CHAPTER – I

INTRODUCTION

1.0 INTRODUCTION

This chapter introduces Concept of Internet, Social Competence, Emotional Maturity and General Well-being. It also discusses the significance of the present study, statement of the problem and operational definitions of key terms used in the research. It furthermore discusses the objectives, hypotheses and delimitations of the present study.

1.1 CONCEPT OF INTERNET

“Internet” refers to the global information system that...(i) is logically linked together by a globally unique address space based on the Internet Protocol (IP) or its subsequent extensions/follow-ons; (ii) is able to support communications using the Transmission Control Protocol/Internet Protocol (TCP/IP) suite or its subsequent extensions/follow-ons and/or other IP-compatible protocols; and (iii) provides, uses or makes accessible, either publicly or privately, high level services layered on the communications.

Federal Networking Council (1995, cited in Leiner et al., 2010)

1.1.1 INITIATION OF THE INTERNET

The Internet with a capital I is one of the world’s most interesting achievements in computer science and networking technology. It provides a world-wide mechanism for user-to-user, computer-to-computer communication that spans corporate and national boundaries (Miller, 2004). It is a communication revolution that is sweeping through the world and nothing will ever be the same again (Dinnick, 2000). With the growth rate of 6000% p.a. it surely is, as Bill Gates quotes, “the road ahead” (Lambert et al., 2005).

The Internet is the world’s largest computer network. It links computer terminals together via wires or telephone lines in a web of networks and shared software. With the proper equipments, an individual can access vast amounts of information and search databases on various computers connected to the Internet, or communicate with someone located
anywhere in the world as long as one has the proper equipments (Handy Science Answer Book, 2003).

The Internet was an American invention, but its influence and impact have swept through the world like a seismic wave. In Cambodia, wireless Internet is being used to improve health care and education in some of the remotest rural areas. In England, Christians have used the Net to launch a radical new online church. From Mexico to Germany, governments have sponsored ambitious national programs to bring their schools online as quickly as fiscally feasible. The cyber-café culture of South Korea has spawned some of the most challenging, multiplayer online games. Some governments have seen the Net as a threat, with good reason: in Indonesia and Serbia, the Internet played a part in toppling hated regimes. In the United States, questions have been raised about the threat of outsourcing jobs to other nations such as India – a trend made possible by the Internet. Others view the Net as a mixture of threat and opportunity. France sees the Net as a threat to the viability of its language and as one of the most important ways of preserving its culture. In China, the government recognizes both the enormous economic potential of the Net and its fundamental threat to authoritarian regimes – in response, China’s government employs tens of thousands of police to crack down on those who try to view what authorities consider illicit Websites. The Net is no longer the preserve of affluent North Americans and Western Europeans; understanding what it means need an increasingly global perspective (as cited in Lambert et al., 2005).

Internet is indeed the most outstanding innovation in the field of communication added in the history of mankind. It is a combination of most advanced technologies till today. But most advanced technologies often have a dark side also just like nuclear power and pesticides (Lambert et al., 2005). The Internet is no different. The influences of the Internet potentially range across the whole landscape of human endeavour, raising profoundly important issues-technological, social, political, legal, economic, environmental and cultural (Lambert et al., 2005). A broad perspective is required to understand and solve the controversial issues. Though Internet has its own advantages and disadvantages by using it, but it is dramatically changing the way people live, work, communicate, recreate and participate in public life all over the world (Haseloff, 2005).
1.1.2 DEFINING THE WORD ‘INTERNET’

The Internet is the result of some visionary thinking by people in the early 1960s that saw great potential value in allowing computers to share information on research and development in scientific and military fields (Howe, 2010). Internet is a short form of the technical term Internetwork (Oxford English Dictionary, 2009) and often referred to as the Net (Internet Wikipedia, 2010). It is the result of vast worldwide conglomeration of linked computer networks (Encyclopaedia of Espionage, Intelligence & Security, 2004) which form and act as a single huge network for transport of data and messages across distances which can be anywhere from the same office to anywhere in the world (Slater, 2002). Internet is in indeed the most outstanding innovations in the field of communication added in the history of mankind. Rajashekar (2004) depicted Internet as the interconnection of computer networks is shown in figure 1.1:

![Internet Diagram]

*Figure 1.1: Internet as the Interconnection of Computer Networks*
As the figure 1.1 shows it links together thousands of individual networks at military and
government agencies, educational institutions, non profit organizations, industrial and
financial corporation’s of all sizes, and commercial enterprises (called gateways or
service providers) that enable individuals to access (Columbia Electronic Encyclopaedia,
2010) a broad array of electronic and optical networking technologies (Internet
Wikipedia, 2010). The most popular features of the Internet include electronic mail (E-
mail), blogs (weblogs or journals), discussion groups (such as newsgroups, bulletin
boards, or forums where users can post messages and look for responses), on-line
conversations (such as chats or instant messaging), wikis (websites that anyone on the
Internet can edit), adventure and role-playing games, information retrieval., electronic
commerce (e-commerce), Internet- based telephone service (voice over Internet
Protocol), and web mashups (in which third parties combine their web – based data and
services with those of other companies (Columbia Electronic Encyclopaedia, 2010).

Thus, Internet is the mother of all networks (Slang, 2007) providing an infrastructure for
maximum utilization of information resources and services throughout the world. This
versatility makes the Internet one of the most powerful tools in the universe.

**1.1.3 HISTORY OF THE INTERNET**

The Internet has revolutionized the computer and communication world like nothing
before (Leiner et al., 2010). It is the result of the bold effort of a group of people in the
1960s, who foresaw the great potential of a computer-based communication system to
share scientific and research information (Satorras and Vespignani, 2004). The invention
of the telegraph, telephone, radio and computer set the stage for this unprecedented
integration of capabilities (Leiner et al., 2010). However, it is not itself a single
invention; it is a simple idea that has evolved throughout the decades into something
bigger. The Atlantic Cable of 1858 and Sputnik of 1957 is two basic milestone of the
Internet pre-history (Gromov, 1996). Investigator tried to collect and represent the history
of Internet in systematic form in Table 1.1 from various sources:
Table 1.1: History of the Internet

<table>
<thead>
<tr>
<th>Year</th>
<th>Technological Advancement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1858</td>
<td>The Atlantic Cable was established to carry instantaneous communications across the ocean for the first time. Although the laying of this cable was seen as a landmark event in society. But it was a technical failure. It only remained in service a few days (Gromov, 1996).</td>
</tr>
<tr>
<td>1866</td>
<td>Subsequent Cables laid were completely successful (Gromov, 1996).</td>
</tr>
<tr>
<td>1957</td>
<td>Former Soviet Union launched world’s first artificial earth satellite, Sputnik I, which was stepping stone in Net’s history (Dinnick, 2000).</td>
</tr>
<tr>
<td>1958</td>
<td>As a result, the Advanced Research Projects Agency (ARPA) was set up in 1958 within the Department of Defence (DoD) in United States to re-evaluate the use of technology in its military forces (Dinnick, 2000).</td>
</tr>
<tr>
<td>1962</td>
<td>J. C. R. Licklider introduced the idea of an ‘Intergalactic Network’ (Altavilla, 2010).</td>
</tr>
<tr>
<td>1965</td>
<td>Lawrence Roberts connected a Massachusetts computer with a California Computer over dial-up telephone lines (Howe, 2010).</td>
</tr>
<tr>
<td>1969</td>
<td>The Internet, then known as Advanced Research Projects Agency Network (ARPANET) was brought online. ARPANET initially connected four major computers at Universities in the South-western US (UCLA, Stanford Research Institute, UCSB, and the University of Utah) (Howe, 2010).</td>
</tr>
<tr>
<td>1972</td>
<td>Bob Kahn and Vint Cerf invented the Transmission Control Protocol (TCP) to allow diverse computer networks to interconnect and communicate (Internet Wikipedia, 2010). E-mail was adapted for ARPANET by Ray Tomlinson of Beranek and Newman (BBN). He picked @ symbol from the available symbols on his</td>
</tr>
<tr>
<td>Year</td>
<td>Event</td>
</tr>
<tr>
<td>------</td>
<td>-------</td>
</tr>
<tr>
<td>1973</td>
<td>The file transfer protocol, enabling file transfer between Internet sites was published as a RFC. RFC’s are a means of sharing developmental work throughout community (Howe, 2010).</td>
</tr>
<tr>
<td>1975</td>
<td>TELENET began operations installing free public dialup access in cities throughout the US (Segaller, 1998).</td>
</tr>
<tr>
<td>1976</td>
<td>Internet started to spread globally when the network became linked to Europe (Internet Wikipedia, 2010).</td>
</tr>
<tr>
<td>1978</td>
<td>Gary Thuerk sent the first spam email to 400 users of ARPANET advertising his DEC’s new range of minicomputers (Altavilla, 2010).</td>
</tr>
<tr>
<td>1979</td>
<td>CompuServe became the first service to offer electronic mail capabilities and technical support to personal computer users (Internet Wikipedia, 2010).</td>
</tr>
<tr>
<td>1980</td>
<td>Private commercial networks and global links bring the net everywhere (Rajashekar, 2004).</td>
</tr>
<tr>
<td>1981</td>
<td>BITNET (Because It’s Time Network) connected IBM mainframes around the educational community and the world to provide mail services. Listserv software was developed for this network (Howe, 2010).</td>
</tr>
<tr>
<td>1983</td>
<td>On January 1, every machine connected to ARPANET was required to use TCP/IP (Transmission Control Protocol and Internet Protocol). This became the core of the Internet (Altavilla, 2010).</td>
</tr>
<tr>
<td>1984</td>
<td>The idea of Top level domains and Domain Name Servers (DNS) was born (Dinnick, 2000).</td>
</tr>
<tr>
<td>Year</td>
<td>Event</td>
</tr>
<tr>
<td>------</td>
<td>-------</td>
</tr>
<tr>
<td>1987</td>
<td>The number of hosts on the Internet reached 28,000 and world’s biggest Internet Service Provider (ISP), UUNET was set up (Dinnick, 2000).</td>
</tr>
<tr>
<td>1988</td>
<td>Desktop became popular (Robbins, 2000).</td>
</tr>
</tbody>
</table>
| 1989 | Commercial electronic mail services were started (Internet Wikipedia, 2010).  
Web was invented by British Scientist Tim Berner Lee (Internet Wikipedia, 2010). |
| 1990 | First Internet dial up access introduced (Robbins, 2001).  
HTML developed (Robbins, 2001). |
Multimedia pushed the Internet in the new direction of entertainment and the term “Surfing the Internet” was coined by Jean Armour Polly (Dinnick, 2000). |
| 1994 | Net celebrated its 25th anniversary (Dinnick, 2000). |
| 1995 | An annual fee was imposed for all domains except those used by the government (.gov) or educational institutions (.edu) (Altavilla, 2010).  
Internet courses offered in Colleges (Greenlaw and Hepp, 2000). |
| 1996 | Internet age begins, Home use becomes strong and touch screen used (Robbins, 2001).  
The first mobile phone with Internet connectivity was the Nokia 9000 Communicator launched in Finland (Internet Wikipedia, 2010). |

1999 | Wi-Fi wireless Internet technology was standardized (Altavilla, 2010).

2000 | The concept of e-books came in trend (Robbins, 2001).

2001 | Wikipedia was launched (Altavilla, 2010).

2004 | On April 1, Google announced the launch of Gmail, which would offer 1GB of storage. Because Hotmail and Yahoo were only offering 2MB and 4MB respectively, some people thought it was an April Fool’s joke (Altavilla, 2010).

2005 | YouTube is launched, revolutionizing web-based videos; Google bought YouTube for $1.6 billion the following year (Altavilla, 2010).

2006 | Dom Sagolla released Twitter (Altavilla, 2010).

| 2006 | Face book, once exclusive to college students, is made available to everyone (Altavilla, 2010).

2009 | Mobile data traffic exceeded voice traffic every single month. Globally, mobile data exceeded an Exabyte (a billion gigabytes) for the first time (Altavilla, 2010).

2010 | Internet user population reached at 28.8% of the total population of the world (Internet World Stats, 2010).

Thus, looking back, the essential idea of the Internet is extremely basic; however with several innovations, the Internet has grown and evolved to where it is currently today. It has changed continuously, surviving dramatic changes in technology and evolving to accommodate the exponential increase in user (Satorras and Vespignani, 2004). The Internet we know and love today would not exist without the hard work of highly intellectual peoples. The technologies and standards they created make today’s Internet
and World Wide Web possible. Some of them are well known and some are unknown in creating the history of Internet, and they deserve recognition and our gratitude for changing the world with the Internet (Slater, 2002).

1.1.4 SERVICES PROVIDED BY THE INTERNET

“A country that work smarter, enjoys efficient, less costly government, guided by a well-informed citizenry; that produces high quality jobs and educated citizens to fill them; that paves a road away from poverty; that promotes life-long learning, public life and the cultural life of our communities. This is the promise of the Internet.”

(Pandey, 2010)

In today’s world of rapid knowledge expansion and technological advancements, the Internet has completely revolutionised the way information is accessed. It has become a potential tool for societal transformation, be it the economy, culture and ethics or even education. Following services are provided by the Internet:

1. **Information:** Information is probably the biggest advantage Internet is offering. The Internet is a virtual treasure trove of information. Any kind of information on any topic under the sun is available on the Internet. The search engines like Google, Yahoo is at our service on the Internet. We can almost find any type of data on almost any kind of subject that we are looking for.

2. **Communication:** The foremost target of Internet has always been the communication. And Internet has excelled beyond the expectations. Still, innovations are going on to make it faster, more reliable. Now we can communicate in a fraction of second with a person who is sitting in the other part of the world. Today for better communication, we can avail the facilities of e-mail; we can chat for hours with our loved ones. There are plenty messenger services in offering. With help of such services, it has become very easy to establish a kind of global friendship where we can share our thoughts, can explore other cultures of different ethnicity.
3. **File Transfer**: File transfer is a generic term for the act of transmitting files over a computer network or the Internet. There are numerous ways and protocols to transfer files over a network. Computers which provide a file transfer service are often called file servers. Depending on the user’s perspective the data transfer is called uploading or downloading. Vast numbers of articles, data-bases, and other information are available this way.

### 1.1.5 **MILESTONES IN INDIA’S INTERNET JOURNEY**

It is revolutionizing life on this planet like no other technology has in human history. It has been impacting on the economy, communication, culture, educational system and social interaction in all the countries, bringing them closer in a world transformed into a global village and laying the foundation for a new civilization. India, as the cradle of civilization, is poised to become a major IT power in the coming years and contribute to the realization of its many promises for our own benefit and for the global good (Vajpayee, 1998). The Internet is central to the new vision of India as an IT power in many respects (Wolcott, 2005). The Indian government supported a variety of programs to establish nationwide networks (Wolcott, 2005). Table 1.2 presents technological advancement of Internet in India as follows:

**Table 1.2: Technological Advancement of Internet in India**

<table>
<thead>
<tr>
<th>Year</th>
<th>Technological Advancement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1986</td>
<td>- Educational and Research Network (ERNET) was established in 1986 by the Department of Education (DoE) and seven other government organizations; the National Centre for Software Technology (NCST); the Indian Institute of Science (IISc), Bangalore; and IITs in Chennai, Kanpur, Kharagpur, Mumbai and New Delhi (Wolcott, 2005).</td>
</tr>
<tr>
<td>1989</td>
<td>- The first connection to the global Internet, a 9.6 kbps link between NCST and UUNet (Unix-to-Unix Network)</td>
</tr>
</tbody>
</table>
Technologies in the US was established (Wolcott, 2005).

<table>
<thead>
<tr>
<th>Year</th>
<th>Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>- The international link was up-graded to 64 kbps (Wolcott, 2005).</td>
</tr>
</tbody>
</table>
| 1996 | - Rediff.com launched by Ajit Balakrishnan (Ranjan, 2005).  
- India’s first cyber cafe called “Cybercafe” launched in a Mumbai hotel (Ranjan, 2005). |
| 1997 | - The Shell Account costed exactly Rs. 250/- per hour, for a speed of about 19.6 kbps. The TCP/IP was costing Rs. 500/- per hour (Ranjan, 2005).  
- First online banking site launched by ICICI Bank (Ranjan, 2005).  
- Naukri.com launched; this becomes India’s first profitable dotcom (Ranjan, 2005).  
- Sabeer Bhatia’s Hotmail sold to Microsoft for $400 million in USA; he becomes the poster boy of the Internet age to Indians (Ranjan, 2005). |
| 1998 | - India introduces new ISP policy which ends VSNL’s monopoly on Internet (Ranjan, 2005).  
- SIFI becomes India’s first ISP (Ranjan, 2005).  
- First major hacking case-teenagers hack data on BARC’s servers (Ranjan, 2005).  
- Launch of Nasscom by Dewang Mehta, a chartered accountant |
by profession to promote IT industry (Ranjan, 2005).

- Cybercafés start mushrooming across Indian cities (Ranjan, 2005).

- No of Internet connections reached upto 1,50,000 in India (http://www.indax.com/Internet.html) (as cited in Ranjan, 2005).

1999

- Indiaworld sold to SIFY for $115 million; this triggers off the dotcom boom (Ranjan, 2005).

- Large number of dotcoms appears, mostly modelled as e-marketplaces but have untested revenue models (Ranjan, 2005).

- Webdunia, India’s first and most successful Hindi portal launched (Ranjan, 2005).

- VSNL received permission to reduce the rate it charged corporate customers for international Internet connections by 15%, while leaving the rates for private ISPs changed (Mani, 1999; Mohan, 1999 cited in Wolcott, 2005)

2000

- IT ACT 2000 passed by the Indian Parliament (Ranjan, 2005).

- Indya.com launched with Rs. 4.5 crore campaign blitz (Ranjan, 2005).

- Foreign portals set up shop in India; Yahoo and MSN launch Indian sites – Yahoo.co.in and Msn.co.in respectively (Ranjan, 2005).

- Birth of online journalism-Tehelka.com exposes cricket betting scandal (Ranjan, 2005).

- ITC launches E-Choupal initiative to take the Internet to the villages (Ranjan, 2005).
<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
</table>
| 2001 | - VSNL introduced a popular pricing package called “Monsoon” which reduced dial-up costs by 50% (Sengupta, 2001)  
- First cyber crime related arrest-2 arrested for hacking go2nextjob.com (Ranjan, 2005).  
- Indian Railways launches online ticketing site, irctc.com (Ranjan, 2005).  
- India’s first cyber crime police station opens in Bangalore (Ranjan, 2005). |
| 2002 | - Home Trade fiasco-brokerage site launched with Rs 65 crore blitzes goes bust (Ranjan, 2005).  
- New dotcoms start emerging with more refined revenue models (Ranjan, 2005). |
| 2003 | - Air Deccan becomes first airlines to offer online ticketing in India (Ranjan, 2005).  
- Phase of consolidation and stocktaking for Indian dotcoms (Ranjan, 2005).  
- VSNL, MTNL and BSNL were the first, third and fourth largest ISPs in India, together having 45% of the nation’s subscriber base (Kumar, 2003) |
| 2004 | - Dotcoms start exercising exit options (Ranjan, 2005).  
- First Indian Dotcoms IPOs are successful-indiabulls.com and indiainfoline.com (Ranjan, 2005). |
<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>A high profile cyber crime expose sheer inadequacy of India’s IT laws-Baazee CEO jailed for MMS scandal (Ranjan, 2005).</td>
</tr>
<tr>
<td></td>
<td>40 million net users (4% of total estimated net users in the world) (Ranjan, 2005).</td>
</tr>
<tr>
<td></td>
<td>200,000 cyber cafes in country (accounting for 60% of net users) (Ranjan, 2005).</td>
</tr>
<tr>
<td></td>
<td>More than 1000,000 users do online share trading (Ranjan, 2005).</td>
</tr>
<tr>
<td></td>
<td>Half a million broadband connections (Ranjan, 2005).</td>
</tr>
<tr>
<td></td>
<td>Rs. 570 crore total e-commerce transactions in India (Ranjan, 2005).</td>
</tr>
<tr>
<td></td>
<td>Average no of transactions per month -440000 (Ranjan, 2005).</td>
</tr>
<tr>
<td></td>
<td>Average value per transaction-Rs 1080 (Ranjan, 2005).</td>
</tr>
<tr>
<td></td>
<td>Indian Railway online ticketing accounts for 63% of e-commerce (Rs 370 cr.) (Ranjan, 2005).</td>
</tr>
<tr>
<td></td>
<td>ITC E-Choupal demonstrates rural Internet adoption-expands to 5300 kiosks serving 3.2 million farmers (Ranjan, 2005).</td>
</tr>
<tr>
<td></td>
<td>Overall, 71 million users accessed Internet with 52 million “active” users who accessed at least once in a month (Shrivastava, Abhichandani, Gangwal and Gupta, 2010).</td>
</tr>
</tbody>
</table>
Thus, India’s experience offers a number of insights into and lessons for the development of the Internet. This country’s experience has been, on the whole, successful, and offers one model of how countries can transit from Internet laggard to one with a vibrant Internet presence (Wolcott, 2005).

1.1.6 WORLD INTERNET USAGE AND GROWTH STATISTICS

Internet has made real what in the 1970’s that visionary of the communications Marshall Mcluhun (1911-1980) called the “Global Village”. The Internet has given an international or globalized dimension to the world. It has become the universal source of information for millions of people at home, at school, and at work (Internet World Stats, 2010). The explosive growth of the Internet since the 1980s has been for faster than the growth of any other communications medium – faster than the spread of the telephone, radio, television, or even cellular phones. This growth has been possible largely because of the open processes that have supported the development of Internet technologies and the administration of Internet resources (Internet Society Bulletin, 2003). The following tables and figures show the incredibly fast evolution of the Internet till the present time:

Table 1.3: Internet User Growth Statistics

<table>
<thead>
<tr>
<th>Date</th>
<th>Number of Users</th>
<th>%World Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec, 1995</td>
<td>16 millions</td>
<td>0.4%</td>
</tr>
<tr>
<td>Dec, 1996</td>
<td>36 millions</td>
<td>0.9%</td>
</tr>
<tr>
<td>Dec, 1997</td>
<td>70 millions</td>
<td>1.7%</td>
</tr>
<tr>
<td>Dec, 1998</td>
<td>147 millions</td>
<td>3.6%</td>
</tr>
<tr>
<td>Dec, 1999</td>
<td>248 millions</td>
<td>4.1%</td>
</tr>
<tr>
<td>Date</td>
<td>Internet Users</td>
<td>Growth Rate</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Dec, 2000</td>
<td>361 millions</td>
<td>5.8%</td>
</tr>
<tr>
<td>Aug, 2001</td>
<td>513 millions</td>
<td>8.6%</td>
</tr>
<tr>
<td>Sept, 2002</td>
<td>587 millions</td>
<td>9.4%</td>
</tr>
<tr>
<td>Dec, 2003</td>
<td>719 millions</td>
<td>11.1%</td>
</tr>
<tr>
<td>Dec, 2004</td>
<td>817 millions</td>
<td>12.7%</td>
</tr>
<tr>
<td>Dec, 2005</td>
<td>1,018 millions</td>
<td>15.7%</td>
</tr>
<tr>
<td>Dec, 2006</td>
<td>1,093 millions</td>
<td>16.7%</td>
</tr>
<tr>
<td>Dec, 2007</td>
<td>1,319 millions</td>
<td>20.0%</td>
</tr>
<tr>
<td>Dec, 2008</td>
<td>1,574 millions</td>
<td>23.5%</td>
</tr>
<tr>
<td>Dec, 2009</td>
<td>1,802 millions</td>
<td>26.6%</td>
</tr>
<tr>
<td>June, 2010</td>
<td>1,966 millions</td>
<td>28.7%</td>
</tr>
<tr>
<td>Sept, 2010</td>
<td>1,971 millions</td>
<td>28.8%</td>
</tr>
</tbody>
</table>

Source: http://www.internetworldstats.com/emarketing.html

**Figure 1.2: Evolution of the Internet till the Present Time**
Table 1.4: World Internet User and Population Statistics as on June, 2010

<table>
<thead>
<tr>
<th>World Regions</th>
<th>Population (2010 Est.)</th>
<th>Internet Users Latest Data</th>
<th>Penetration (%)</th>
<th>Growth 2000-2010</th>
<th>Users % of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>1,013,779,050</td>
<td>110,931,700</td>
<td>10.9 %</td>
<td>2,357.3%</td>
<td>5.6 %</td>
</tr>
<tr>
<td>Asia</td>
<td>3,834,792,852</td>
<td>825,094,396</td>
<td>21.5 %</td>
<td>621.8%</td>
<td>42.0 %</td>
</tr>
<tr>
<td>Europe</td>
<td>813,319,511</td>
<td>475,069,448</td>
<td>58.4 %</td>
<td>352.0%</td>
<td>24.2 %</td>
</tr>
<tr>
<td>Middle East</td>
<td>212,336,924</td>
<td>63,240,946</td>
<td>29.8 %</td>
<td>1,825.3%</td>
<td>3.2 %</td>
</tr>
<tr>
<td>North America</td>
<td>344,124,450</td>
<td>266,224,500</td>
<td>77.4 %</td>
<td>146.3%</td>
<td>13.5 %</td>
</tr>
<tr>
<td>Latin America/Caribbean</td>
<td>592,556,972</td>
<td>204,689,836</td>
<td>34.5 %</td>
<td>1,032.8%</td>
<td>10.4 %</td>
</tr>
<tr>
<td>Oceania/Australia</td>
<td>34,700,201</td>
<td>21,263,990</td>
<td>61.2 %</td>
<td>179.0%</td>
<td>1.1 %</td>
</tr>
<tr>
<td>World Total</td>
<td>6,845,609,960</td>
<td>1,966,514,816</td>
<td>28.7 %</td>
<td>444.8%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Source: www.internetworldstats.com/stats.html

Figure 1.3: Internet Users in the World by Geographic Regions

Source: Internet World Stats - www.internetworldstats.com/stats.htm
Estimated Internet users are 1,966,514,816 on June 31, 2010
Copyright © 2010, Miniwatts Marketing Group
Figure 1.4: World Internet Penetration Rates by Geographic Regions

![World Internet Penetration Rates by Geographic Regions - 2010](source)

Source: Internet World Stats - www.internetworldstats.com/stats.htm
Penetration Rates are based on a world population of 6,845,669,560 and 1,966,514,816 estimated Internet users on June 30, 2010.
Copyright © 2010, Miniwatts Marketing Group

Figure 1.5: Internet Users in the World Distribution by World Regions

![Internet Users in the World Distribution by World Regions - 2010](source)

Source: Internet World Stats - www.internetworldstats.com/stats.htm
Basis: 1,966,514,816 Internet users on June 30, 2010
Copyright © 2010, Miniwatts Marketing Group

By taking a glance at Table 1.4 and Figure 1.3 and 1.5, it is evident that

- Asia has the maximum number of Internet users (825.1 million) and user percentage of total population (42.0%) followed by Europe (with 475.1 million Internet users and 24.2% users of total population).
Table 1.4 and figure 1.4 indicates that

- North America has the highest Penetration Ratio (77.4%) followed by Oceania/Australia (61.2%).

1.1.7 ADOLESCENTS ONLINE ACTIVITY STATISTICS

Adolescents use a variety of Internet applications such as instant messaging, bulletin boards, chat rooms, and blogs to connect with their peers (Boneva et al., 2006; Gross, 2004) and to explore typical adolescent issues such as sexuality, identity, and partner selection (Subrahmanyam, Smahel, and Greenfield, 2006). Table 1.5 presents adolescents’ online activity statistics:

**Table 1.5: Adolescents’ Online Activity Statistics**

- A majority of adolescents (58%) do not think uploading photos or other personal information on social networking sites that is highly unsafe.

- Nearly half of adolescents (47%) are not worried about others using their personal information in ways they do not want.

- About half (49%) are unconcerned posting personal information online might negatively affect their future.

- A large majority of adolescents (71%) have established online profiles including those on social networking sites such as MySpace, Friendster and Xanga.

- 69% of adolescents regularly receive personal messages online from people they do not know and most of them do not tell a trusted adult about it. Adolescents readily post personal information online.

- 64% post photos or videos of themselves, while more than half (58%) post information about where they live. Females are far more likely than male adolescents to post personal photos or videos of themselves (70% and 58%).
Nearly one in 10 adolescents (8%) has posted his or her cell phone number online.

Overall, 19% of adolescents report they have been harassed or bullied online, and the incidence of online harassment is higher (23%) among 16 and 17 year-olds.

Girls are more likely to be harassed or bullied than boys (21% and 17%).

Source: www.all-spy.com/blog/2010/04/08

Thus adolescents are increasingly being lured into the alluring world of the internet, where they are willingly revealing personal information to complete strangers, and are completely nonchalant about it. Some recent studies have shown that in most cases, these adolescents are aware that they are creating online friendships with complete strangers, and chatting with adults more than double their age. In spite of knowing these things, they are blissfully ignorant of the dangers of the internet (Teens’ Internet Activity Statistics, 2010).

1.1.8 ADOLESCENTS INTERNET PORNOGRAHIC STATISTICS

Internet pornography is pornography that is distributed by means of various sectors of the Internet, primarily via websites, peer-to-peer file sharing, or Usenet newsgroups. While pornography had been traded over the Internet since the 1980s, it was the invention of the World Wide Web in 1991 as well as the opening of the Internet to the general public around the same time that led to an explosion in online pornography (Internet Pornography Wikipedia, 2010).

Internet pornography is perceived as possibly more accessible, more explicit and more harmful than pornography in its traditional forms (Beaver, 2000; Buzzell, 2005). Internet allows people to view pornography more or less anonymously in the comfort and privacy of their homes. Exposure of children and adolescents to this material is particularly worrying in that it can have a negative effect on their development, motivating greater acceptance of sexual permissiveness, sexual activity at an early age, acceptance of negative attitudes to women, and rape myths (Barak, Fisher, Belfry and Lashambe, 1999; Greenfield, 2004; Malamuth and Impett, 2001; Malamuth, Addison and Koss, 2000; Lo
and Wei, 2002). Table 1.6 revealed adolescents porn statistics (Sabina, Wolak, and Finklhor, 2008):

Table 1.6: Adolescents and Porn Statistics

<table>
<thead>
<tr>
<th></th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>93% of boys and 62% of girls are exposed to Internet porn before the age of 18.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>70% of boys have spent more than 30 consecutive minutes looking at online porn on at least one occasion.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35% of boys have done this more than on ten occasions.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23% of girls have spent more than 30 minutes looking at online porn on at least one occasion.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14% have done this on more than on one occasion.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>83% of boys and 57% of girls have seen group sex on the Internet.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>69% of boys and 55% of girls have seen porn showing same-sex intercourse.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>39% of boys and 23% of girls have seen online sex acts involving bondage.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>32% of boys and 18% of girls have viewed bestiality on the Internet.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18% of boys and 10% of girls have seen rape or sexual violence online.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15% of boys and 8% of girls have seen child pornography.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Only 3% of boys and 17% of girls have never seen Internet pornography.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Thus, the Internet has consolidated itself as a very powerful tool that has modified the behaviour of human being by entering in its life. Today the Internet continues to grow day by day making McLuhan’s Global Village a reality.
1.1.9 INDIA INTERNET USAGE AND GROWTH STATISTICS

VSNL introduced Internet in India in 1995. Since then, Internet usage in India continues to grow at a slow but steady pace, both in breadth and depth. The Table 1.7 presents the Internet usage and population statistics till 2010.

### Table 1.7: Internet Usage and Population Statistics

<table>
<thead>
<tr>
<th>Year</th>
<th>Users</th>
<th>Population</th>
<th>% Pen.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>1,400,000</td>
<td>1,094,870,677</td>
<td>0.1 %</td>
</tr>
<tr>
<td>1999</td>
<td>2,800,000</td>
<td>1,094,870,677</td>
<td>0.3 %</td>
</tr>
<tr>
<td>2000</td>
<td>5,500,000</td>
<td>1,094,870,677</td>
<td>0.5 %</td>
</tr>
<tr>
<td>2001</td>
<td>7,000,000</td>
<td>1,094,870,677</td>
<td>0.7 %</td>
</tr>
<tr>
<td>2002</td>
<td>16,500,000</td>
<td>1,094,870,677</td>
<td>1.6 %</td>
</tr>
<tr>
<td>2003</td>
<td>22,500,000</td>
<td>1,094,870,677</td>
<td>2.1 %</td>
</tr>
<tr>
<td>2004</td>
<td>39,200,000</td>
<td>1,094,870,677</td>
<td>3.6 %</td>
</tr>
<tr>
<td>2005</td>
<td>50,600,000</td>
<td>1,112,225,812</td>
<td>4.5 %</td>
</tr>
<tr>
<td>2006</td>
<td>40,000,000</td>
<td>1,112,225,812</td>
<td>3.6 %</td>
</tr>
<tr>
<td>2007</td>
<td>42,000,000</td>
<td>1,129,667,528</td>
<td>3.7 %</td>
</tr>
<tr>
<td>2009</td>
<td>81,000,000</td>
<td>1,156,897,766</td>
<td>7.0 %</td>
</tr>
<tr>
<td>2010</td>
<td>81,000,000</td>
<td>1,173,108,018</td>
<td>6.9 %</td>
</tr>
</tbody>
</table>

Source: www.internetworldstats.com/india.html

Table 13 shows that Internet represents so much potential for India. With 1.4 million Internet users (0.1%) in 1998, India is reached up to 81 million Internet users (6.9%) of total population till today. A recent report by Boston Consulting group (2010) concluded that India will reach 237 million Internet users by 2015.

To understand the clear picture of India Internet usage pattern, there are two most reliable reports by Internet and Mobile Association of India (IAMAI, 2010):

1. I-cube 2009-2010 Internet in India (Shrivastava et al., 2010)

2. Internet for Rural India, 2009 (Shrivastava, Abhichandani and Deorukhar, 2010)
According to I-cube report (2010) that the number of active urban Internet users was 52 million in Sept, 2009 compared with 42 million in Sept, 2008.

From 5% in 2000 to 36% in 2009, Internet has surely made an impact in lives of small town. Increasing number of Cybercafés and government initiatives of e-kiosks has created interest among small town people. This clearly indicates that the Internet has reached to remote masses in urban India (I-cube Report, 2010).

College students contribute 30% of the Internet usage. Along with young men, they account for 28% of Internet usage. Working women lead their 14% share in Internet access followed by older men (13%). Non-working women are the least user (7%) of Internet (I-cube Report, 2010).
A large number of users access Internet from cybercafés and offices. However, accessing Internet through homes has steadily declined over the year. 4% of users access Internet through Mobiles and kiosks (I-cube Report, 2010).

**Frequency of Internet Access**

Internet plays an integral role in daily life. Ranging from communication to shopping, a huge amount of activities is just a click away. This has lead to increased frequency of Internet usage among Internet users. With business adopting activities, working population access Internet at least 4-6 times per week. However, students usually access this medium at least once a week (I-cube Report, 2010).

**Internet Acceptance in Daily Lives**

With rising usage pattern, Internet users use the Internet for 15.7 hrs in a week in 2009 from 9.3 hrs in a week in 2008 i.e. a steep 70% rise. Thus, Internet is percolating into the daily lives of people. The reason can be attributed to
innovative content delivery, better applications and their increased popularity (I-cube report, 2010).

*Figure 1.12: Various Purposes of Accessing Internet*

![Image](image1.png)

Internet as a medium for socializing and leisure activities like downloading music and videos are gaining space compared with other services. Searching education-related information has increased substantially compared to the previous year. This could be due to the availability of academic materials from education boards such as CBSE eBooks and also the recent introduction of the recent online examinations for centralized tests (I-Cube Report, 2010).

In the year 2009, there has been 17% growth in Claimed Rural Internet users and 27% in Active Rural Internet users. It is expected that this rate of growth will continue. By the year 2010, the total number of Internet users in rural villages is will grow to 7.7 Mn of which 5.4 Mn will be Active Internet users resulting in 30% growth from the year 2009. Further, the overall proportion of Active Ruler Internet users to claimed rural Internet users has risen from 60% in 2008 to 65% in 2009 and is expected to 70% in 2010 (Internet for Rural India Report, 2010).

*Figure 1.13: Rural Internet User*
54% of rural users access Internet through Cybercafés that are located greater than 10 km away followed by cybercafés located within 10 km. Home, School/College and Computer Institute also enable rural people to access the Internet (Internet for Rural India Report, 2009).

Non-awareness of Internet typically has been one of the main reasons of low Internet penetration among the rural people. The report surveyed, about 84% of the respondents who had not used Internet in the past indicate that they are not aware of it. Further, 38% do not feel the need for it. A fairly high percentage of respondents either need guidance in using Internet (25%) or a PC (28%). Further, a proportion of respondents indicate the need for infrastructural setup such as lack of electricity, Internet connection or appropriate access points (Internet for Rural India Report, 2009).
As in the early stages in urban Internet use, rural users also access Internet for communication. Email is the dominant purpose of Internet access in rural India. It is interesting to note that after communication, 67% of the rural users’ access music and video over the Internet. About 48% of the people claim to have used the Internet for educational research and 42% claim they used it for general information search. With the proliferation of initiatives as e-Choupal, Shakti and so on, rural people have started using the Internet appreciably for agriculture-related aspects. About 13% of the people use the Internet for knowing more about latest farming techniques and 8% of the people use the Internet to find more about fertilizers and pesticides. This is an important point to note considering the importance of farming in rural India. If there are Internet related initiatives with farming as a focus, these could certainly trigger Internet literacy to raise faster (Shrivastava, Abhichandani and Deorukhar, 2010).

1.1.10 ADOLESCENTS AND THE INTERNET

*Letting your kids use the web completely unsupervised is like opening your own door and saying ‘They don’t know how to cross the road but they’ll work it out’.*


Internet access and use among adolescents and other age brackets have grown exponentially over the past decade. The 2002 Gallup survey (Whitlock, Powers, and Eckenrode, 2006) reported that Internet is preferred by many adolescents to the other media, including the telephone, TV and radio. It is also reported that the primary purpose why adolescents use the Internet remains social reasons (Gross, 2004) despite various activities including doing school work, playing games, shopping and downloading music (Shen and Shakir, 2009). As a social context, the Internet enables multiple communication functions, such as e-mail, instant messaging (IM), chat and blogs to allow adolescents to participate and construct their own environments (Greenfield and Yan, 2006). The Pew Internet and American Life Project (Lenhart, Madden and Hitlin, 2005; Whitelock et al., 2006) indicated that the vast majority (89%) of teens use e-mail, 75% use instant messaging. Over 50% of teens possess more than one e-mail address or screen name, which they can use to send private messages to friends or to participate
anonymously in online forums, such as chat rooms (Lenhart et al., 2005). However, the Internet access and usage among Indian adolescents is little and sparse. According to a research presented in a special issue of American Psychological Association (APA), spending a lot of time on the web can have both negative and positive effects on young people (Willenz, 2006) in terms of their social life, emotional state of mind and health.

(i) Social Influences of Internet among Adolescents

Because adolescents use the Internet at higher rates than any other age group (Lenhart, Rainie and Lewis, 2001), a better understanding of how Internet use effects their social development is an important line of scientific inquiry (Whitlock et al., 2006). Indeed, a small but growing body of research is beginning to examine the implications of various electronic forums for social interaction (e.g., chat rooms, news groups, message boards) on adolescents behaviour (e.g., Gross, 2004; Subrahmanyam, Greenfield and Tynes, 2004; Tynes, Reynolds and Greenfield, 2004 cited in Whitelock et al., 2006).

Research on American youth shows that the Internet serves as a powerful resources for information about socially sensitive topics such as sex and interpersonal relations (Suzuki and Calzo, 2004); it also serves as a community - building tool providing information on civic engagement and political participation (Rainie and Horrigan, 2005). Studies have shown that through Internet communication, youth are given the opportunity to exercise leadership skills and become stakeholders in communities that they themselves have created. Despite fears of stalkers and inappropriate sites, parents are beginning to recognize the Internet as a powerful tool for both networking and academic enhancement for their children. The Home Net Too project research indicate that home Internet use has no adverse effects on children’s social or psychological outcomes and has positive effects on their academic outcomes.

Some evidence suggests that Internet communication may be especially advantageous for shy, socially anxious or marginalized youth, enabling them to practice social skills without the risks associated with face-to-face interactions (Heitner, 2002; Mckenna, Green and Gleason, 2002; Subrahmanyam et al., 2004). This freedom from social pressure may help adolescents build more confidence in real social situations and can
elicit a sense of connection to others an important aspect in adolescent social development (as cited in Louge, 2006).

Although the Internet has consistent positive impacts on modern society, it has also caused various societal concerns about privacy, security, pornography, Internet crime and virtual community (Greenfield and Yan, 2006). Its easy accessibility poses greater risks and dangers for youth as compared to other forms of media. 85% of parents reported that among all forms of media, the Internet posed the greatest risk to their children (Common Sense Media, 2006). Parental concerns are valid, especially considering that teens are essentially free to view and post whatever they choose and communicate with whomever they want (as cited in Louge, 2006).

Although the Internet may serve as a catalyst for communication and may increase social competence of socially anxious teens, it may also encourage fake identities and a false image of real life situations. Fake identities are easy to produce and to sell on the Internet. These socially anxious teens may have a tendency to resort to computer communication as a substitute for real life interactions (as cited in Subrahmanyam et al., 2006).

Research from Cornell University explored that online interactions provide essential social support for otherwise isolated adolescents, but these online message boards may also normalize and encourage self-injurious behaviour and add potentially lethal behaviours to the repertoire of established adolescent self-injurers and those exploring identity options (as cited in Willenz, 2006).

(ii) Emotional Influence of Internet among Adolescents

Internet has become a highly effective and profitable means of distributing sexually explicit material as well as a sophisticated channel for compulsive sexual behaviour, sex trafficking and sex crimes (Galbreath and Berlin, 2002). According to a survey performed by the London School of Economics (2002), 90% of children between ages 8 and 16 have viewed pornography on the Internet. In most cases, the sex sites were accessed unintentionally when a child, often in the progress of doing homework, used an innocuous word to search for information or pictures. Such free access and exposure to this information by adolescents who have not yet developed a full maturity could pose
negative impacts on adolescent development and could potentially manifest in their social interactions with peers, their sexual activity and their emotional developments (Subrahmanyam et al., 2006).

Free and sometimes anonymous communication through chat rooms, blogs and instant messages pose risks to teens. Recent studies have shown that adolescent from virtual communities to support unhealthy behaviour including self-injury and eating disorders (Whitlock et al., 2006). Half of teens ages 13-18 often communicate through the Internet with someone they have not met in person, one-third have talked about potentially meeting someone face-to-face whom they have only met through the Internet (Polly Klaas Foundation, 2006). Further, almost 12.5% discovered that someone they were communicating with online was an adult pretending to be much younger. A national poll revealed that 54% of girls reported they could be online without their parents’ knowledge and have been involved in some sort of cyber relationship (Girls Scout Research Institute, 2002).

Tyler (2002) addressed that the psychological quality of Internet societal interaction is lower than the psychological quality of traditional face-to-face interaction. Excessive use of online activities, Internet addiction and Internet pornography makes adolescents emotionally and mentally disturb. So, there is a strong need to control the adolescents’ pattern of Internet usage.

(iii) Influence of Internet on Adolescents’ health

Internet is invaluable for adolescents who want to find out more about personal, sensitive and embarrassing issues related to their bodies, relationships and health (Willenz, 2006). Researchers from Johns Hopkins University and the University of Ghana looked at the benefits of teens using the Internet for health information in the developing world, where access to health information is scaring (Willenz, 2006). Teens use the Internet as a source of health information in order to gain the necessary information on both sexual and general health issues that they would probably not have access to in their own local environment (Cassell, Huffaker, Tversky and Ferriman, 2006). Two thirds (66%) of the youth who were in school and ground half (54%) of the youth who were of school had
gone online previously. Internet provided interesting material that helped youth to solve a problem or answer a question. The most common topics searched on the Internet for in-school youth were sexually transmitted diseases, diet/nutrition and fitness and exercise. For the out-of-school youth, sexually transmitted diseases, sexual activities and sexual abuse were the topics of choice (Willenz, 2006).

Thus the Internet has implications for the physical, cognitive, social and behavioural development of children and adolescents (Finkelhor, Mitchell and Wolak, 2000; Finkelhor, Mitchell and Wolak, 2003; Greenfield, 2004; Huston and Wright, 1998; Katz and Rice, 2002; Kraut et al., 1998; Subrahmanyam et al., 2001; Thornburgh and Lin, 2002). Greater use of the Internet is associated with small, but statistically significant declines in social involvement as measured by communication within the family and the size of social people’s network and significant increases in loneliness and depression. Other effects are increase in the size of the distant social circle, social support and stress, academic efficacy, emotional maturity, social competence are not significant but consistently negative (Kraut et al., 1998).

Easy and continuous access to the Internet provides tremendous opportunities for adolescent socialization, allowing them to connect with their peers as well as with complete strangers from across the world. Clearly, the Internet is transforming the social world of adolescents by influencing how they communicate, establish and maintain relationships and find social support. Therefore, it is essential to gain awareness of both the potential benefits and risks of teen Internet use and provide strategies to guide safe and positive practice. So, the children’s Internet Protection Act was signed into law in 2000, requiring schools and libraries receiving federal e-rate funds to filter online visual depictions that are harmful to children under the age of 17 and representing widely implemented federal policy decisions to protect children from damaging impacts of the Internet (Parsad and Jones, 2005).

1.1.11 STRATEGIES FOR POSITIVE INTERNET USE

As technology continues to expand access to the Internet, use among teens is inevitable. Consequently, rather than focusing on censorship of teen use; there is a strong need for
strategies to encourage safer and more positive operation of this complex system (Louge, 2006). Some potential strategies suggested by Louge (2006) are as follows:

1. A federal law, the children’s online Privacy Protection Act (COPPA) requires websites to explain their privacy policies on the site and obtain parental collecting or using a minor’s personal information. The law also prohibits a site from requiring youth to provide more personal information than necessary to play a game or contest.

2. Parents and educators can place Internet filters that inhabit access to inappropriate sites such as pornographic sites.

3. Many sites use “cookies”, devices that track specific information about the user, such as name, email address and shopping preferences cookies can be disabled.

4. Teen can access the Internet from home, a friend’s house, school, the library or a cafe. So parents and educators can educate themselves about the Internet. Parents can set rules for Internet use and discuss them with teens. Parents can make sure that rules are for his protection and apply to all instances of Internet usage.

5. Parents should not be afraid to monitor their teen’s use of the Internet. Tracking programs can be purchased to access previously visited sites.

6. Even though the Internet may be accessed by teen away from home, but keep the computer in a common area at home, not in individual bedroom and make sure to provide supervision.

7. Parents should become involved in their teens Internet life. Perhaps acquire a screen name and chat with their teen online. This will allow parents to be on the same page as their teens.

8. A number of schools have incorporated media literacy into their curriculum in order to educate teens about the risks and benefits of Internet use. These programs will often show teens how to identity deceiving information and to never fully trust any non-accredited websites.
Parents should ask questions about child’s online activities, his/her favourite websites and online friends. Parents should know the real-life identities for their online friends.

Parents can sure teens that people online are not always who they say they are. And explain that it’s never safe to give out his/her personal identifiable information to someone they don’t know or trust in real-life. Talk with them about the motives of online predators and try to gain their trust.

If teen have a Social Networking profile/blog, parents should ask him/her to show it. Set his/her/privacy settings so that not everyone can view his profile. Personal identifiable information posted on social networking site is a risk for teen and family.

Parents should try to seek out the advice and counsel of teachers, librarians and other parents if they have concerns about teen’s online activities.

Thus, all Internet usage carries with it is certain amount of risk, especially for our teens. But by thoughtfully setting rules for its use, discussing the potential for harm and keeping the lines communication open with teens; we can protect them from Internet predators.

1.1.12 EDUCATIONAL USES OF THE INTERNET

“Work with computers—particularly using the Internet – brings students valuable connections with teachers, other schools and students, and a wide network of professionals around the globe. These connections spice the school day with a sense of real-world relevance, and broaden the educational community.”


Established only a few decades ago, the Internet is a system of enormous technical and social complexity. It comprises a gigantic but almost invisible universe that includes thousands of networks, millions of computers and billions of users across the world (Greenfield and Yan, 2006). It is a wonderful and strong widely used resource in
education because it provides up-to-date information on teaching-learning process unavailable from other sources.

Education and the Internet have always been closely related – through not always in obvious ways. Universities played a major role in the development of both the Internet and its predecessor, the ARPANET, right from the start. Although computers first appeared in universities in the 1960s, they did not become practical and affordable enough to be used in the classroom until the mid-1970s. In 1985, Apple launched its pioneering Apple Classrooms of Tomorrow (ACOT) Project to study the deployment of technology in more than 100 elementary and secondary schools. By the 1990s, everyone appeared to have recognized the importance of information technology in education (Lambert et al., 2005). And when we talk of 2010, E-learning, M-Learning and U-Learning is in trend.

The Internet may also be used to replace the traditional classroom lectures. A number of courses are being developed in which portions of the course or the entire courseware offered via the Internet. The instructor may place course notes on Web pages, may create a video recording of a live lecture for viewing on the Internet, or use combinations of these ideas. Forsyth (1998) discussed several methods of preparing courses for the Internet including facilitating the use of video clips on Web pages as well as the use of forms and other graphics on Web pages.

The World Wide Web has rapidly become the primary source of research material for most school and college students. Children for wealthier backgrounds or whose parents have a higher level of education are more likely to use the Internet at home; children from poorer backgrounds, ethnic minorities, or whose parents have less education are more likely to use the Internet at school. Wherever they go online, children make heavy use of the Internet to help them with their schoolwork. Most use the Web to research and write school created school or class Websites, download online study aids, or contact teachers or classmates for help via email or instant messaging (IM). Parents are also enthusiastic about new technology agreeing that it is “essential” for children to learn about the Net to be successful in life and useful source of information and statistics about prospective
schools and colleges, which helps them to make informed choices about their children’s education (as cited in Lambert et al., 2005).

College students find the Internet an equally important part of their lives. Many rely on email to communicate with their professors and classmates as part of their academic work; around two-thirds subscribe to email discussion lists directly related to their course of study (as cited in Lambert et al., 2005).

Both students and teachers tend to look upon the Internet as a new spin on some age-old ways of learning. Much like a trusted teacher, the Internet can also serve as a source of confidential advice on taboo subjects such as sex and relationships that young people find difficult to discuss. Email, IM, and chat offer ways to collaborate or communicate with other pupils and teachers – a bit like a virtual seminar or study group (as cited in Lambert et al., 2005).

The Internet is changing education worldwide. The idea is not to replace traditional teaching but to make available a broader range of courses to students. The Internet is not replacing libraries in schools and colleges, but it is changing the way they deliver information (as cited in Lambert et al., 2005).

In words of Darch (n.d., cited in Stoll, 1995), Computers are lollipops that rot the teeth. The kids love them. But once they get hooked, they get bored without all whoopee stuff. The Pew project’s “Internet Goes to College” report found that the biggest single use of the Internet by students was for social communication (though carrying out course work was not far behind). Another Pew study, “College Students and the Web,” reported that, of twenty large popular Websites with a higher-than-expected proportion of student visitors, only one was obviously education related (the others included music-sharing, entertainment, and gambling sites).

1.2 CONCEPT OF SOCIAL COMPETENCE

“The (socially) competent individual is one who is able to make use of environmental and personal resources to achieve good developmental outcomes”

(Waters and Sroufe, 1983)
1.2.1 DEFINING THE SOCIAL COMPETENCE

Social competence is an important ingredient of modern civilization; and is the essential attribute of the members of a progressive onward moving society (Sharma, Shukla and Shukla, 1992). Some estimates indicate that between 7% and 10% of the population has difficulties with social interaction skills and may be considered socially incompetent (Hecht and Wittchen, 1988). Approximately one-fifth of the population in epidemiological study have been found to show loneliness, anxiety, and shyness (Segrin, 1998; Segrin and Flora, 2000). Social competence is the condition of possessing the social, emotional, and intellectual skills and behaviours needed to succeed as a member of society (Davidson, Welsh and Bierman, 2005). The success of an individual in the society depends largely upon the extent to which he has acquired the richness and potency of social competence desirable for his/her self-actualization, growth and development. It is acquired through social interaction and culture integration in different socio-cultural settings (Sharma, Shukla and Shukla, 1992). Some define Social competence as the ability to behave in socially appropriate ways in different contexts (Mehan, 1980; Weinstein, 1991), in contrast with “trait” approaches which assume that a socially competent person will be competent in all social situations (as cited in Schneider, 1993).

Social competencies are conceptualized differently across disciplines, and even within disciplines there is no agreed consensus of their definition. Within psychology social competencies are defined as personality traits (Sarason 1981) which can manifest in different capabilities such as empathy, tolerance, conscientiousness; ability for cooperation; as a dynamic construct involving the ability to adjust to and interact in given social conditions (Argyle 1994; Tajfel 1981); as peoples belief about their efficacy (Bandura 1997), as social (Gardner 1999) or even emotional intelligence (Goleman 1995). Within pedagogy it refers to lifelong, intercultural and social learning. In economics social competencies are sometimes used to refer to ‘soft skills’ comprising abilities such as flexibility, working in a team, motivating colleagues and clients. Economic terms such as social ‘capital’ are used in sociology and the social sciences in
general to describe resources arising from social relationships (Putnam 2000; Halpern 2005 cited in Schoon, 2009).

Eisler (1970) defined social competence as the social ability and interpersonal skill of an individual in effectively meeting a person-situation interactions’ or successfully dealing with ‘an individual environmental factors’.

Goldfriend and D’Zurilla (1969) considered social competence as the effectiveness or adequacy which an individual is capable of responding to the various problematic situations which confront him.

Argyle (1967) postulated social competence as a function of goals of performance selective perception of cues, control process, mother responses, feedback and timing of responses.

White (1963) developed the concept of social competence to depict a person’s transaction with the social environment, and enable him to acquire successful experiences of others that may produce desirable effects.

Thus, Social competence is a collection of specific social behaviour such as differential self-concept, consolidation of identity, habits of personal maintenance and care consistent with common peer group standards differentiations of feelings and implication’s, positive and affectionate personal relationship, appropriate regulations of antisocial tendencies, curiosity and active exploration of the environment, control of attention as a function of situational or task requirements, perceptual skills, fine motor dexterity, language skills, memory flexibility in the application of information processing, strategies, quantitative and rational concepts, understanding and skills, general knowledge of health, social environment, consumer behaviour, etc., competence motivation, problem solving skills, some positive attitudes towards learning and educational experiences (as cited in Anderson and Messick, 1974).

1.2.2 COMPONENTS OF SOCIAL COMPETENCE

Social competence is a term used to describe social effectiveness the ability to develop mutually satisfying relationships and to avoid negative treatment or victimization from
others remembering that competency can also be effected by the extent to which there is a good match in skills, interests and abilities of others in the environment e.g.- a quiet and studious person may appear socially inept within a group of footballers, but may be fine socially in a group sharing his interest in quite games or computers. Social competence is a set of individual-level cognitive and non cognitive attributes that lead to an individual’s adaptive functioning, positive adjustment and goal attainment within their social environment (Ladd, 1999; Rydell et al., 1997; Ewart et al., 2002; Baumrind, 1978; Clausen, 1991; Ford, 1982; Harter, 1982). Rathjan (1980) reported some of the criteria of social competence. They are: social power, social relation, social skills, social mobility, social attraction, communicability, social participation, etc whereas White (1963) mentioned social ability, social acceptance, social associability, socio-emotional integrity as components of social competence. Kohn and Rossman (1971) noted involved participation and apathy withdrawal., cooperation-compliance and anger defiance as essential criteria whereas, Walker (1970) has identified acting out, withdrawal., and distractibility disturbed peer relations and immaturity as inhibitory factors of social competence. Baumrind (1967) pointed out self-control as components of social competence. Clikeman (2007) describes language and the ability to have a conversation, ability to accurately send and receive emotional messages (Halberstad et al., 2001), ability to understand and recognize facial expressions appropriately, ability to learn, to take another’s perspectives, to manage one’s behaviour, and the ability to work cooperatively with others (Vaughn and Haager, 1994), problem orientation and problem solving skills (Shewchuck et al., 2000) are key elements of social competence. Social competence has been conceptualized as consisting of six categories of competence: adoption of social values, development of a sense of personal identity, acquisition of interpersonal skills, learning how to regulate personal behaviour in accord with societal expectations, planning and decision-making, and development of cultural competence (Kostelnik et al., 2002).

Social competence incorporates emotional competence and vice versa (Clikeman, 2007). There is sufficient empirical evidence that links social competence to mental and physical health (Spitzberg, 2003). Saarni (1999) suggest the following eight skills for emotional competence that also appear necessary for adequate social competence: (1) awareness of
own emotional state and motivation (2) the ability to understand the other person’s emotion from non-verbal cues (3) the ability to use emotional languages (4) empathy (5) understanding the external and internal expressions may not be concurrent (6) coping with distressing emotions (7) understanding the relationship are intimately related to how one negotiates emotional communication (8) emotional self-efficacy. These skills are described as emotional competence, while Saarni (1999) correctly identifies that emotional and social competence cannot be separated; it is important to note that several of these topics are very important in social competence. Thus, the ability to express one’s feeling as well as be aware of one’s and the other’s feelings is a cornerstone for social competence (Clikeman, 2007).

Thus, very different social competencies are required and valued in different contexts (Argyle et al., 1985). Behaviours that are dysfunctional and disapproved of in one context might be functional and approved of in another. Through thinking and feeling, the socially competent person is able to select and control which behaviours to emit and which to suppress in any given context, to achieve any given objective set by them or prescribed by others (Mishra, 2008).

1.2.3 NATURE OF SOCIAL COMPETENCE

Social competence is the owing of skills that are used in social attitude where as the social adjustment is the individual skill in facing the various positions and the ability to set and run them (Wood, 2007). Nature of social competence can be described as:

*Development of competencies:* Social competences change over the life course, and depend on the development of capabilities such as social awareness, social skills, and self confidence (Schoon, 2009).

*Biological aspects:* There might be links between social competencies and other enduring personality characteristics as well as genetic factors that shape social interactions (Schoon, 2009).

*Social change:* In recent years concerns have been raised about the erosion of social competencies as a consequence of socio-historical change and increasing globalization. It
has been argued that there had been an increasing instrumentalization and individualization of social relationships (Putnam 2000), while others have emphasized the emergence of new values and lifestyles with greater tolerance for ethnic, cultural, and sexual diversity, more issue-oriented forms of participation, greater emphasis on self-expression, and search for meaning and purpose of life (Inglehart 1997).

**Context dependency:** Social competencies are essentially relational, describing how individuals behave within the context of interpersonal and group relationships. Characteristics of the relationships engaged in and the context encountered provide opportunities to acquire and express social competencies (Schoon, 2009).

**Measurement:** The assessment of social competencies can comprise a variety of methods, ranging from self-ratings or self-reports of behaviour, values, and motivations, but, there is no widely used consensus about how to measure social competence (Schoon, 2009).

Thus, Social competencies is the capabilities enabling individuals ‘to live together in the world’ (Arendt 1958) comprising aspects of interpersonal, intercultural, social and civic competencies (Schoon, 2009).

### 1.2.4 ASSESSMENT OF SOCIAL COMPETENCE

Social development begins at birth and progresses rapidly during the pre-school years. It is clear that early childhood programs should include regular opportunities for spontaneous child-initiated social play. Berk and Winsler (1995) suggest that it is through symbolic/pretend play that young children are most likely to develop both socially and intellectually. Thus, periodic assessment of children’s progress in the acquisition of social competence is appropriate.

When one refers to “a measure of social competence”, most likely one means a measure of one or more social skills (perceptual, cognitive or motoric), their manifestation in overt behaviour, or their outcome in terms of enhanced interpersonal relationships, causal or intimate (Schneider, 1993). Trower (1982) argued that assessment of social competent should encompass both an individual’s social knowledge and the ability to act upon it.
Given the extensive number of conceptual components used to reflect social competence and the variation in corresponding conceptualizations it is not surprising that there is considerable variability in the actual measurement of social competence. Social competence measures vary across studies as a result of the different methodologies and instruments employed in assessing competence (Cavell, 1990; Rydell et al., 1997). A variety of formal and informal methods are appropriate for assessing social competence (Williamson and Dorman, 2002). There are several methods of measuring competence such as behavioural observations (Lamb et al., 1988), socio-metrics (Coie, Dodge, and Coppotelli, 1982; Green et al., 1980), and self-report, caretaker and teacher report surveys (Harter, 1982).

1.2.5 PROBLEMS IN ASSESSMENT OF SOCIAL COMPETENCE

The following basic problems arise during the assessment of the social competence:

1. Not all areas of social competence can be observed directly. It is very difficult to get answers from observations on the self-perception or independence of people.

2. Social competence is bound to specific social situation, in which it operates. This problem is especially grave for people with learning difficulties. Often, they have great difficulties in transferring skills and also competences from one area of life to another for example, that someone, who has gained certain skills during training, suddenly is not able to convert those at a work place, because the general framework has changed.

3. The bonding with social situations also means that someone not only reaches a certain level of social competence but that dependent on influences like motivation or physical and psychical condition on a certain day one and the same person may show a different level of social competence. This may be a particular problem for people with certain mental disabilities and also for people, who, for different reasons, need to take drugs, which strongly affect their mental condition.
4. There are no reliable and objective instruments/techniques for assessing social competence.

5. Norms are not clear to measure the behaviour pattern of social competence, other factors like motivation, mental health etc have a great influence on social competence.

1.2.6 CRITERIAL FOR THE ASSESSMENT OF SOCIAL COMPETENCE

The measurement of social competencies involves the study of a complex phenomenon that occurs over time and in context. The most important criteria for the assessment of social competence are:-

1. Assessment as well as interpretation should be in touch with reality in particular situations.

2. Time and effort for the assessment should not be too big and should be adapted to the questions.

3. The method should provide structure but still be flexible enough in order to allow for individual adaptations.

4. Not only quantitative but also qualitative statements should always be included.

5. The method should work with terms and phrases that are easy to understand.

6. Most of all, the assessment should help the person concerned to gain a better self image.

1.2.7 “DOS” FOR FOSTERING SOCIAL COMPETENCE

An adolescent’s connection with a given family, neighbourhood, centre or school may limit opportunities for social development. Mixed age, sex, racial or cultural peer interactions may be infrequent and highly bound by activity differences and early learned expectations, thereby limiting the extent of diversity in peer interaction. This lack of diversity limits the child’s ability to be socially competent in various circumstances
The following techniques given by Ramsey (1986) suggest several ways to adolescents foster social competence in adolescents:

- Observe adolescents in a wide variety of social situations (e.g., classroom, scout meetings, free play). This will enable to gain a deeper understanding of his social strengths and weakness.

- Observe adolescent in a wide variety of social situations (e.g., classroom, scout meetings, free play). This will enable to gain a deeper understanding of his social strengths and weakness.

- Design an unobtrusive “signal system” with the child to use in social situations. For example, if the adolescent tends to perseverate (talking about only one topic which often is not of interest to the listener) design a signal (touch your nose with your finger, cross your arms) that tells him to change the topic or cease the discussion. In this way, we can halt troubling behaviours without causing undue embarrassment or conflict.

- Establish reward systems to reinforce and recognize appropriate social behaviour even the smallest signs of progress and growth.

- Enrol the adolescent in group activities and pursuits. While selecting these activities, consider the adolescent’s interests and abilities.

- Many social skill deficits are caused by a lack of basic social information (e.g., mail deliveries are made only once daily). Never miss an opportunity to teach/reinforce invaluable social information to a adolescent.

- Encourage all members of the family to assist in the creation of a support system for the adolescent. The adolescent must learn to view his progress as compared to his own previous performance, not the performance of others.

- Students with social skill deficits often have difficulty “changing gears” from one activity to another. This is particularly true when going from an enjoyable activity (e.g., a game) to a less pleasurable one (e.g., math drills). In order to ensure a smoother transition, be certain to “wind down” the enjoyable activity by providing a warning signal several minutes prior to the end of the activity.

- Make modifications and adjustments to accommodate for the adolescent with a learning problem. For example, if he/she is unable to participate effectively
in the homework program because he constantly forgets his books, simply issue him two texts with instructions to keep one at home and one in school.

- Focus on one behaviour or social skill at a time to learn the adolescent’s attention.
- Assist the child in expressing his feelings during emotionally charged social situations.
- Encourage the adolescent to be more understanding of the feeling of others.
- Utilize “real life” or television shows to teach valuable social skills. Discuss the behaviours of significant, high status people.
- Provide the adolescent with choices whenever possible. This approach fosters independence and problem solving skills. It also increases the adolescent’s ownership of the task or activity.
- Provide the adolescent with a positive model of appropriate social skills.
- Necessarily discourage the adolescent from establishing relationships with students who are a year or two younger than he is. He may be seeking his developmentally appropriate level. By befriending younger students, he may enjoy a degree of status and acceptance that he does not experience among his peers.
- Encourage the frustrated adolescent to relieve his stress via pointless physical activity (e.g. punching a pillow). Rather, teach him to relieve stress through an activity which has definable and observable goals. (e.g.. shoot ten baskets, run five laps, write a one-page letter)

Thus social competence is less a fix quality but rather a process that shows how different situations are managed in everyday life. Social competence has become an “Umbrella-like construct”. It must be viewed as a dynamic system of knowledge and value that both emerges from and structures the child’s perceptions, representations and actions in the social world (Strayer, 1989).

1.3 CONCEPT OF EMOTIONAL MATURITY

“The success of a person solely depends on the art of managing emotions which includes practical skills and the ability to handle people.”

Goleman (1995)
**1.3.1 INTRODUCTION TO MATURITY**

Maturity is the ability to control anger and settle differences without violence or destruction. Maturity is patience. It is the willingness to pass up immediate pleasure in favour of long-term gain. Maturity is perseverance, the ability to sweat out a project or a situation in spite of heavy opposition and discouraging set-backs. Maturity is the capacity to face unpleasantness and frustration, discomfort and defeat, without complaint or collapse (http://www.mikelee.org/maturity.html).

For L. J. Saul (EM, Philadelphia, 1960) the main characteristics of maturity are: capacity to live independently; capacity for responsibility and productivity; freedom from inferiority feelings, egotism, and competitiveness; socialisation and domestication; sexual integration, absence of aggressiveness; a firm sense of reality; flexibility and adaptability (as cited in Cliner, 1981).

According to J. D. Carter (1974), there are five basic dimensions to maturity: having a realistic view of oneself and others; accepting oneself and others; living in the present but having long-range goals; having values; developing one’s interests and abilities and coping with the task of living.

Allport (1963) summarises in his own way the criteria of maturity that he has received as: extension of the sense of self (full participation in life); warm relating to self to others; emotional security (self-acceptance); realistic perception, skills and assignments; self-objectification (insight and human); a unifying philosophy of life.

Thus maturity is the ability to make a decision and stand by it. Maturity is art of living in peace with that which we cannot, the courage to change that which should be changes and the wisdom to know the difference ((http://www.mikelee.org/maturity.html).

**1.3.2 TYPES OF MATURITY**

Psychologists, Doctors, Educationists and Sociologists describes about different types of maturity.
**Emotional Maturity** encompasses social interactions, emotional balance and self confidence. According to the Penguin Dictionary of Psychology, emotional maturity is the state in which one’s emotional reactivity is considered appropriate and normal for an adult in a given society. The clear connotation in most cultures is one of self-control and the ability to suppress extreme emotional reactions (as cited in Singaravelu, 2008).

**Intellectual Maturity** is academic or occupational knowledge. This is what when we learn from school or work; this objective information that can be tested and evaluated (http://www.mikelee.org/maturity.html).

In **Spiritual Maturity**, one has faith in a power greater than himself. He feels himself an organic part of mankind as a whole, contributing his part to each group of which he is a member. One obeys the spiritual essence of the Golden Rule.

**Social Maturity** is expressed by the behaviour of a person. Social Maturity means knowing what to do and striving for it by following role models to reaches the desired level of acceptable social behaviour. It helps the person to adjust himself at home, school and community. Self-control, dependence-independence, stress, social roles are some important factors which effect the social maturity (as cited in Srivastava, 1983).

**Chronological Maturity** compares maturity according to age.

### 1.3.3 CONCEPTS OF EMOTIONAL MATURITY

The concept of emotional maturity is called the master concept. It is probably the most important contribution of modern psychology (Saul, 1957 cited in Sivakumar and Visvanthan, 2010). Emotion is a basic aspect of human functioning. It is one of the dimensions of personal experience that arise from a complex interplay among physiological, cognitive, and situational variables (Singaravelu, 2008). Emotions dominate our lives (Jersild, 1947). They can be distorted or dissociated according to values and beliefs. They provide motivation and inspiration to retreat or to go excel.

The concept “Mature” emotional behaviour of any level is that which reflects the fruits of normal emotional development (Singh and Bhargava, 1990). A person can be called emotional mature if he is able to display his emotions in appropriate degree with
reasonable control (Manoharan and Doss, 2007). He has the capacity to withstand delay in satisfaction of needs and to make effective adjustment with himself, members of his family, and his peers in the school/workplace, society and culture.

Skinner (2001) defined emotional maturity as “the degree to which the person has realized his potentials for richness of living and has developed his capacity to enjoy things, to relate himself to others, to love and to laugh, his capacity for wholeheartedness. It is a state or condition of having reached an adult level of emotional development and therefore no longer displaying emotional patterns appropriate to children (Chaplin, 1975). Morgan (1934) stated the view that an adequate theory of emotional maturity must take account of the full scope of the individuality, powers and his ability to enjoy the use of his powers (Singaravelu, 2008). If the emotional development of the individual is relatively complete, his adaptability is high, his regressive tendencies are low and his vulnerability is minimal (Seoul, 1951).

Thus emotional maturity is a process in which the personality is continuously striving for greater sense of emotional health, both intra-physically and intra-personally (Smitson, 1974). Emotional maturity is always relative. Emotional maturity however, develops throughout life. Emotional maturity, then, is not a state in which all problems are solved but, instead, is a continual process of clarification and evaluation, an attempt to integrate feelings, thinking and behaviour (Singaravelu, 2008). In brief emotional maturity can be called as the process of impulse control through the agency of “self “or “ego” (Smitson, 1974).

1.3.4 THE KEY CRITERIA OF EMOTIONAL MATURETY

Emotional Maturity includes constellations of qualities which makes our mind more stable, balanced and actually express less defilement and hence makes us happier (Gunatilake, 2008). According to Bernard (1954) following are the criteria of mature emotional behaviour (as cited in Singh and Bhargava, 1990):

1. Inhibition of direct expression of negative emotions.

2. Cultivation of positive, up building emotions.
3. Development of higher tolerance for disagreeable circumstances.

4. Increasing satisfaction from socially approved responses.

5. Increasing dependence of actions.

6. Ability to make a choice and not broad about other choices.

7. Freedom from unreasonable fear.

8. Understanding and action in accordance with limitations.

9. Awareness of the ability and achievement of others.

10. Ability to err without feeling disgraced.

11. Ability to carry victory and prestige with grace.

12. Ability to delay the gratification of impulses.

13. The enjoyment of daily living.

The most outstanding mark of emotional maturity, according to Cole (1944) is ability to bear tension. Other mark is on indifference toward certain kinds of stimuli that effect the child or adolescent and he develops moodiness and sentimentally. Besides, emotionally mature person persist the capacity for fun and recreation (Cole, 1944). The mature person has developed attitudes in relation to himself and his environment which have lifted him above "childishness" in thought and behaviour.

Kaplan and Baron elaborate the characteristics of an emotionally mature person; say that he has the capacity to withstand delay in satisfaction of needs. He has the ability to tolerate a reasonable amount of frustration. He has belies in long-term planning and is capable of delaying or revising his expectations in terms of demands of situations. An emotionally mature child has the capacity to make effective adjustment with himself, members of his family, and his peers in the school, society and culture. But maturity means not merely the capacity for such attitude and functioning but also the ability to enjoy them fully (as cited in Singh and Bhargava, 1990).
Thus, an emotionally mature person is one whose emotional life is well under control (Chamberlain, 1960).

1.3.5 LEVELS OF EMOTIONAL MATURITY

In the present circumstances, youth as well as children are facing difficulties in life. These difficulties are giving rise to many psycho-somatic problems such as anxiety, tension, frustrations and emotional upsets in day to day life. So, the study of emotional life is now emerging as a descriptive science, comparable with anatomy. It deals with interplay of forces with Intensities and quantities (Singh and Bhargava, 1990). Kevin FitzMaurice (2010) accounted levels of emotional maturity in his book ‘The Secret of Maturity’ as are as follows:

1. **Basic Emotional Responsibility** - When a person reaches level one of emotional maturity, they realize that they can no longer view their emotional states as the responsibility of external forces such as people, places, things, forces, fate, and spirits. They learn to drop expressions from their speech that show disownership of feelings and a helpless or victim attitude towards their feelings.

2. **Emotional Honesty** - The issues of resistance to self-discovery are dealt with at this level. This is a necessary step to self-understanding and acceptance. The realization of the old maxim, "To thine own self be true," is the primary goal at this level. As a secondary goal on this level, people learn to locate others with whom they can safely share their real feelings, their real selves. Such work to never again accept self as behaviour.

3. **Emotional Openness** - This level concerns the person's willingness and skills in sharing their feelings in an appropriate manner and at appropriate times. Self-disclosure is the important issue at this level of work. Persons at this level experience and learn the value of ventilating feelings, and also the dangers involved in hiding feelings from self and others. At this level, one has the openness, the freedom to experience any emotion without the need, the compulsion to suppress or repress it.
4. **Emotional Assertiveness** - The person at this level of work enters a new era of positive self-expression. The primary goal here is to be able to ask for and to receive the nurturing that one needs and wants--first from self and then from others. As a secondary goal, persons should learn how to express any feeling appropriately in any situation, i.e., without aggressive overtones.

5. **Emotional Understanding** - Persons on this level understand the actual cause and effect process of emotional responsibility and irresponsibility. Self-concepts are known as "the" problem. Knowing that though we may hide one half in darkness (unconsciousness) it is still active in us; they begin to regularly leap beyond the pitfalls of self-concepts, self-images, and self-constructs. This knowledge of the Unity of Opposites (of self-concepts, of knowledge) is applied to new situations daily. The main work here is a total shift from identifying with any self-concepts to identifying only with the true self.

6. **Emotional Detachment** - At this level the person lives without the burden and snare of self-concepts, self-images, self-constructs, and all group-concepts and thing-concepts. True detachment from all self-concepts and others has occurred which means that absolute emotional responsibility has been achieved (actually discovered). Not having self-concepts to defend or promote, this person can remain unaffected by the Blame Game, and even experiences unconditional love for their enemies.

### 1.3.6 THREE WAYS TO EMBODY EMOTIONAL MATURITY

Emotional maturity is not something that is automatically given to someone when they turn Adult. Emotional maturity is something that we must develop in our lives by knowing how to respond to situations in a mature and responsible manner. Three factors that define emotional maturity according to Bohl (2008) are:

- **Ability to Face Reality – Acceptance** - We know that we need to stop smoking because it is not good for our health, but we don’t do it because we want to avoid having to face a difficult challenge in our lives. Many of us like to avoid difficulties and pretend that they don’t exist. We have to stop denying that
situations exist and instead move towards assessing the risks of situations and taking actions based on those risks.

❖ **Ability to relate well With others** - This is a big world, and we need to get along with others – even those that are different from us or have beliefs that differ from ours. Instead of looking at people with a critical eye look for the good inside them. Try to be compassionate, not critical and must learn to forgive others and ourselves

❖ **Willingness to be Honest with ourselves** - We must be willing to do a self-appraisal of who we are and what we want from our life. None of us is perfect. Chances are that there are areas in your life that could use improvement. We don’t have to be in control of everything in our life being honest with ourselves can lead us to understand that some things in our life just aren’t worth worrying about.

**1.4 CONCEPT OF GENERAL WELL-BEING**

“*Well-being is the state of happy, healthy and prosperous.*”


**1.4.1 INITIATION OF THE WELL-BEING**

The concept of well-being originated from positive psychology. Positive psychology has emerged from the problem of the west. The focus of positive psychology is to study the improvement in the lives of individuals. The term ‘well-being’ is mostly used for specific variety of goodness e.g.-living in a good environment being of worth for the world, being able to cope with life, enjoying life etc (as cited in Singh and Shyam, 2007).

Sociologists use the word ‘well-being’ mostly in the sense of ‘good living conditions’; ecologists and biologists in term of ‘livability’ and politicians and social reformers refer to preconceptions of what a good living environment is like, such as good standard of living and social equality (Veenhoven, 2004). Many dictionaries and Roget’s new
thesaurus (1980) refers to well-being using words like happiness, full of life, vital., energy, interest and prosperity as well as health.

Well-being is an emerging concept of present arena. Pollard and Lee (2003) describe well-being as “a complex, multi-faceted construct that has continued to elude researchers’ attempts to define and measures it”. It is a dynamic state characterized by a reasonable amount of harmony between an individual’s abilities, needs and expectations and environmental demands and opportunities (Levi, 1987). It transcends the limitations of body, space, time and circumstances and reflects the fact that one is at peace with one’s self and others” (Johnson, 1986). It is connotative as a harmonious satisfaction of one’s desires and goals (Checola, 1975). Pender (1982) conceptualized wellness to have 5 dimensions, self-responsibility, nutritional awareness, physical fitness, stress management and sensitivity to the effects of environment on wellness.

Well-being thus has been described as a complex, multifaceted construct (Singh and Shyam, 2007). It can be concluded that it is an intangible and amorphous concept with perception differing from person to person (Wilcock et al., 1998) and situation to situation. It can be measured by using various well-being scales. The concept of well-being is attracting a lot of attention in this materialistic world these days. Many researches are carried out and carrying on different aspects of well-being. It is a concept that really makes people’s life happy, healthy and fulfilled in every manner. Thus, well-being leads to attaining the World Health Organization goal of ‘healthy mind in a healthy body in a healthy environment’ (Shri, 2007).

1.4.2 ECOLOGICAL CONCEPTUAL MODEL OF WELL-BEING

Well-being is a condition, which is a characteristic of the average person who meets the demands of life on the basis of his own capacities and limitations (Nagarathna and Vimala, 2007). The ecological conceptual model of well-being described by Lawton (1991) depicts the interacting relationship between the varied components of the concept:

- Person and context factors in this model refer to the attributes of the person, the immediate environmental context, and the wider socio-cultural context. Person factors with a direct bearing on well-being include general health and fitness and
coping mechanisms for adaptation to life changes. Context factors may also have an important effect on well-being through facilitation or constraint of goals and actions. Home environment, social support, social network, neighbourhood and services provided interact as a functional or dysfunctional relationship.

![Ecological Conceptual Model of Well-being](image)

**Figure 1.17: Ecological Conceptual Model of Well-being**

- An activity refers to what the person actually does and relates to lifestyle, social interaction, personal goals and self-esteem. Lifestyles include the everyday activities of daily living which includes the tasks that a person needs to do to live independently. Social interaction has an emphasis on interaction in the home or the world outside of the home. Personal goals refer to those activities important to the individual such as hobbies and leisure activities. Personal appearance and grooming also impact the person’s self-identity and self-esteem.

- Experience refers to the subjective interpretation of situations that provide personal significance. The significance of activities is directly related to subjective perception.
Thus, the model of well-being denotes a quality of wholeness or soundness. The individuals’ condition or state of well-being is continuously changing depending upon his own actions and the factors and forces acting upon him (Nagarathna and Vimala, 2007)

1.4.3 COMPONENTS OF WELL-BEING

Well-being is health, happiness and prosperity (Shri, 2007). Health is a resource of everyday life and an essential part of well-being (Allardt, 1976); not the object of living (as cited in Khan, 2007). Both as individuals and as a planet, happiness is our ultimate reason for living (Eysenck and Eysenck, 1994). Studies (Diener, 2004; Feldman, 2004 as cited in Shri, 2007) have reported that happiness produces good results in many areas for example –

- Happy people on an average have stronger immune systems, and live longer.
- Happy people are more creative, helpful, altruistic, successful and spiritual.
- Happy people are better citizens having high self esteem.
- Happy people do better in social relationships.
- Happy people are optimistic and better able to cope with difficult situations.
- Happy people like themselves and other people more, and others also like them.
- Happy people have a high self esteem and are optimistic.
- Happy people are spiritual.

A change in the different dimensions of well-being of an individual may be reflected in his/her behaviour or the performance. Components relevant to the concept of well-being (Sixsmith et al., 2007) are:-

- Individual characteristics of people such as functional ability physical and psychological health.
- Physical environmental factors including facilities, amenities, and housing standards.
- Living environment including household status, household conditions and neighbourhood.
- Socio-economic factors such as family and social networks including income, standard of living and ethnicity.
- Personal autonomy factors such as ability to make choices and control.
- Subjective satisfaction on the person’s evaluation of their quality of life.
- Activities such as hobbies, leisure and social participation.
- Life changes such as traumatic or disruptive events or lack of change.
- Care including expectations amount and kind of support.

Numerous studies by psychologists like McCrae & Costa (1986), Diener (1984); Lykken and Tellegreen (1996) concluded that variables such as temperament, social comparison, cultural beliefs, attributions, demographic details etc. have an influence on person’s well-being.

1.4.4 NATURE OF WELL-BEING

Well-being is a multidimensional construct comprising of physical, mental and social components (Bhimwal, 2007). There are several cardinal characteristics of the well-being (Diener, 1984). It resides within the experience of the individual (Campbell, 1976). Well-being is a dynamic state characterized by a reasonable amount of harmony between an individual’s abilities, needs, expectations, environmental demands and opportunities (Singh and Shyam, 2007). Thus, it is subjective (Sharma, 2002) in nature because it involves subjective satisfaction and individual pleasure depending upon psychological status of the individual and his environmental conditions (Khan, 2007). Notably absent from definitions of well-being are necessary objective conditions such as health, comfort, virtue or wealth (Khan, 2007).

Well-being includes positive measures (Sharma, 2002). The well-being of the body, mind and emotions, the sense of ethics and morality, represent the concept of health, and not necessarily the absence of disease (Jain, Sharma and Yadav, 2007) It deals with the factors that differentiate slightly happy people from moderately happy and extremely happy people (Sharma, 2002). The field covers the entire range of well-being from agony of ecstasy (Sharma, 2002). Ryff and Keyes (1995) includes self acceptance, positive relations with others, autonomy, environmental mastery, purpose in life and personal growth in well-being.
A final hallmark of well-being is that the field focus on longer term states not just momentary moods (Sharma, 2002). Well-being researchers are interested in relatively enduring feelings of well-being, not just fleeting emotions (Diener, Suh and Oishi, 1997).

By concluding the nature of well-being, it can be said that it is subjective (Sharma, 2002) and a positive construct and is not only an absence of illness (WHO, 1948). Jourad (1974), Shoben (1957) and Bremer (1996) describe the well-being as intricate relationship between biological, social, emotional and spiritual ingredients which form footing for well-being.

1.4.5 TYPES OF WELL-BEING

The concept of well-being refers to optimum psychological functioning and experiences (Ryan and Deci, 2001). There are four conceptual terms related to well-being:

1. General Well-being

General well-being as a construct refers to the harmonious functioning of the physical as well as psychological aspects of the personality, giving satisfaction to the self and benefit to the society (Siwach, 2000). General Well-Being has been defined as encompassing people’s cognitive and effective evaluations of their lives (Karatzias et al., 2006). Other terms have been used, interchangeably with the general well-being term, included health (Emmons and Kings, 1988) and quality of life (Quality of Life Wikipedia, 2010). In general well-being, main emphasis is given to the health because health is the general condition of a person in all aspects. It is a level of functional and/or metabolic efficiency of an organism, often implicitly human (http://en.wikipedia.org/wiki/Health). World Health Organization (1948) defined health as "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity". In 1986, the WHO, in the Ottawa Charter for Health Promotion, said that health is "a resource for everyday life, not the objective of living. Health is a positive concept emphasizing social and personal resources, as well as physical capacities". The spiritual dimension on health was added much later in the WHO definition (Dalal et al., 2006).
The LaLonde (1974) described four general determinants of health including human biology, environment, lifestyle, and healthcare services. According to the World Health Organization (http://en.wikipedia.org/wiki/Health) the main determinants of health include the social and economic environment, the physical environment and the person's individual characteristics and behaviors. Generally, the context in which an individual lives is of great importance on his life quality and health status. Moreover, the World Health Organization lists a wide range of other factors that can influence the well-being of a person such as the gender, social support networks and health services in terms of both quality and access to them are to be considered as health determinants. The Alameda County Study (Housman, 2005) found that people can improve their health via exercise, enough sleep, maintaining a healthy weight, limiting alcohol use, and avoiding smoking.

Health and wellness have four characteristics (Kiefer, 2008); being able to function and do what they wanted to do, being independent or self-determining, having both a physical and emotional state of well-being, and an absence of pain. Thus, factors in defining health and wellness seemed to centre on the ability of self-care and control of one’s life. Health intervention strategies include general well-being promotion related to eating healthily, taking care of oneself, accessing social support and using problem solving techniques.

The other term quality of life is used to evaluate the general well-being of individuals and societies. Quality of life should not be confused with the concept of standard of living, which is based primarily on income. Instead, standard indicators of the quality of life include not only wealth and employment, but also the built environment, physical and mental health, education, recreation and leisure time, and social belonging (http://en.wikipedia.org/wiki/Quality_of_Life).

2. Psychological Well-being

Psychological well-being is one component of health, which like psychological skills falls under the broad category of psychology (Edwards, 2007). Psychological Well-Being refers to positive mental health (Edwards, 2005). Psychological Well-Being or positive mental health extensively researched over the last two decades (Conway and Macleod,
2002; Ryff, 1989b; Wissing and Van Eeden, 1998). It is a diverse multidimensional concept (MacLeod and Moore, 2000; Ryff, 1989; Wissing and Van Eeden, 1998), which develops through a combination of emotional regulation, personality characteristics, identity and life experience (Helson and Srivastava, 2001 as cited in Edward, 2007). McCulloch (1991) has shown that satisfaction, morale, positive effect, social support etc. constitute psychological well-being. A person high in psychological well-being not only carries higher level of life satisfaction, self-esteem, positive feelings, and attitudes, but also manages tensions, negative thoughts ideas and feelings more efficiently (Singh and Shyam, 2007). Psychological Well-Being can increase with age, education, extraversion and consciousness and decrease with neuroticism (Keyes et al., 2002). There are six distinct components of psychological well-being having a positive attitude towards oneself and one’s past life (self-acceptance); having goals and objectives that give life meaning (purpose in life); being able to manage complex demands of daily life (environment mastery); having a sense of continued development and self-realization (personal growth); possessing caring and trusting ties with others (positive relations with others); and being able to follow one’s own convictions (autonomy) (cited in Khan, 2007). The relationship between physical activity and psychological well-being has been noted in many studies (Biddle et al., 2000; Bydawell, 2006; Edwards et al., 2004; Edwards et al., 2005; Hayes and Ross, 1986; Malebo, Van Eeden and Wissing, 2007; Scully et al., 1998). Furthermore, the perception of physical health and spirituality can mediate the relationship between context and psychological well-being (Temane and Wissing, 2006; 2006).

3. **Subjective Well-being**

Subjective Well-being is a broad category of phenomena that includes people’s emotional responses, domain satisfactions, and global judgements of life satisfaction (Diener, Suh, Lucas and Smith, 1999). It is defined as how a person evaluates his or her own life (Khan, 2007). Subjective Well-being is not synonymous with mental health; or psychological health (Singh and Shyam, 2007). A person suffering from delusion might be happy and satisfied with his life and yet we would not say that he possesses mental health (Diener, Suh and Oishi, 1997). Thus, subjective well-being is not a sufficient
condition for psychological well-being; it requires mastery on environment, personal growth and purpose in life (Ryff, 1989; Ryff and Keyes, 1995). Although, subjective well-being emphasizes the relevance of personal perspective (internal), experience rather the standard imposed by mental health professionals (Singh and Shyam, 2007). Life satisfaction, presence of positive emotional experiences and absence of negative emotional experiences are major components of Subjective well-being (Gaur, 2005). Subjective Well-being is not a simple unitary entity (Diener, Suh, Lucas and Smith, 1999). Diener and Suh (1988) suggested that Subjective Well Being is one of three ways to assess the quality of life of societies along with economic and social indicator.

4. Spiritual Well-being

Recently, another dimension of well being that require sue consideration is the concept of spirituality, that has been considered by the World Health Organization an important aspect of health, in addition to Physical., Psychological., and Social health (Yogesh et al., 2004 cited in Samantaray and Tripathi, 2010). It is a concept derived from the holistic approach, in which a person is viewed as a multifaceted totality of body, mind, and spirit (Ben-Arye and Steinmetz, 2007). The first recorded expression of the term “Spiritual Well-Being” is attributed to the National Interfaith Coalition on Aging (NICA, 1975 cited in Samantaray and Tripathi, 2010) which suggested “Spiritual Well-Being” is the affirmation of life in relationship with God, self, community and environment that nurtures and celebrates wholeness (Ellison, 1983 cited in Samantaray and Tripathi, 2010). Moberg (1971) has conceptualized Spiritual Well-Being as two faceted, with both vertical and horizontal components. The vertical dimension refers to our sense of life well-being in relation to God (Paloutzian and Ellison, 1982). The horizontal dimension refers to a sense of life purpose and life satisfaction, with no reference to anything especially religious (as cited in Samantaray and Tripathi, 2010).

Thus, it can be concluded that Well-being is about meaningful and good life fulfilling our potential at and feeling that our lives are worthwhile (Dhar, Sen and Basu (2010). It is attained when the goals set by individuals are fulfilled (Omodei and Wearing, 1990). Judgements of well-being are irreducibly subjective and that the meaning and content of
the terms used seem to fluctuate, depending on who is using it and why it is being used (Dhar, Sen and Basu (2010).

1.4.6 OBSTACLES IN ATTAINING THE STATE OF GENERAL WELL-BEING

Health and General Well-being are conceptually related (Emmons and Kings, 1988). An individual’s as well as communities general well-being plays a vital role in living a good quality of life, forming a healthy environment and a good society in a nation. But in the present materialistic world, there are essential obstacles that interrupt one’s general well-being:

- Regular physical activity keeps our body, mind and spirit healthy. But excessive use of technology in daily routine lacks the regular physical activities that lead to obstacle in attaining the general well-being in terms of physical unfitness.

- People do not have healthy eating habits. They use cold drinks and alcohol in excess and include junk food in their meals. So, lack of well-balanced and nutritious diet is strong obstacle in attaining the state of good health.

- Because of high expectations and dis-satisfaction in personal and social relationship, family support system is breaking down. This leads to psychosomatic disorders like anxiety, depression, sleep disorder, hypertension and other life style related disorders that affects the general well-being of individuals.

- Degeneration of value system influences the general well-being of societies because it is the primary characteristic of materialism and breaks the social structure that leads to social isolation and emotional disturbance.

- As we know, we are living in materialistic world and believe in philosophy of existentialism in which cut throat competition exist. It leads to dishonesty, disrespect and disobey that makes our interpersonal relationship poor and suffer from mental unrest that becomes the reason of poor health status.
Environmental pollution is increasing day-by-day. Excessive use of means of transports and communications, pollutants from industries and chemicals in water are causes of environmental pollution. It affects not only the immune system of human beings but also all living beings. So, environmental pollution is a strong barrier in obtaining the state of general well-being.

Many new diseases/epidemics came in limelight in past decade. We are hearing about a new virus every month. All these affect the human’s general well-being badly. Scientists, doctors and researchers are trying to find out the cures, but it will take much more time.

Terrorism also affects the general well-being of a society because it increases the fear and insecurity among the people and affects the social relationship also.

Thus, these are obstacles in attaining the state of general well-being. With positive attitude and collective efforts, we can elicit all obstacles and can help in formation of healthy living conditions and environments that makes people happy, healthy and prosperous.

1.4.7 HOW TO ATTAIN THE STATE OF GENERAL WELL-BEING

General Well-being is a state everyone wants to achieve it to live a healthy and happy life. For attaining and then maintaining general well-being there are some techniques (Shri, 2007; Dwivedi, 2005) one must incorporate in one’s life:

1. Personal Hygiene

One must take care of personal hygiene to attain the state of general well-being. It includes regular brushing of the teeth, daily massage of the scalp and hair, daily oil massage of the body, regular bath, cleanliness of feet and private parts, wearing of clean and seasonal clothes and avoids keeping late hours.

2. Well-balanced diet
It is stated that unwholesome food is the most important cause of diseases. The importance of a proper diet in health and sickness is repeatedly stressed upon. One should follow a well-balanced diet to remain the healthy.

(3) Regular Physical Exercise

Regular physical exercise aids digestion and increases capacity for work and physical strength. By exercise a person gets lightness in the body, increase in capacity to work, firmness, tolerance of difficulties, diminution of impurity and stimulation of digestion and metabolism.

(4) Adequate Sleep

Inadequate or poor quality of sleep can lead to feelings of day-time tiredness. To be well one should not sleep in a crooked position or on a narrow or uneven bed, not expose oneself to the strong light. One should try to get sufficient sleep.

(5) Effects of Environment on Health and General well-being

Ayurveda treats bodily health not only a personal problem but also in relation to geographical, climatic, environmental, seasonal variation and other related factors. Areas having a proper balance of dry and moist seasons and of open spaces and forests generally contribute in good health. One should take care of his/her own health according to environmental conditions.

(6) Public sanitation

Caraka Samhita emphasise on public sanitation to remain healthy. Adultery, gambling, drunkenness, crude habits of eating, dirty or inadequate dress, sneezing etc are considered unhealthy practices to be avoided by those willing to lead a clean life.

(7) Stress Management Techniques

Everyone in this materialistic world seems to be effected by stress, tension and depression. Too much stress can worsen the symptoms of depression and takes its
toll on one’s health. Avoiding unnecessary stress is easier said than done. Positive attitude, yoga, meditation and stress management classes are some stress management techniques. By applying these techniques, one remains happy and healthy.

(8) Seek support from family, friends and attend support group meetings

Depression, emotional disturbance and negative thinking are essential part of human being’s daily routine that resulted in social isolation. One should try to get support from family, friends and attend support group meetings to attain the state of general well-being. There are also numerous online communities and forums available.

(9) Practice Forgiveness

One should try to forgive to oneself and others for their mistakes. We are all human and make mistakes knowingly or innocently. So, one does not carry oneself or anyone’s mistakes. It will enhance the feeling of well-being that helps in attaining the state of general well-being.

(10) Make time for ourselves

We sometimes feel that we have no time for ourselves also. We should try to make time for own hobbies and interests to remain happy and healthy.

(11) Satisfying work and financial self-reliance

Satisfying work and financial self-reliance play an important role in attaining the state of general well-being.

(12) Ethical Codes:-

To remain well one must believe in nature. One must pay obeisance to the preceptors, the elderly people, accomplished persons and teachers. One should have presence of mind even in difficult circumstances, one should speak relevant, measured, sweet and meaningful words, one should be self-controlled, self-
virtuous, and full of zeal in cause but not in effect, free from anxiety, fearless, shy, very courageous, skilful, forbearing, religious, and optimistic in one’s approach.

Thus, Happiness is our highest goal and extremely effective means of achieving many of our cherished goals (Shri, 2007). The knowledge of techniques of attaining the state of general well-being helps in improving the living of individuals as well as communities (Khan, 2007).

1.5 SIGNIFICANCE OF THE STUDY

A subtle shift is occurring in our society. We are becoming a “dot com” nation. As a society, we are changing. We are inventing new ways of communication, doing business, sharing information, both personal and public. It is the Internet, most powerful invention of the century, which makes all these things possible in every manner. The Internet is one of the major technological systems currently changing how we define knowledge, personal value and social relationships (Postman, 1992; Webster, 1995). It has become a gateway of information, communication, commerce and entertainment for everyone. Users of all ages can find ways to extend their thinking and receive assistance from others in pursuing their interests. It enables the user to explore new ideas, enter into complex systems, and/or develop new intellectual connections.

Internet is the most popular daily routine activity. Different kinds of people with different ethnicities, backgrounds, social standing is using the Internet on a daily basis. Using the Internet, we can connect with just about anybody from anywhere in the world. We can have multiple conversations with people from different countries in real time. It’s amazing to think that we can also view a person via webcam from hundreds of thousands miles away with a single click. This is the genius and beauty of the Internet.

Internet access among adolescents has grown exponentially over the past decade. Pre adolescents and younger children also use the Internet to a large extent. As a new information and communications system, the Internet poses a practical problem that demands reflective and critical thinking on the part of individuals especially adolescents and families. The Internet is more exciting and challenging as a research environment
than earlier media because it is a complex virtual social and physical world that children and adolescents participate in and co-construct, rather than something that is merely watched (TV) or merely used (PC). It becomes a complex virtual universe behind a small screen on which developmental issues play out in old and new ways, offering new views into the thoughts, feelings, and behaviours of children and adolescents. This universe will continue to expand as web-connected cell phones and other new Internet applications emerge. This is an important and healthy sign of a new and growing area of research.

The Internet has implications for the physical, cognitive, social, and behavioural development of children and adolescents (Finkelhor, Mitchell, and Wolak, 2000; Finkelhor, Mitchell, and Wolak, 2003; Greenfield, 2004; Huston and Right, 1998; Katz and Rice, 2002; Kraut et al., 1998; Subrahmanyam et al., 2001; Thornburgh and Lin, 2002 cited in Yan, 2006). So, it is essential to find out the influence of Internet on adolescent’s social competence, emotional maturity and general well-being so that findings of the study can be used to design the curriculum. The studies reported above demonstrate that different factors associated with Internet use operate differently in different race, culture and sex-groups and since there is dearth of systematic study under Indian set up, it is appropriate to investigator that whether or not Internet use independently or interaction with each other accountable for differences in Social Competence, Emotional Maturity and General Well-being. Research about the perceived influence of Internet use on social competence, emotional maturity and general well-being of adolescents is still in its infancy especially in India, and needs to be qualitatively and quantitatively improved. The present study is an effort in this direction.

1.6 STATEMENT OF THE PROBLEM

The problem under study stated as, “A Study of Perceived Influence of Internet Use on Social Competence, Emotional Maturity and General Well-being of Adolescents”.

1.7 DEFINITIONS OF THE KEY TERMS USED

Perceive – To attain awareness or understanding of, to become aware of through the senses (http://www.merriam-webster.com/dictionary/perceived).
**Internet** – The Internet is a global system of interconnected computer networks that use the standard Internet Protocol Suite (TCP/IP) to serve billions of users worldwide. It is a network of networks that consists of millions of private, public, academic, business and government networks, of local to global scope, that are linked by a broad array of electronic, wireless and optical networking technologies. It carries a vast range of information resources and services (http://en.wikipedia.org/wiki/Internet).

**Internet User** – Internet World Stats (http://www.internetworldstats.com) defines an Internet User as anyone currently in capacity to use the Internet. In their opinion, there are only two requirements for a person to be considered an Internet User:

1. The person must have available access to an Internet connection point, and
2. The person must have the basic knowledge required to use web technology.

**Internet Penetration Rate** – Internet Penetration Rate corresponds to the percentage of the total population of a given country or region that uses the Internet. No adjustments have been made for infants or illiteracy in the Internet Penetration Rate calculations (http://www.internetworldstats.com).

**Internet Growth Rate** – In order to establish the relative growth rate of the Internet on a global basis, Internet World Stats compare the current (latest) Internet usage figures for each country or region with the year 2000, baseline year for Internet usage figures, and express this ratio as a percentage (http://www.internetworldstats.com).

**Social Competence** – The definition given by Bernard (1995) was used as an operational definition of the term Social Competence which states that Social Competence is consists of relationship skills. It involves responsiveness, especially the ability to elicit positive responses from others; flexibility, including the ability to move back and forth between primary culture and dominant culture (cross-sectional competence); and empathy, caring, communication skills, and a sense of human.

**Emotional Maturity** – Skinner (2001) defined Emotional Maturity as “the degree to which the person has realized his potentials for richness of living and has developed his
capacity to enjoy things, to relate himself to others, to love and to laugh, his capacity for whole heartedness.

**General Well-Being** – It is a state of being or doing well in life (www.people.vcu.edu/~swharkin/swhpages/glossary). General well-being as a construct refers to the harmonious functioning of the physical as well as psychological aspects of the personality, giving satisfaction to the self and benefit to the society (Siwach, 2000).

**Adolescents** – Adolescence (Latin in origin, derived from the verb *adolescere*, which means to grow into adulthood) is a transitional stage of physical and mental human development generally occurring between puberty and legal adulthood (age of majority), but largely characterized as beginning and ending with the teenage stage. According to Erik Erikson's stages of human development, for example, a young adult is generally a person between the ages of 20 and 40, whereas an adolescent is a person between the ages of 13 and 19 (http://www.answers.com/topic/adolescence).

**Metropolitan Area** - A metropolitan area is a region consisting of a populous urban core with a high density of employment plus surrounding territory that is socio-economically linked to the urban core by commuting. In India, the Census Commission defines a metropolitan city one having a population of over 4 million. Mumbai, Delhi, Chennai, Kolkata, Bengaluru, Hyderabad, Ahmedabad, Pune, Nashik, Surat are the ten cities that qualify. Residents of these cities are also entitled to a higher House rent allowance. The figure only applies to the city region and not the conurbation (http://en.wikipedia.org/wiki/metropolitan_area).

**Non-metropolitan Area** - The areas located outside the metropolitan area are referred to as non-metropolitan area (Kim, 2003). Non-metropolitan areas cover all other parts of a state or territory excluding the Metropolitan areas as defined above (http://adl.brs.gov.au/mapserv/fishcoast/glossary.html).
1.8 OBJECTIVES OF THE STUDY

The present study aimed at the following objectives:

O₁ To construct and standardise the General Well-being Scale to assess the General Well-being of adolescents.

O₂ To study the influence of Residential Background, Gender, Academic Stream, Frequency of Internet Access and their various interactions on Social Competence of Internet user adolescents.

O₃ To study the influence of Residential Background, Gender, Academic Stream, Frequency of Internet Access and their various interactions on Emotional Maturity of Internet user adolescents.

O₄ To study the influence of Residential Background, Gender, Academic Stream, Frequency of Internet Access and their various interactions on General Well-being of Internet user adolescents.

1.9 HYPOTHESES OF THE STUDY

The following hypotheses were formulated for the present study:

H₀₁ There is no significant influence of Residential Background, Gender, Academic Stream, Frequency of Internet Access and their various interactions on Social Competence of Internet user adolescents.

H₀₂ There is no significant influence of Residential Background, Gender, Academic Stream, Frequency of Internet Access and their various interactions on Emotional Maturity of Internet user adolescents.

H₀₃ There is no significant influence of Residential Background, Gender, Academic stream, Frequency of Internet Access and their various interactions on General Well-being of Internet user adolescents.

1.10 SUM-UP

This chapter introduced a theoretical overview of the important initiations of the study i.e. Internet, Social Competence, Emotional Maturity and General Well-being. It
discussed rationale of the study, problem statement, operational definitions of key terms used in the study, objectives and hypotheses of the study. The next chapter concerned with the literature review related to core components of this study which are recent reports, Internet usage pattern, Internet addiction and Internet pornography and regulate the Internet on Social Competence, Emotional Maturity and General Well-being of adolescents.