Trends, Technology And Addiction: An Explorative Study On Cyber Behaviour Of Students

** Devi Prasad Dash*
*** Shamim Akhtar*

ABSTRACT

The Internet has revolutionized every sphere of our life. From the urgency of office cubicles to the comfort of our home recliners, people are living a substantial part of their everyday hours online. And now, with the emergence of portable devices such as smart phones, net-books and tablets, everyone is "connected", even while they are on the move. No doubt, the internet has opened up a whole big window of unlimited possibilities for everyone. From social networking to net-banking, it has, in many ways, made our life simpler, fancier and better. However, on the other hand, it has also caused serious concerns, and at times, has posed threats that tend to go beyond our ordinary control. Today, the students, especially the ones in their teens and early twenties have become the most vulnerable segment to fall on the wrong side of this revolutionary technology. This article explores internet usage behaviour among a selected sample of college and school students from Lunglei town in Mizoram, and on the basis of the findings of the study, it draws suggestions for more healthy and productive use of the Internet.

Keywords : Internet Addiction; Cyber Behaviour; Social Networking; Mobile Internet

INTRODUCTION

There used to be a time when internet facilities were available only in few major towns and cities in India. Also, accessing the internet was only limited through desktop computers with many added accessories such as modems, land line telephone connections, etc. But with rapid infrastructural development and introduction of newer technologies such as broadband, Wi-Fi, GPRS, 3G etc; the reach has extended beyond the metros. Consequently, India – one of the fastest developing economies in the world - has emerged with a growing population of active mobile phone users. Coupled with this technological development, the ever dropping price of mobile phone handsets and mobile services has been a further contributing factor to this gigantic growth story. Today, even the entry-level mobile phones are equipped with internet surfing facilities, and the number of internet users has grown significantly in the past few years. The Internet usage statistic of India Report points out that there are 88 million internet users in the country, which constitutes 6.9 % of India's total population. According to another report, India has about 81 million internet users, and going with the predictions, this figure can dramatically increase to 237 million by 2015. Since India is a country that is demographically blessed with a substantial young population, the bulk of the internet users are from the young age group. From school goers to college students, and the early-staged professionals – today's young generations are not only high on technological awareness, but at the same time, they have integrated technology as a part of their overall lifestyle. Generally, the internet is being used for varied purposes that include anything to everything like social networking, information searching, travel booking, photo/video sharing, music/movies downloading, job searching or even matrimonial match-making. Some of the primary purposes of internet usage have been discussed below:

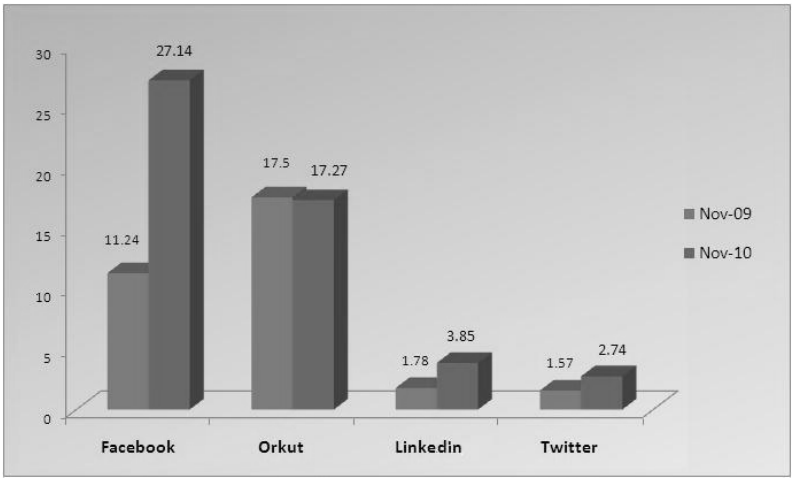
❖ **Information Search :** The Internet today has become the one-stop-shop for all kinds of information that includes – information related to studies, job, travel enquiries, real estate property deals, medical facilities or any other information on any particular topic of interest. Moreover, popular search engines like Google provide lists of links on a priority basis for easy and fast searching of any particular information. The free online encyclopedias like Wikipedia is filled with articles on almost any topic that one can possibly imagine. Similarly, there is Google Earth, an online service which provides virtual geographical maps of any location from any part of the world. And then, there are dedicated news websites that keep people updated about all the latest happenings from around the world.

❖ **Social Networking:** The "World Wide Web" revolution evolved from the fundamental idea that people by nature like to keep in touch with other people. This brilliant concept of connecting and sharing gave birth to a number social networking sites such as "Facebook", "Twitter", "Orkut" etc. Everywhere, people are spending a considerable amount of their time on social-networking activities. Tweets and followers have now become redefined words in Gen-Y's

* *Faculty Member (IT),* ICFAI University, Mizoram. E-mail : devidash1@gmail.com
** *Faculty Member (Management),* ICFAI University, Mizoram. E-mail : worldofshamim@gmail.com

vocabulary. It's a buzzing trend of frequent status updates, uploading photos/videos, sharing quick links, joining communities, posting comments and all that. Therefore, for the young age groups, social networking has become more like an addiction. From a more commercial angle, the potential of social networking has now been taken beyond social bonding and is being exploited as a powerful marketing media tool by professional marketers across the globe. Exhibit-1 shows the growth of users in popular social-networking sites during the last two years in India.

Exhibit 1 : Cumulative Growth of Social Networking Sites In India



Note: Numbers are in Million
Source: Digital Inspiration, "The Growth of Social Networking Sites in India" (accessed on Feb 9, 2011)

❖ **Online Entertainment:** Internet is basically a combination of two things – information and entertainment. Ever since internet's commercial inception, surfing has become a way of life, by which people engage in various leisure activities. The internet is ,therefore, flooded with online entertainment resources like games, music, movies, apps, e-books, e-mags and so on. Launch of dedicated devices for online entertainment such as I-phones and I-pads[1] has added new dimensions to this fascinating digital arena.

❖ **Digital Content Sharing:** With the emergence of high speed internet, people can now easily share their digital resources like music, photos, videos, documents, designs, software, etc. Some of the popular websites that provide online sharing are YouTube, Flickr, Photobucket etc. New concepts like Cloud Computing[2] are set to change the way people are used to using computers. It will provide a virtually connected platform for all computing needs like storage, processing and retrieval.

❖ **Education & Learning:** From getting information about a particular institute or career to studying online courses, the internet has clearly revolutionized the educational systems and methodologies. Most of the reputed institutes in India and abroad are utilizing the internet for advertising their target specific courses, submission of online applications and even conducting online examinations like CAT [3]. Therefore, learning is also a major purpose that is keeping serious students attentively busy with technology.

❖ **Online Shopping:** Online shopping provides people with a variety of benefits like easy search of products, interactive catalogues, direct online payment options, better deals and even online bargaining. EBay, Naaptol, Rediff

[1] Both I-phone and I-pad were introduced by Apple as the brand names respectively for their trend-setting smart phones and tablets.

[2] According to the NIST definition, "Cloud Computing is a model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction.

[3] CAT is the Common Admission Test conducted by Indian Institute of Management as an entrance test for their post-graduate courses and is also widely recognized by other similar institutes as well.

Shopping, Quikr etc. are some of the online shopping sites. Besides, today's conventional companies are also using the internet as a parallel channel for direct marketing and sales; thereby reducing the cost of intermediaries.

❖ **Net-Banking:** It is the ease of getting services, without being physically waiting in queues at the bank's counter that has put net-banking above conventional banking as a preferable medium. From simple balance updates to national/international fund transfer or just simply investing in a Systematic Investment Plan (SIP), the options are plenty and hassle free. So, almost all banking needs can now be served online through the user-friendly bank's portal that operates under an advanced secure network.

❖ **Specialized Online Services:** Specialized personal services such as job search, travel booking, personalized dating or matrimonial match-finding services; everything is now provided by exclusive websites. These websites use virtual business models and offer interactive and customized services directly to the end-customers. For example, young aspirants who are either looking for their first job or for subsequent shifts in their careers are keen on registering on job portals like naukri.com, timesjobs.com, etc.

❖ **Official Purposes:** The internet has also become a vital platform for carrying out day-to-day organizational activities, including sending/receiving mails, reporting, video conferencing, CRM, Database Management, HR administration, etc. Without the internet, any modern organizational set-up is next to unthinkable. Therefore, it is evident that today's employees are spending considerable amount of their office hours sitting online.

The rising use of the internet and the falling average age of its users is a correlation that has raised some serious concerns globally. Many research studies have pointed out to the implications of internet addiction and overuse among various user groups. Among all, the young age group has become the victim of "internet addiction". Like any other form of addiction, it not only causes problems such as wastage of time, effort and money, but can also adversely affect one's health and development. Excessive and unrestricted use of the internet, especially for young students, has been linked with many physical, behavioural, psychological and moral problems (Exhibit-2). Over-exposure to the internet may have serious psychological implications among adolescents. Unsuitable yet unrestricted contents available on the cyberspace such as, pornography, violence, or provocative thoughts and literature can cause irreversible damage to a person's natural behaviour and personality. It is this particular aspect that makes the internet usage behaviour among the young age group an essential topic for further study and discussion.

Exhibit 2: Adverse Effects of Internet On Young Users

Physical	Psychological	Behavioural	Moral
❖ Musculoskeletal disorder	❖ Stress	❖ Addiction	❖ Value degradation
❖ Poor eyesight	❖ Anxiety	❖ Social alienation	❖Cyber crimes
❖ Repetitive strain injuries	❖ Personality conflicts	❖ Abusive & violent behaviour	❖Sexting [4]
❖ Sleeplessness	❖ Pro-sexuality	❖ Laziness and lack of interest	❖Becoming selfish & materialistic
❖ Headaches	❖ Loss of reasoning abilities	❖ Negative Attitude	❖Risking individual privacy

LITERATURE REVIEW

Haija (2003) focused on the role of guide / parent for the positive use of the internet as a source of information and support tool. The use of a computer or accessing the internet helps the student to think more, analyze more, which helps in developing the analytical powers of the student. At the same time, the students should be under the process of regular monitoring activity placed for observing the student's activity while accessing the computer / the internet. Moreover, for a positive outcome, the students should be encouraged and counselled for using necessary tools for developing their creativity, so that the use of computer / internet will be a productive one.

Osunade (2003) also sighted some of the positive effects of internet use towards the student's development and suggested that the students gather maximum information for academic professional excellence. He said that the

[4] Creating, receiving, storing and forwarding sexually explicit contents in the form of texts, photos, audios or videos through internet, mobile or any other type personal electronic media.

internet is an advanced tool for knowledge acquisition.

Mohamed (2008) elaborated on the positive use of the internet towards the student's academic and knowledge progress. The internet is one of the useful tools for the process of e-learning due to the availability of large scale of information database. It helps the students in building their intellectual ability by numerous examples and case studies towards the subject. Information access is easier and faster through the internet.

Marie A. (2008) stressed on some of the preventive measures before allowing the use of computers by students like **(a)** Maintaining a state of balance between the virtual and the real world within the minds of the students. ; **(b)** As the internet is a massive source of information, regular counselling is required regarding the effective use of the internet and other digital sources for avoiding victimization, cheating, unethical communication, cyber-harassment and cyber-bullying. ; **(c)** She expressed the essentiality of a counsellor's role for avoiding the internet addiction tendency of the young students as PCs, cellphones and iPods are cheaply available in the market.

Mythily, Qiu and Winslow (2008) stressed on a frame of regulation for household observation towards internet usage to monitor the type and hours of usage by the youth to avoid internet adolescence and negative aspects of internet usage.

Saif (2009) focused on the negative impact of internet towards social behaviour of the students. Internet may have some adverse psychological effects on the minds of young students, at the same time, it also helps the students to be more social and provides support for the development of their (students') cognitive ability.

IAMAI, I-Cube (2009) survey results showed that, until September 2009, India experienced a significant growth in the number of users in the field of IT / ITES. Till September 2009, 95 million people claimed that they possessed computer knowledge; 71 million people claimed that they were internet users, out of which, 52 million claimed that they were active internet users. According to the report, the percentage of internet users increased in the towns with a population of less than 5 lakh. The main drivers for the growth were involvement of school kids, college students and non working women and change of access point preference. The basic objective of internet use for the school and college students is collecting information with a special interest of e – commerce use towards the college students. Some of the most common areas of interest in internet usage are information collection, watching / downloading music / videos and text chatting. The overall internet access increased from 9.3 hours per week use in 2008, to 15.7 hours per week use in 2009.

Zboralski et al. (2009) pointed out in a study of 120 sample students that students having nuclear family have a greater tendency towards internet addiction and moreover, it has correlation with age, gender and family background.

ASSOCHAM (2010) conducted a survey of 1500 young internet users in 10 major cities of India and reported **(a)** Within the age group of 8 – 11 years, 18% did not surf daily, 30% surfed for 1 – 5 hours daily and 52% surfed for more than 5 hours daily. **(b)** Within the age group of 12 – 15 years, 10% did not surf daily, 32% surfed for 1 – 5 hours daily, and 58% surfed for more than 5 hours daily. **(c)** Within the age group of 16 – 18 years, 4% did not surf daily, 40% surfed the net for 1 – 5 hours and 56% surfed the net for more than 5 hours daily. According to the study, children of working parents were the most sensitive customers to internet addiction due to lack of parental supervision and easy availability of 3G facility with mobile phones and lack of parental intervention.

Internet Usage Statistic of India - A 2010 Report (2010) reported that although India has a very low number of broad-band users, but still, the statistics is quite transparent about the usage of internet facility. According to the report : 6.9% of the Indian population were internet users (about 88 million), 37% of the total internet users were based in 10 major cities of India, out of which, 3.24 million were located in Mumbai and 2.66 million were located in Delhi. The report also said that some of the basic reasons of using the internet are music downloading (73%), chatting (56%) and social networking (56%).

Kaiser Family Foundation's (2010) study focused on some of the common media used by the students within the age group of 8- 18 years. According to the report, the media exposure increased on an average by 2.12 hours (from 2004) to 2009. The basic objectives of using multitasking media between the students are for music and computer usage. Apart from these fixed media, the interest of mobile media has also increased. According to the survey, 76% of the students were having their own iPods, 66% owned a cell phone and 29% owned laptops. The basic use of a cell phone within this group was for music and gaming purposes. 86% of the students were accessing the internet at home, with 33% in their bedroom. Some of the basic objectives of using a computer / internet by these students was for gaming (19%), Social networking (25%), instant messaging (13%), video sites (16%) and other websites (12%). The study also brought forth some significant results regarding the academic performance of the students. According to the

results, 51% got good grades despite heavy media usage, 65% received good grades with moderate media use and 66% received good grades with light media usage.

The Hindu (Sept, 2010) presented some of the significant growth ratios of internet users in India. Focusing on the Boston Consulting Group, the study reported that the BRICI [5] countries are expected to experience a growth of 16% in internet users from 2009 – 2015. In India, there are about 81 million internet users , and the figure would dramatically increase to 237 million by 2015. One of the major factors resulting in such a progressive growth is availability of high end mobile phones in cheaper prices.

Comscore Media Metrix's (2011) survey provided some of very amazing statistics of growth of social-networking users in India as compared to 15 other countries. The results said that from July 2009 to July 2010, Indians were the 4th highest visitors on social networking sites (43%) after Russian Federation (74%), South Korea (57%), Brazil and Germany (Combined third place with 47%).

Digital Inspiration's (2011) report provided the growth of users in different social-networking sites within November 2009 to November 2010 with a growth rate of 60% in India within 1 year. The report implied **(a)** Facebook had 11.24 million users till Nov. 09 and by Nov. 2010, it had 27.14 million users. **(b)** Orkut had 17.50 million users until Nov. 09 and by Nov. 2010, it had 17.27 million users. **(c)** LinkedIn had 1.78 million users until Nov. 09 and by Nov. 2010, it had 3.85 million users. **(d)** Twitter had 1.57 million users by Nov. 2009 and by Nov. 2010, it had 2.74 million users.

Khalid (2011) presented his views on some of the negative factors of maximum exposure to online internet material on child psychology. The report suggested excess internet use may have negative implications like "limited / confined knowledge ability" because of lack of book usage, "week family and social bonding" due to limited / restricted interaction with actual people, and a comparatively large base of virtual friend circle, with a weak sense of differentiating and reacting to the actual environment as compared to the virtual arena of games and gaming behavior. Such conditions open the door for cyber harassment and psychological disorders by accessing uncensored internet sites. He also suggested some of the basic guidelines for controlling the child from these effects with the intervention at the door step through parents and teachers like maintaining logbook, open spaces for accessing the internet, counselling and making the child aware about the negative aspects of the restricted sites, allotment of standard and ethical rules for accessing the internet, etc.

METHODOLOGY

❖ **The Survey Area:** Lunglei is the second largest populated district in Mizoram. According to the provisional census report 2011, the district was having a total population of 1, 54,094 spread over 4536 sq. km of area. The Lunglei town is the headquarter of the district, with a population of 54,320. The town is an active commercial and administrative centre with a sizable number of governmental and private offices and educational institutes. There are about 10 schools in Lunglei town, out of which, two were having computer as a subject in their syllabus. There were a total of 5 degree/diploma colleges in the town which included 2 Technical colleges, 1 Polytechnic college, and 2 general colleges with regular programs like arts and science. All the colleges were equipped with computer facilities on their campus, while two colleges were offering advanced computer application courses with modern infrastructure. The survey had been conducted with a sample size of 256 respondents (between the age group of 14 - 30 years) collected from various educational institutes within the town during the period between May, 2011 and June, 2011.

❖ **The Sample:** There were 256 participants for the present study in the age group ranging from 14 - 30 years. For a better understanding, the participants were categorized into four distinct segments namely, *"Early Teens"* (comprising of 28 respondents in the14- 16 years age group); *"Late Teens"* (comprising of 107 respondents in the age group of 17 - 20 years); *"Early Twenties"* (comprising of 97 respondents in the age group of 21 - 25 years); and, *"Late Twenties"* (comprising of 12 respondents in the age group of 26- 30 years). 12 respondents did not mention their age and so, they were marked as *"Unspecified"*. Gender wise, there were 170 males and 86 females in the sample. Institution wise, there were 46 school students and 210 college students who were a part of the total sample composition.

❖ **Research Design And Survey Process:** The survey process was carried out in various schools and colleges across the

[5] BRICI countries includes Brazil, Russia, India, China and Indonesia.

Table 1: Details Of The Sample Representation		
Group	**Samples**	**No. of Respondents**
Early Teens (14 - 16 age group)	**Total**	**27**
	Male	12
	Female	15
Late Teens (17 - 20 age group)	**Total**	**107**
	Male	66
	Female	41
Early Twenties (21 - 25 age group)	**Total**	**97**
	Male	72
	Female	25
Late Twenties (26 - 30 age group)	**Total**	**13**
	Male	11
	Female	2
Unspecified	**Total**	**12**
	Male	9
	Female	3

town. The information was collected through a carefully designed questionnaire from the target students. The questionnaire primarily covered areas such as purpose of internet usage, usage rate, preferred device for accessing the internet, etc. The information obtained was processed and analyzed using appropriate statistical tools and techniques.

DATA ANALYSIS

The Table – 1 represents the detailed sample distribution. There were nearly 42% of the total respondents who belonged to the late teens in the ratio of 62% male over 38% female respondents ; 38% of the total respondents were in their early twenties in the ratio of 74% male over 26% female; 10% were in their early teens in the ratio of 44% male over 56% female and the remaining sample were nearly 5% each from the group of late twenties and an unspecified group. The early teen groups were the ones with the maximum usage of PC on a per day basis at home (with 3.54 hrs.), followed by early twenties (3.48 hrs.), late twenties (3.39 hrs.), late teens (3.34 hrs.) and the unspecified group (found to be the least PC users within all groups, with an average of 3.2 hours). The growing use of technology is clearly evident among a majority of the respondents. The students were either having a PC at home or owned a mobile phone. Maximum respondents were having mobile phones with them, and 95 % of the mobile phones were equipped with GPRS facility. 13% of the respondents were using both the computer and the cell phone for accessing the internet.

Out of all the participants, near about 98% of the respondents were having a computer at home, out of which, 15% of the home PCs were equipped with internet facility. Today, mobile phones with internet surfing facilities are available at cheaper prices, where these dedicated models are being marketed with easy-surfing as their USP. In addition to this, almost all network service providers, who are competing against each-other, are offering GPRS connectivity at throw-away rates. This may be a major cause of selecting a mobile as one of the most preferred devices for accessing the internet. The other factor is with the help of a mobile phone, the respondents could access the internet anytime anywhere, wherever and whenever they felt comfortable, and hence, the cell phone was also an obscure mode of accessing the internet. The basic purpose of using the internet implies that most of the usage, either by computer or by cell phone, was for social networking or for chatting with friends.

The survey results are quite transparent about the choices of internet usage among the youth. Near about 44% of the respondents accessed the internet for checking out social networking sites / chatting, etc. and about 12% of the respondents accessed the internet for playing online games. According to the "The Hindu" report, the youth in India spend 2 hours on an average per day on social-networking sites, with the site preference in India being : Facebook (17 Million users), Orkut (18 Million users), LinkedIn (8 Million users), Ibibio (5 Million users), Twitter (4.5 Million

users) and according to internetworld.com report, India was positioned 4th on the ranking of the highest number of internet users by June, 2010 after China, United States and Japan. There are many other sites available for the purpose of making online friends, dating, blogging, etc. According to eBizMBA ranking, some of the popular websites have a dramatic number of monthly unique visitors. Exhibit – 3 shows some of the most popular sites with their monthly unique visitors.

One of the reasons for an increase in visitors towards these sites may be the availability of mobile phones, which is more obscure than a home PC. Chart – 1 is evident of per day average usage hours for the respondents. The average hours spent by the respondents through a computer or mobile for accessing the internet was 2.045 hours per day. The chart values show that the respondents were spending nearly 87.53% of the average time on Social Networking Sites and 62% of the average time was spent on online gaming. On an average, near about 57% of the internet usage was based on gaming and checking out social networking websites, which may be termed as unproductive use of the internet. According to the Facebook report of September 2010, the Facebook audience of India was much higher than the average number of users in top 15 countries within the age group of 18 – 25 years. The distribution of hours spent by each age group is represented in the Table 2. The Table 3 and Table 4 represent the detailed habit of using PC and mobile phones respectively for using the internet.

Exhibit - 3: Top 5 Social Networking Sites

Rank	Networking Sites	Monthly Unique Visitors
1	facebook	550,000,000 nos.
2	twitter	180,000,000 nos.
3	LinkedIn	100,000,000 nos.
4	my	80,500,000 nos.
5	Ning	60,000,000 nos.

Source: eBizMBA Rank, 1st June, 2011

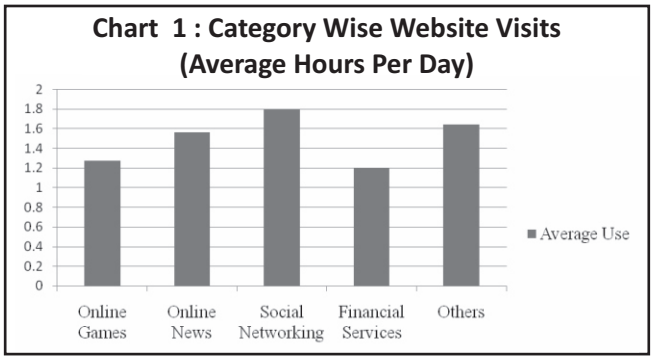


Table – 3 represents that nearly 7.31% of the respondents were aligned with the "excessive internet usage" category (India Current Affaire, September 2010) and about 34% of the respondents were using the internet daily for a time span of 4 hours and above. Out of all the groups, the Early Teens were having the highest tendency of excessive internet usage (nearly 46.15%) followed by the age group - Early Twenties (nearly 41.53%), followed by Late Teens (nearly 25.75%).

PEARSON'S PRODUCT MOMENT CORRELATION COEFFICIENT TEST

❖ **Analysis Result:** There is a positive correlation between the total hours of internet usage through mobile phones and total hours used by each group (Table 4).

❖ **Analysis Result:** There is a positive correlation between the average hour usage and average use byEarly Teens (Table 5).

Table 2: Age Group Wise Average Hours Spent (Per Day) On Different Websites					
Website Type	**Early Teens**	**Late Teens**	**Early Twenties**	**Late Twenties**	**Unspecified**
Online Games	1.7	1.19	1.45	1	1
Online News	1.3	1.25	1.69	1.25	2.3
Social Networking	1.2	1.72	1.65	1.9	2.5
Financial Services	0	1.14	1.18	1.23	2.3
Others	1.31	1.56	1.62	1.4	2.3

Table 3: Hour Wise Internet Access (Through PC)					
Hour Wise Break Ups	**Early Teens**	**Late Teens**	**Early Twenties**	**Late Twenties**	**Unspecified**
1 Hr.	3	23	20	6	0
2 Hrs.	4	26	18	3	3
4 Hrs.	3	15	19	2	5
>=5 Hrs.	3	2	8	0	0

Table 4 : Hour Wise Internet Access (Though Mobile Phone)						
Use in Hr. Break Up	**Total**	**Early Teens**	**Late Teens**	**Early Twenties**	**Late Twenties**	**Unspecified**
1/2 Hr.	63	11	35	17	0	0
1 Hr.	90	13	34	34	3	6
2 Hrs.	17	0	8	6	2	2
3 Hrs.	9	0	3	4	1	0
4 Hrs.	21	3	6	11	2	0
>=5 Hrs.	3	0	1	2	0	0
Pearson's Test Result		**0.979**	**0.958**	**0.9703**	**0.405**	**0.726**

CHI – SQUARE RESULTS

H_0: There is no significant relationship between internet usage objectives and usage by the groups of respondents.

H_1: There is significant relationship between internet usage objectives and usage by the groups of respondents.

$$\chi^2 = \frac{(O-E)^2}{E} = 30.0714123189028$$

Degree of Freedom= (C-1) X (R-1) = 4 X 6 = 24

The table value of χ^2 at 5% level of confidence with degree of freedom 24 is 36.415. The calculated value of χ^2 is less than the table value (Table – 6). So, the relationship between internet usage objectives and usage by the groups of respondents is not significant , and the hypothesis does not hold good. Thus, the null hypothesis (H_0) is accepted.

Table 5: Per Day Average Hours Wise Usage of PC And The Internet By The Respondent Groups						
Objective	**Total Average Use**	**Early Teens**	**Late Teens**	**Early Twenties**	**Late Twenties**	**Unspecified**
PC Use at Home	3.39	3.54	3.34	3.48	3.39	3.2
Play Game on Home PC	1.98	2.5	1.9	2.09	1.8	1.6
Use Internet	2.67	3.2	2.25	3	1.71	3.2
Online Games	1.27	1.7	1.19	1.45	1	1
Online News	1.56	1.3	1.25	1.69	1.25	2.3
Social Networking	1.79	1.2	1.72	1.65	1.9	2.5
Financial Services	1.2	0	1.14	1.18	1.23	2.3
Others	1.64	1.31	1.56	1.62	1.4	2.3
Avg. Mob. Internet Use Per day	**1.42**	**1.13**	**1.25**	**1.71**	**1.8**	**1.2**
Pearson's Test Result		**0.890**	**0.983**	**0.980**	**0.862**	**0.728**

Table 6: Relationship Between Internet Usage Objectives And Usage By The Groups Of Respondents (Per Day Average Hours of Use)							
Objective		**Early Teens**	**Late Teens**	**Early Twenties**	**Late Twenties**	**Unspecified**	**Total**
Use of Internet	Actual Average	3.2	2.25	3	1.71	3.2	13.36
	Expected Average	2.282729641	2.403361695	2.853412051	2.387122764	3.43337385	13.36
Online Games	Actual Average	1.7	1.19	1.45	1	1	6.34
	Expected Average	1.083271401	1.140517451	1.354089252	1.132811252	1.62931064	6.34
Online News	Actual Average	1.3	1.25	1.69	1.25	2.3	7.79
	Expected Average	1.331022747	1.401361347	1.663778434	1.39189269	2.00194478	7.79
Social Networking	Actual Average	1.2	1.72	1.65	1.9	2.5	8.97
	Expected Average	1.532641084	1.613634312	1.915801354	1.602731377	2.30519187	8.97
Financial Services	Actual Average	0	1.14	1.18	1.23	2.3	5.85
	Expected Average	0.999548533	1.052370203	1.249435666	1.045259594	1.503386	5.85
Others	Actual Average	1.31	1.56	1.62	1.4	2.3	8.19
	Expected Average	1.399367946	1.473318284	1.749209932	1.463363431	2.10474041	8.19
Mob. Internet Use	Actual Average	1.13	1.25	1.71	1.8	1.2	7.09
	Expected Average	1.211418649	1.275436708	1.514273311	1.266818892	1.82205244	7.09

H_0: There is no significant relationship between hours of internet usage through mobile phones and its usage by the groups of respondents.

H_1: There is significant relationship between hours of internet usage through mobile phones and its usage by the groups of respondents.

$$\chi^2 = \frac{(O-E)^2}{E} = 28.9227457174296$$

Degree of Freedom= (C-1) X (R-1) = 4 X 5 = 20

The table value of χ^2 at 5% level of confidence with degree of freedom 20 is 31.410. The calculated value of χ^2 is less than the table value (Table – 7). So, the relationship between the hours of internet usage through mobile phones and its usage within the groups of respondents is not significant, and the hypothesis does not hold good. Thus, the null hypothesis (H_0) is accepted.

Table 7: Hour Wise Internet Access (Though Mobile Phones)							
Use in Hr. Break Up		Early Teens	Late Teens	Early Twenties	Late Twenties	Unspecified	Total
1/2 Hr.	Actual Count	11	35	17	0	0	63
	Expected Count	8.338235294	26.86764706	22.85294118	2.470588235	2.470588	63
1 Hr.	Actual Count	13	34	34	3	6	90
	Expected Count	11.91176471	38.38235294	32.64705882	3.529411765	3.529412	90
2 Hrs.	Actual Count	0	8	6	2	2	18
	Expected Count	2.382352941	7.676470588	6.529411765	0.705882353	0.705882	18
3 Hrs.	Actual Count	0	3	4	1	0	8
	Expected Count	1.058823529	3.411764706	2.901960784	0.31372549	0.313725	8
4 Hrs.	Actual Count	3	6	11	2	0	22
	Expected Count	2.911764706	9.382352941	7.980392157	0.862745098	0.862745	22
>=5 Hrs.	Actual Count	0	1	2	0	0	3
	Expected Count	0.397058824	1.279411765	1.088235294	0.117647059	0.117647	3

Easy availability of technological gadgets sometimes leads to a negative impact on the youth. Several studies have been conducted towards the negative impact of excessive internet usage. Many of them concluded that excess use of the internet has some major negative impacts like psychological disorders / addiction, mental harassment, internet abuse, problem related to eye sight, negative mental growth and many more. 46% percent of the respondents believed that the use of the internet helped them to relieve stress. It shows that when students are usually stressed or lonely, they become more addicted to the internet. According to India Current Affairs (Sept 27, 2010) report, single child / children of working parents or children from nuclear families are most prone to the excessive use of PC / internet usage.

CONCLUSION

There has been a considerable amount of internet addiction both through PCs as well as through mobile phones. It was found that 22.26% and 9.37 % of the respondents were accessing the internet for more than 4 hours on an average per day through PCs and mobile phones respectively. Segment wise, in case of internet access through PCs, a whopping 62.96 % of the Late Teens were accessing the internet for more than 4 hours on an average per day. Whereas, in case of internet access through mobile phones, the trend was even, but was slightly dominated by Early Twenties and Late Twenties groups (13.4 % and 15.38 % respectively). The addictive behaviour of young internet users has increased during the last 3-4 years. This may be a direct outcome of the growing popularity of social networking sites. This conclusion has been further substantiated by the researchers' finding that 85.16 % of all respondents were found to be

Exhibit 4: Internet Uses & Implications		
Productive	**Unproductive**	**Harmful**
❖ Education and learning	❖ Addictive social networking	❖ Pornography
❖ Information search	❖ Online gaming, watching videos, photos etc.	❖ Sexting
❖ Communication	❖ Chatting with online friends	❖ Hacking/Invading privacy
❖ Official use	❖ Spamming[6]	❖ Disclosing private information
❖ Online Services (net-banking, online bill payments, shopping, travel booking, job searching, medical counselling)	❖ Unnecessary downloads	❖ Cyber Crimes (copyright violation, illegal content sharing etc.)

[6] Creating and transmitting unsolicited emails, messages or any such digital content through the internet.

frequent users of social-networking sites.

The growing trend of internet usage by the young age group respondents shows a fragmented, but clear sign of internet addiction. After studying the various practical implications, the internet users can be clubbed under three distinct categories as – Productive, Unproductive and Harmful (Exhibit-4).

Uncontrolled and unmonitored use of the internet by the young students can have serious long-term effects as stated earlier (Exhibit-2). To safeguard students from harmful internet contents, and to ensure their psychological well-being, there is an urgent need to take protective measures. However, in order to achieve so, there are many practical hurdles to be overcome :

1) Putting Cyber censorship has always been a debatable topic, as it often contradicts the avant-garde idea of individualistic rights and a world without barriers, which some argue to be the basic philosophy behind the World Wide Web revolution.

2) The Censorship regulations were also found to be not very effective, as in case of the Australian Broadcasting Services Amendment (Online Services) Act, 1999 (Prunckun, 2007).

3) Due to the very nature and complexity of the internet technology, mass-filtering of web content is difficult. Moreover, bulk of the cyberspace contents are constantly created and controlled by the billions of independent users worldwide, thus making filtering virtually impossible.

Therefore, it becomes utmost important, especially for the parents/guardians and teachers to take notice, care and counsel the young students who are active internet users. Proper cyber counselling by parents, guardians, and teachers should include a combination of three basic approaches:

(1) Encouraging productive use of the internet, such as education and learning;

(2) Discouraging unproductive use, such as excessive gaming or social networking;

(3) Protecting youngsters against harmful activities use like sexting or cyber crimes. This last approach is sensitive and requires emotional support and free communication between the young internet user and the counsellor; so that the early-warning signals of harm can be detected and necessary steps may be taken at the right time. In the absence of a proper macro-level cyber control mechanism for young users, the role of parents, guardians and teachers stands to be of utmost importance today.

REFERENCES

1) Associated Chambers of Commerce and Industry of India (2010). "Internet Addiction Disorder: A Rising Trend In Metros." *India Current Affairs,* September 27, 2010 online source: http://indiacurrentaffairs.org/internet-addiction-disorder-a-rising-trend-in-metros-assocham/, accessed on October 10, 2010.

2) Dash, Ajit Kumar (2011). "Use of Online Social Networking Sites By College Students And Its Implications For Marketing: A Case Study In Tripura." *Indian Journal of Marketing,* Volume 41, Issue10, pp. 68-69.

3) District Research Officer, Economics & Statistics, Lunglei District, Lunglei (2011). *"2011 Census Provisional Population Totals & Socio Economic Map of Lunglei District RD Block Wise."*

4) Haija, Laila Abu-El- (2003). *"Technology Environment? How Do Computers Affect Kids - Towards A Healthy Environment For Children."* Proceedings Of The First National Conference, July 8-9, 2003, Jordan University of Science and Technology, Irbid, Jordan.

5) http://www.indiasocial.in/facebook-grows-among-older-age-groups-in-india-inside-facebook /facebook-audience-age-distribution-india-vs-average-september-2010/, accessed on July 19, 2011.

6) http://www.watconsult.com/2011/01/social-media-in-india-statistics-and-insights/, accessed on July 19, 2011.

7) I - Cube (2009, 2010). "Internet and Mobile Association of India.", Internet in India Report .

8) "Internet Usage Statistic of India: A 2010 Report", source: http://www.goospoos.com , accessed on July 19, 2011.

9) Khalid, Ruhi (2011). "The Negative Impact of Using the Internet." *Thesis,* Institute of Psychology Beaconhouse National University, source: http://www.crulp.org/ITLPS/download/TheNegativeImpactOfUsingTheInternet.pdf. accessed on April 12, 2011.

10) Mohamed A. (2008), "Using the Internet as an Educational Way in the Field of Journalism." *The Egyptian Journal of Information*, Volume 8,

Issue 96.
11) O. Osunade (2003). *"An Evaluation of The Impact of Internet Browsing On Students' Academic Performance At The Tertiary Level of Education In Nigeria."* A Research Paper, Department of Computer Science, University of Ibadan, Ibadan, Nigeria.
12) Orren Prunckun (2007). "Particularly Children: A Qualitative Evaluation of the Effectiveness of Australia's Internet Censorship Regulations." *Murdoch University Electronic Journal of Law,* Volume 14, No. 1, Source: http://elaw.murdoch.edu.au , accessed on May 5, 2011.
13) Saif , Abdulkarim A. Al. (2009). "Risks Associated With The Use of The Internet And Its Impact Upon Students' Awareness of Perverse Issues: Literature Review." *ACTA Didactica Napocensia*, Volume 2, Issue 4, pp. 35-36.
14) Subramaniam Mythily, Shijia Qiu, Munidasa Winslow. (2008). "Prevalence and Correlates of Excessive Internet Use Among Youth In Singapore." *Ann Acad Med Singapore*, Vol. 37, No. 1, p. 13.
15) *The Hindu,* "237 million internet users in India by 2015." September 2, 2010. Online source: http://www.thehindu.com/sci-tech/internet/article609507.ece, accessed on October, 10, 2010.
16)*The Hindu* "Indian Youths Spend 2 Hours Daily On Social Networking Sites." New Delhi Edition, July 21, 2010, online source: http://www.thehindu.com/sci-tech/internet/article526639.ece , accessed on October, 2010.
17) www.comscore.com , accessed on 20th February 20, 2011.
18) Wakefield, Marie A. and Rice , Cynthia J. (2008). "The Impact of Cyber-Communication on Today's Youth." *Professional Counselling Digest*, ACAPCD-14.
19) Zboralski , Krzysztof et al. (2009). *"The Prevalence of Computer and Internet Addiction Among Pupils."* pp. 9-10, www.phmd.pl. accessed on June 2, 2011.