CHAPTER - I
CHAPTER I

INTRODUCTION

Adolescence is a stage of transition in which boys and girls start transforming mentally and physically. Adolescents try to grapple with who they are. Actually, we all are—it’s a lifelong process—but for adolescents on the verge of leaving home and establishing their own life, it’s a particularly intense issue. Though males and females differ in their psychological and emotional problems at this stage, they all have the confusion and curiosity of growing. It is the period of emotional excitement and stress caused by different physical, psychological changes and development of sexual feelings. Here clash in outlook and opinion of parents and children is common.

The word ‘Internet’ emanates from the words ‘Internet Connection Network’ (Greenfield, 1999), connecting computers around the world by the use of a standard protocol. The world of paper and print is giving a way to a digital world where everything has digital form whether text, graphics or sound. The internet was established in the early 1960s by the U.S Department of Defence (Schneider, Evans and Pinard, 2006), primarily for military purposes. The digitized world being fast and current, the younger generation is moving fast towards the digital way. Cyberspace and Blogoshere are the new worlds of the young generation who exploit and experiment all the possibilities of the digital environment. Internet is becoming a widely accepted channel for information exchange and networking. It is experiencing tremendous growth and development in its size and numbers of users all over the
world. The benefits of the internet have been widely researched and it includes keeping in touch with friends, making vacation plans, managing finances, assisting with educational needs etc.

The internet has a Janus face. Chou (2001) indicated that the most appreciated internet features included interactivity, simplicity and availability, abundant and updated information. On one hand, it gives every facility for us. More importantly, it is usually considered as a window of opportunity for the alienated. On the other hand, anonymity in the cyberspace makes people insensible to abuse on the internet. Inspite of the two edged effects, it is clear that we cannot do without the internet. Especially, unlike the previous generation not exposed to the cyber culture before socialization, the influence of cyber culture on the adolescents’ socialization is rapidly growing.

The adolescents view the internet as a useful source of information and channel for speedy communication. It is also an effective medium of socialization. Using a couple of keywords and clicks on the mouse, students have sufficient material to cobble together an assignment. The speed of the cut-and-paste process serves to reduce the opportunities to reflect, leading to carelessness in thought, carelessness in citing material and ultimately to plagiarism (Ellery, 2008). Adolescents with Internet Addiction exhibit more impulsivity than controls and have various comorbid psychiatric disorders, which could be associated with the psychopathology of the Internet Addiction (Cao et al., 2007) Experts say that net nards are sick people. Those who serve the internet for more than four hours a day are clinically ill and need mental treatment, the internet addicts will be regarded the same way as alcoholics and gamblers. Gordon et al. (2007) also argue that the reasons why individuals use the Internet must be taken into account in order to understand associations.
The 21st century is an era of technological revolution. Due to the changes in the technology, the environment of today is changing as never before. Adolescents of today are well and easily exposed to vast, unlimited and most importantly censored information and are subject to high pressure because of ever increasing competition and expectations from their family and peers. In this dynamic environment, many of the adolescents are finding it difficult to adjust themselves and even sometimes succumb to the environmental pressure.

There are four basic categories of internet usage by adolescents----

The first category is the website, which provides documents or collection of documents for informational purposes.

Email, the second category is a rapid form of electronic letter communication.

The third category is chat room in which adolescents communicate with each other.

The fourth category, newsgroup, which is like an electronic bulletin board (Hunley et al.2005).

Though the internet is a useful source of information and channel for speedy communication, its abuse among the adolescents is of much concern. However, there is every possibility that the adolescents might use the internet for experimentation. While some use it to a limited extent, the others may be interested in information relating to violence, sexual content, adventures etc. The experimentation might sometimes lead to cybercrimes including the intrusion to others’ data, plagiarism, using and spreading pornographic material and sending anonymous messages.
Fig 1.1: Conceptual Model of factors that may influence Internet use by Wanajak, K.(2011).
The excessive use of the internet may cause distraction from the studies. While being online, adolescents are whole new, worse like in a pretend world. These experiences can influence their emotional wellbeing as well as their safety. The habit of downloading vulgar pictures and pornographic items among the adolescents is a part of their curiosity and the outcome of their sexual interest developed at this stage. There is no guarantee of avoiding the exchange of verbally harassing or sexually aggressive chat (Laidi, 2006). Many children go to cyber cafes even when they have the internet connection at their homes because some parents are aware of the serious effects of overdependence on the internet and the possibility of its abuse.

There is a great variety of content that can be accessed on the Internet. The content can be about something useful or something harmful. As the public interest in ‘e-learning’ is growing rapidly, its effects on education cannot be ignored. In this sense, it is meaningful to examine how the internet use pattern and internet contents affect academic performance of students.

Factors that influences the use of internet are as follows-

(i) Personal factors v.i.z. gender, age and personality/self esteem.

(ii) Family factors v.i.z. parental supervision.

(iii) Internet factors v.i.z. online activities and access.

(iv) Peer factors v.i.z. Peer Pressure.
The rural and urban communities differ in many respects including the accessibility of electronic information. Urban adolescents may have more tendencies to use the internet. The level of education and awareness about the abuse of the internet may also be high among parents in urban areas. The rural adolescents with their rustic curiosity may explore and experiment the possibilities of the internet.

The rapid growths of electronic media with all their potential to change the pattern one gathers and communicates information have brought about positive and negative possibilities of using and misusing the media. On the positive side, the electronic media like the internet provides facility to communicate faster, retrieve and handle information in a more easy way. On the negative side, it causes concern about the possibility of accessing and distribution of unwanted information, plagiarism, security threat etc. These concerns can be worsened by parents’ relative lack of internet sophistication compared to their children.

1.1: Statement of the Problem

As we are living in a networking era, the tremendous growth of the internet has a high impact on the development of the students in which they interact and socialize. During this era, communication is the most popular term. Today, communication revolution brought us together regardless of geographical boundaries. The internet offers a wide variety of communication tools. Billions of people use facilities like search engines, web pages, e-mails, Really Simple syndication (RSS), e-journals, e-newspapers, internet banking, internet telephony, conferencing, multimedia sharing, online news rooms, social networking etc. Today internet is an
essential communication medium in professional as well as personal life. This research will detail the impact of using social networking sites on student’s academic performance. Literature analyzed that the social networking websites are not designed for negative impact but we notice in our daily life that students become addicted to social networking websites. This research contribution will analyze the pros and cons aspects of internet usage on academics.

Many adolescents use the internet on a daily basis. Therefore, an important question arises, how is technology affecting adolescents’ sleep pattern, attention difficulties and their academic performance.

1.2: Need and Importance of the Study

Internet use is a raising phenomenon affecting adolescents with varying frequency around the world and has produced both positive and negative impact on the academic achievement of adolescents and other levels of many lives (Chou and Hsiao, 2000). The present research is an attempt to investigate the effects of internet use on the academic achievement of adolescents of Kamrup Districts of Assam. In India, very few researches in this field have been done till date. Especially in the North Eastern part of India, rarely any such study was found. Hence the Kamrup districts (both metro and rural) were chosen to find out the level of the use of internet by adolescents as its growth is enhancing day by day. At the same time, it is an attempt in a particular direction to produce fruitful result which may be helpful, in facilitating the development of the adolescents of this region.
1.3: Definition and Explanation of Variables:

1.3(a) Internet

The internet is a global linking of computers that allows information transfer. Network that connects computer networks and organizational computer facilities around the world. The origin of internet grew out of an U.S Defence Department Programme called as ARPANET (Advanced Research Projects Agency Network) established in 1969 with connections between computers at University of California at Los Angeles, Stanford Research Institute, the University of California-Santa Barbara and the University of Utah. ARPANET’s purpose was to conduct research into computer networking in order to provide a secure and survivable communication system in case of war.

Table 1.1: Worldwide Internet Users

<table>
<thead>
<tr>
<th></th>
<th>2005</th>
<th>2010</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>World Population</td>
<td>6.5 billion</td>
<td>6.9 billion</td>
<td>7.1 billion</td>
</tr>
<tr>
<td>Not using the Internet</td>
<td>84%</td>
<td>70%</td>
<td>61%</td>
</tr>
<tr>
<td>Using the Internet</td>
<td>16%</td>
<td>30%</td>
<td>39%</td>
</tr>
<tr>
<td>Users in Developing World</td>
<td>8%</td>
<td>21%</td>
<td>31%</td>
</tr>
<tr>
<td>Users in the Developed World</td>
<td>51%</td>
<td>67%</td>
<td>77%</td>
</tr>
</tbody>
</table>

Source: International Telecommunication Union
It is an electronic communication. There are many uses associated with internet use such as, access to information, worldwide access to news and events and interpersonal communication through email. Cyberspace and Blogosphere are the new worlds of the young generation who exploit and experiment all the possibilities of the digital environment. Since the mid-1990s, the internet had a revolutionary impact on culture and commerce including the rise of near instant communication by electronic mail, instant messaging, and voice over Internet Protocol, telephone calls, two way interactive video calls and the World Wide Web with its discussion forums, blogs, social networking and online shopping sites. Today, the internet continues to grow, driven by ever greater amounts of online information, commerce, entertainment and social networking.

The advent of internet in this rat race world to quench the thirst of knowledge has become more aggressive. This has divided the world into two halves, computer literate and computer illiterate. The internet and computer are providing many facilities at home and at workplace. For instance-banking-tickets-books-mails are the most general facilities of internet. One can share one’s experiences and thoughts with the entire world through blogs, wikis and websites. Besides job hunting and hiring employees it is also possible through public portals like naukri.com, UPSC portal, monster.com, latest vacancies, sarkari naukri etc(Edwards and Bruce,2002). It can further be seen that internet use not only affects physiological and psychological variables but also educational and study habits of students. Since adolescents are the future of our bright civilization, it has therefore become necessary to find out the effects of on the study habits of higher secondary students.
News papers, radio and television, for eg, are predominantly ‘one-to-many’ media, meaning that information is created by a relatively restricted group of people and delivered to masses. Telephone and telegraph can be seen as ‘one-to-one’ medium, usually involving two sides communicating with each other (Chadwick, 2006:4-5). Internet, on the contrary, promotes ‘many-to-many’ types of interaction via technologies like forums, blogs, discussion boards and chat rooms, large number of people engage in the process of exchanging information (Chadwick, 2006:5; Miller et al 2009:78; Vintar et al 1999:92).

Internet has become the backbone of the modern education system. The academic community uses internet to satisfy its various needs v.i.z., information, education, communication or research. The students, who were born during full bloom of internet revolution, extensively use internet to satisfy their various needs. Internet, the ever expanding technology, serves as one stop point for all needs of academic community, be it information, education, communication or research. It provides access to galaxies of internet services round the clock (24x7) and sources at a click. The highest percentage of internet users belongs to younger generation who opened their eyes in full light of internet age. In a handful number of the higher secondary schools, the internet access centres in the library premises were there for the students as well as the teachers.

The use of internet has become a central part of the developed and developing societies around the world. Approximately, 78.1% of the U.S population use Internet on a regular basis (Internet World Stats, 2012). Internet use has become
very popular in many areas as well as in education in recent years. Accordingly, Internet access in schools has increased significantly between 1996 and 2001 (Hendel & Harrold, 2004). Dysphonic symptoms have been linked to some types of internet use such as shopping, playing games or doing research. Conversely, increased time involving use of email, chat room discussion and instant messaging have been linked to a decrease in depressive symptoms (Morgan & Cotton, 2003).

The use of internet is viewed as a social environment in which universal adolescent issues pertaining to identity formation, sexuality and self worth are explored in a virtual world (Subrahmanyam et al., 2005). 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).

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. A study found that low income youth who consistently used the internet exhibited higher grade point averages over the course of time (Jackson et al., 2006) than less frequent users.
1.3(b): Adolescents

Adolescence is commonly defined as the stage of life that begins at the onset of puberty, when sexual maturity or the ability to reproduce is attained. It has been regarded as a period of rapid change, both biologically and psychologically. Though the physical changes take place during this stage are universal, the social and psychological dimensions of the adolescent’s experiences depend on the cultural context. Around puberty adolescents show an increase in interest in members of the opposite sex and in sexual matters and a new awareness of sexual feelings. This increased attention to sexuality is caused by factors such as, individual’s awareness of the biological changes taking place and the emphasis placed on sexuality by peers, parents and society. This stage also involves cognitive and social changes along with physical changes. It is the stage when most of the girls and boys think of independence and personal identity.

Piaget describes adolescence as the stage of life in which the individual’s thoughts start taking more of an extreme form and the egocentric thoughts decrease. This allows the individual to think and reason in a wider perspective. The thoughts, ideas and concepts developed at this period of life greatly influence one’s future life, playing a major role in character and personality formation.

Adolescents are more likely to question other’s assertions and less likely to accept facts as absolute truths. As defined by the Webster’s New Collegiate Dictionary (1977), adolescence refers to ‘process of growing up’ or to the ‘period of life from puberty to maturity. Linguistically, as well the word is a Latin word meaning to ‘grow up’ or ‘to come to maturity’. Crider, Goethais, Kavanaugh and Solomon
(1983) states that adolescence is usually defined as the period that begins with the onset of puberty and somewhere around twenties.

G. Stanley (1844-1924) was the first psychologist to advance a psychology of adolescence in its own right and to use scientific methods to study them. He defined this period which started at puberty at about 12 or 13 years and end late, between 22 years to 25 years of age. Hall also described adolescence as a period of ‘storm and stress’. It is a literary movement full of idealism, commitment to a goal, evolution against the old, expression of personal feelings, passion and suffering. This stage is described by Erikson as the period during which the individual must establish a sense of personal identity and avoid the dangers of role diffusion and identity confusion (Erikson, 1950).

Two broad problem types are as follows:

(a) **Internalizing Problems**-
   - primarily affect a person’s internal world (cause distress),
   - more common in females.

(b) **Externalizing Problems**-
   - create difficulties in a person’s external world,
   - more common in males,
   - Often motivated by thrill seeking, not necessarily underlying psychopathology.
Adolescents are dealing with the challenges of growing. The most common sources of day to day stress for adolescents are school related problems or pressures, problems with peers, family issues or problems with parents, their own thoughts, feeling depressed or lonely, getting into trouble because of their behavior. These problems are amply routine for most adolescents. The transitional period can bring up issues of independence and self identity, many adolescents and their peers face tough choices regarding school work, sexuality, drugs, alcohol and their social life. Peer groups, romantic interests and external appearance tend to naturally increase in importance for some time during a teen’s journey towards adulthood.

1.3(c): Anxiety and other emotions:

Anxiety is a normal part of the adolescent and teen years as these are some of the most stressful times in a person’s life. Some anxiety are normal reaction to stressful situations. It can help teens deal with a tricky situation, study harder for an exam, and maintain focus on an important task. For most individuals, anxiety is often a harmless phase that lasts for a while and dissipates on its own. Anxiety during adolescence typically centers on changes in the way the adolescent's body looks and feels, social acceptance, and conflicts about independence. When flooded with anxiety, adolescents may appear extremely shy. They may avoid their usual activities or refuse to engage in new experiences. They may protest whenever they are apart from friends. Or in an attempt to diminish or deny their fears and worries, they may engage in risky behaviors, drug experimentation, or impulsive sexual behavior. The effects of internet use on youngsters can also vary as a function of the motivation and the type of internet usage.(McKenna and Bargh, 2000). For example, the social use of
internet has been found to be related to depression, while non-social use of the
internet v.i.z. information seeking and entertainment, have not been related to
Adolescent depression (Bessiere, Kiesler, Kraut and Boneva, 2008). Supportive
relationships with friends can positively contribute to adolescents’ sense of well
being, self esteem, connectedness and ability to cope with stress (Eisenberg, Hartup
and Stevens, 1997). Adolescents who do not have open emotional bonds with their
parents have more preference for internet related activities.

1.3(d): Academic Achievement:

Academic Achievement has become an index of a student’s future in
this highly competitive world. In general, achievement refers to the scholastic or
academic achievement of the student at the end of an educational
programme. Academic performance is one of the top priorities for schools. It is the
outcome of education, and it refers to the extent to which a student, a teacher or an
institution has received their educational goals. There are two traditional indicators of
academic performance namely, grades and highest level of educational attainment.
These two indicators are arguably the most important to educators, students, their
parents and those people who make public policy decisions. Academic performance is
commonly measured by examinations or continuous assessment, but there is no
general agreement on how it is best tested or which aspects are the most important.
The educational psychology literature decisively indicates that the psychological
variables have an important role in academic performance (Ackerman, Chamorro-
Premuzic, & Furnham, 2010). Recent studies on school children (Deary, Strand,
Smith & Fernandes, 2007) and university students (Rohde & Thompson, 2007) have
confirmed this.
In spite of having similar educational facilities, environment, aspiration and even intelligence, academic achievement of students differs from one another. The research findings hold that the cause of such difference is not only of intellectual incompetency but because of different other causes like continuous usage of mobile phones, internet usage etc. Goods (1959) refer academic achievement as the ‘knowledge attained/skill developed in the school subject usually designed by test scores/marks assigned by the teacher. The academic achievement of society’s youth is a central focal point for society due to the idea that ensuring an education for a child’s help promotes a more successful future (e.g., job opportunities, financial compensation) for that individual compared to their counterparts (Roderick, Nagaoka & Coca, 2009). For the purposes of this study, a grade point average (GPA) of 3.0 or above was used to define “academic success”.

Academic Achievement may be defined as excellence in all academic disciplines, in class as well as co-curricular activities. It includes excellence in sporting behavior, confidence, communication skills, punctuality, arts, culture and the like which can be achieved only when an individual is well adjusted. Trow (1956) defined academic achievement as ‘knowledge attaining ability or degree of competence in school tasks usually measured by standardized tests and expressed in a grade or unit based on pupil’s performance’. Mehta K.K (1969) defined academic achievement as ‘academic performance including both curricular and co-curricular performance of the students. In classrooms, students perform their potential efficiently as a result of it, learning takes place’. The learning outcome changes the behavior pattern of the student through different subjects.
1.4: Objectives of the Study

The objectives of the study are as follows-

(a) To find out the frequency of internet usage by the adolescents,

(b) To find out the correlation of internet usage and academic achievement of those adolescents,

(c) To find out the correlation of internet usage and anxiety level of the adolescents,

(d) To identify the gender differences in internet usage amongst adolescents,

(e) To find out the academic score differences among adolescents of Kamrup Districts of Assam.
1.5: **Scope of the Study**

The present study was attempted to study the adolescents of Kamrup Districts, the effects of internet use on their academic achievement. To attain this academic achievement, criterion variables v.i.z., internet usage and academic achievement were considered and few background variables, such as, sex, anxiety, type of school etc were selected. The study was constituted with a sample of secondary school students drawn from various CBSE Schools of Kamrup Districts (Metro and Rural) giving representation to Boys and Girls. Data was collected and analysed with the help of SPSS package. The descriptive analysis, t-test and Pearson Correlation statistical techniques were applied to realize the objectives and statement of hypotheses. Based on the data analysis, major findings and conclusion were drawn.

1.6: **Limitations of the Study:**

The study has the following limitations-

- The students studying in the higher secondary schools affiliated to the Central Board of Secondary Education were selected for the present study.
- The study was limited to 600 adolescents only.
- The study was limited to two main independent variables, Anxiety and internet Use only.
- Sample was restricted to a single district of Assam only.
1.7: Overview of the Chapters

In *first chapter*, the theoretical background of the study has been given. This chapter also deals with the need for the study, scope of the study and limitation of the study.

The *second chapter* deals with the review of related literature. The available researches on the area of Academic Achievement, Role of Anxiety, and Internet Use Questionnaire with other related variables have been consolidated in this chapter.

The *third chapter* deals with the methodology of the research study. It includes tools of research, collection of data, sampling procedure, statement of hypothesis.

The *fourth chapter* deals with the procedure undertaken in construction of the questionnaire.

The *fifth chapter* consists of analysis and interpretation of data. Hence the data is quantified and the hypotheses are tested and interpretations are given.

The *last chapter* consists of concluding with the summary of the preceding chapters, major findings, educational implication, limitation of the study and suggestion for further research is also given by the researcher.