factors of accessing ICT is having a connection to electricity. In terms of electrification in Sri Lanka, there is a very encouraging rate over 80% of households having a connection to the National electricity grid. (Department of Census and Statistics Sri Lanka, 2008) Therefore they are likely to have access to ICT, amenities such as the radio, television or a personal computer. Despite living in an urban or rural area, people are most likely to have a television and a radio at home. In fact, according to the household computer literacy survey of 2006/2007, an estimated 76.3% households possess a television while over 80% own a radio.

However, in the introduction to the household computer literacy survey of Sri Lanka 2006/2007, the Department of Census and Statistics of Sri Lanka conveys the following: “Although computer ownership in Sri Lanka is growing, the majority of Sri Lankan households do not have access to all the tools needed to participate in this technological revolution, including personal computers and computer networking capability such as internet access. This disparity between those with access to the tools of technology and those without such access has created what is being commonly referred to as the “digital divide”.

Therefore, in Sri Lanka the digital divide does not directly affect access to electronic media but it definitely affects it when it comes to accessing a computer or internet, within the urban and rural sectors. This study further indicates that 8.2% of households possess a personal computer, and that it is a significant increase from the 3.8% in 2004. A reason for this could be that computers are now amply available, whether it is second hand or brand new and is more affordable than before. Also this increase is supported by the survey that was concluded, as it revealed that out of the 2992 respondents aged 15-29 years, 33% have a personal computer.

Household ownership of a computer or accessing a computer will continue to grow in the future because of the government’s initiatives to promote the usage of computers among youth by introducing it

in the school syllabus, and the ICTA establishing e-Nenasala[3] units all over the island. Nenesala units function with the objective of achieving ICT development in rural areas, poverty alleviation through strengthening administration and providing opportunities for every citizen to develop their global knowledge by getting in touch with the world.

Nenasala is an initiative of the ICTA, Sri Lanka and they indicate on their website[4] that there are over 600 e-Nenasala units all over the island where people can access the internet, e-mail, while making phone calls and providing other educational facilities. This is certainly carried out with the objective of increasing the number of persons who have access to ICT and hopefully decreasing the "digital divide" between the urban, rural and plantation sectors.

In addition to providing ICT to rural areas, the main objective of a Nenasala is to assist communities in poverty reduction, social and economic development and peace building.

Another objective may have been to achieve the target of introducing ICT education in to the school education system. Although the need for introducing ICT to the school curriculum was discussed since the 1980s, it was finally realized in 2004 when ICT was introduced as a subject for Advanced Level students in the form of a subject called General Information Technology. It was later introduced as a subject for the Ordinary Level students and it was administered in the 2008 examination. This move of including ICT to the school syllabi could have been the reason behind a high percentage of students with computer knowledge, as revealed in this study.

According to the present study 75% students have computer knowledge when compared with the 46% employed persons.

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3. The implementation was via tele/knowledge centers called Nanasala(Nena = Knowledge; sala = shops), that spawned across the country bringing within easy reach, computer technology, the internet , and IT skills training to many people who had never even seen a computer. (http://nanasala.org/target.htm)

4. A website, also written as Web site, web site, or simply site, is a set of related web pages containing content such as text, images, video, audio

As per study, conducted by the Ministry of Education[5] computer literacy among teachers is 40%. According to the same study there are 9714 public schools and approximately 400 private and international schools with approximately 3.9 million students and 200,000 teachers. Out of the 200,000 teachers there are 65,000 teachers who are trained in ICT. The study further states that 40% of the schools also have computer laboratories with an encouraging 230 schools having their own websites. These facts further support the survey findings which show that internet usage among students is higher 42% than that of employed youth 31%.

E-village is another project to develop ICT education in rural areas. It makes rural communities an internal part of the global village. Other objectives of the E-village project are providing accessibility to English language learning and widening the opportunities to villages in academic and professional fields. This project is operated by the Secondary Education Modernization Project II (SEMP II) and Education for Knowledge Project (EKSP) of the Ministry of Education under the patronage of the Precedential Secretariat. It is funded by the Government of Sri Lanka and the Asian Development Bank. (ADB) In July 2007, this project was started in five rural villages Matale, Hambantota, Rathnapura, Monaragala and Kurunegala districts. The project increased the number of locations by adding more schools including Isuru schools and rural schools. Currently, fifty projects are being successfully operated in Sri Lanka.

E-Sri Lanka is another project which brings Information Communication Technology (ICT) to every village. It is the first World Bank project to develop ICT education which also initiated the transformation of working procedure of Government Organization to electronic media. The project has created a vast eco system of ICT –based resources in the rural sector, resulting in the ICT literacy rate increasing from 9.7% in 2004, to 22% in 2008 Government Information Centre is another institute, operating under the Presidential Secretariat to enhance the information communication of citizens about the services rendered by seventy seven government departments and ministries. This service is provided through a telephone communication system, via a public telephone line 1919 and also by the GIC website.

5. The Ministry of Education is a ministry of the Government of Sri Lanka that directs the formulation and implementation of policies related to primary and secondary education in Sri Lanka. further: www.edu.gov.lk (Anura Dissanayake, Project Director-Secondary Education Modernization Project)

Outside school, youth can educate themselves from over 12,000 centers that offer ICT education. Despite the many challenges faced by them, the Ministry of Education is promoting ICT education, and by 2012 hopes to introduce ICT as a subject to be taught from grade Three onwards. In order to counter the challenges they have established the school net system and Nenasala, and would further seek support from the private sector to realize this goal.

One factor curbing the rapid growth of computer literacy in Sri Lanka is inadequate knowledge of the English language. According to an article by Gayan Ratnayake in the Lanka Business Online[6], only 53.7% of teachers are English literate. However the private sector is stepping in to offer their assistance by broadcasting educational programmes via television. Various electronic media stations have computer lessons on computers via television for the masses of youth to learn from.

As discussed earlier a considerably higher proportion of persons have access to television. Recently, a privately owned electronic media station also launched a channel exclusively for education whereby children/youth have the opportunity to learn merely by tuning in to television. Though this is not a concrete solution for the lack of teachers knowledgeable in English and ICT to carry out ICT education, it helps to ease the situation. Along with this, efforts are being made to localize ICT tools by making them available in Sinhalese. The Sinhala/ Tamil Unicode was approved by the Sri Lanka Standards Institute in 2005 and in order to increase more Sinhalese content online, Sinhalese web browsers were launched in 2007 along with the launch of the “Siyabas” website. Further attempts are being made to have more Sinhalese content online in order to decrease the digital barrier caused by inadequate English knowledge. Along with the standardization of the Sinhala Unicode the Secretary to the President issued a circular in 2007 insisting that all government organizations should use the Sinhala Unicode for their Sinhala computing needs.

To conclude, although only 3.8% of the households have computers at home, over 30% of the households who do not own computers strongly feel that they should have one (Department of Census and Statistics of Sri Lanka, 2008). In the present survey 33% of youth own

6. Survey shows majority of Sri Lanka’s teachers lack computer literacy, http://www.lankabusinessonline.com/news/survey-shows-majority-of-sri-lanka%E2%80%99s-teachers-lack-computer-literacy/1501389129

a computer. However under the school net system, currently 500,000 students have email accounts and out of 9000 schools 800 schools provide the surrounding community with IT services. Therefore, with the introduction of ICT to the entire school syllabus, as well as with the public and private sector promotion of ICT, there will evolve a new generation of youth, who will conquer the digital divide and make Sri Lanka completely ICT literate.

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