Communication has been a very prominent vehicle of development all over the globe. Infact, communication and development are the two major domains of human endeavor which are intimately linked with one another. By 'communication' we mean flow of material, information, perceptions and understanding between various parts and members of society. It includes listening, writing, speaking, reading, channel networks etc. (Vardaman and Halterman 1968). In today's social scenario an individual can never become a part of modern society without the means of communication. Gouldner (1976) has argued that the relationship between media and public is so close that they are mutually constitutive concepts. Both are the ways of talking about society that are to a significant extent governed by the interests of metropolitan administrative elite. Kumar (2000) termed the interaction between media and human beings as an extremely complex phenomenon. It becomes even more complex when we realize that there is a great variety of media offering numerous programmes genres, and also the fact that there is a whole variety of people and groups listening, viewing, and reading in a countless number of socio cultural environments.

Neumann (1974) termed this process of interaction between individual and environment as 'spiral of silence', where dominant opinion is defended and new opinion is established. According to him people by nature are social beings, live in a perpetual fear of isolating themselves and carefully observe their environment to see which opinion increases and which one decreases.

McCormack (1981) uses the concept of 'credibility' to show the interaction between media and public. Credibility is a concept of truth, not as facts verifying a hypothesis, but as an organizing principle of a narrative or a belief system. Thus the basic link between media content and human behaviour is forged in the interconnection between information transmitted by the mass media on one hand and human information processing on other. Differences in response may derive from variations in how similar messages are interpreted by different people or by similar people under differing
conditions. Above views suggest that mass media and society are interdependent and influence each other.

‘The Media’ as an Institution

The word ‘media’ is the plural of the medium. It is derived from the Latin word ‘medius’ which means ‘middle’. The communication media include the different technological processes that facilitate communication between the sender of a message and the receiver of that message. Receiving implies actively interpreting media messages. The same media product might mean very different things to two different people. The early use of the term media was as a part of the phrase ‘mass media of communication’. The word mass suggests that the communication is sent from one place and received in many places by a large audience. Another characteristic of most mass media is that they involve a known sender and generally anonymous receivers. So, for some fifty years the word ‘media’, the plural of ‘medium’, has been used as a singular collective term, as in ‘the media’ (Williams 1976). So, if we speak of ‘the media’ surely we can speak of the ‘new media’ by simply giving the solidity and familiarity of established media a prefix. ‘The media’, in the established sense, usually refers to ‘communication media’ and the institutions and organizations in which people work (the press, cinema, broadcasting, publishing and so on) and cultural and material products of those institutions (the forms and genres of news, road movies, soap operas) which take the material forms of newspapers, paperback books, films, tapes, discs, etc. (Thompson 1995). We also investigate the wider processes through which information and representations (the content) of the media are distributed, received and consumed by its various audiences and is regulated and controlled by the state or the market. In this sense the media is understood as a fully social institution, while ‘new media’ on the other hand, immediately suggests something far less settled, known and identified.

The recent technologies sometimes termed as ‘new media’ (Kumar 2000) such as pagers, cellular phones, satellite computers, electronic mail and the internet, have taken the globe as mass media. This medium can be seen to play the role in society as the central nervous system does in the body. In this sense, the emergence of ‘new media’ is some kind of epoch
making phenomena, seen as a part of a much larger landscape of social, technological and cultural change; in short as a part of techno culture. The term ‘new media’ gains currency as a term because of its useful inclusiveness. It avoids, the emphasis on purely technical and formal definitions, as in ‘digital’ or ‘electronic media’, the stress on a single, ill defined and contentious quality as in ‘interactive media’, or the limitation to one set of machines and practices as in computer mediated communication. So while a person using ‘new media’ may have one kind of thing in mind (the internet), others may mean something else (digital TV, new ways of imaging the body, a virtual environment or a game). All use the same term to refer to a range of phenomena. These all forms of ‘medium’ we have in our mind borrow the glamorous connotations of ‘newness’. The features of new media include digitality, interactivity, hypertextuality, dispersal and virtuality.

When most people talk about ‘the media’ they are referring to the channels of mass communication, such as television and radio. In fact, not all media are mass. We need to clarify some key terms before going any further. One is mass communication and second is mediated interpersonal communication. A communication medium is any device that conveys a message. For example radio is a communication medium, because the technology is used to bridge the distance between the sender and receivers. Mediated communication, then is any type of communication in which messages are conveyed via some medium, rather than face to face. Because media is the plural form of medium, we refer to the print media of books, magazines, and newspapers, ‘the broadcast media’ of television and radio, ‘the entertainment media’ of movies and recordings and so on. In popular use we talk about how the media treat public figures and celebrities and how it handles issues like sex and crime.

Mediated communication, however does not involve just mass messages. Today much interpersonal communication is mediated. We speak to friends over the telephone, we e-mail friends, make contacts across the nation and around the globe. There are differences between mediated interpersonal communication and mass communication. In the interpersonal variety, a message does not go out to a large audience, it is not produced by
professionals, and it allows a considerable amount of interaction and feedback.

Internet is a blend of mass and personal communication. In some respects, the world wide web resembles other forms of mass media. Both individuals and organizations can create web sites that have the potential to reach thousands, or even millions of computer users. Also, many web sites are created by professionals and are quite elaborate in nature, including the “portals” of major corporations such as Microsoft and Yahoo! On the other hand, the web also possesses characteristics of personal communication. Unlike most forms of mass communication, the internet is a truly democratic medium. Any one can set up a web site and also it invites visitors to participate and sends e-mails. Thus it makes this a personal medium.

**Media as a Concept of the Medium**

*Enzensberger (1974)* writes of the media as ‘the consciousness industry’ that distributes products whose end result is not just a product but an effect on the consciousness of those receiving it. Mass media could serve as a kind of magic multiplier for the development in underdeveloped countries (*Lerner 1958; Moore 1981*). *McLuhan (1964)*, the media prophet, proclaimed ‘the medium is the message’. This means that the true message the media of television and radio deliver, the one which is decoded and consumed deep down and unconsciously, is not the manifest content of sounds and images; but the constraining pattern linked to the very technical essence of the media. *Marshall McLuhan* has described the drastic effects of the mass media upon society. *For McLuhan*, it is not just that man is spending time with the media that is important, nor the patterns of messages transmitted; what is significant for him, instead, is the media itself. His analysis begins with the simple premise that there have been three ages of man; the preliterate or tribal, the guttenberg or individual, and the present electronic or re-tribalised age. *McLuhan’s* thesis is as follows:

In the pre-alphabet age, the ear was dominant and hearing was believing. Man lived in acoustic space, the world of tribes, emotions, mystery and communal participation. Later, with the phonetic alphabet, there was a transition from the ear to the eye, and then with the guttenberg and printing
the transition was complete. Individualism was born, thought was separated from action and man began to comprehend in a linear connected fashion that shattered the old tribal society. Finally in the nineteenth century, McLuhan suggests, electronic circuitry began to bind the world up in web of instant awareness. Today, high speed communications annihilate the time and space of the world, contracting it into a global village in which everyone is involved with everyone else – the haves with the have-nots, races of different colours with one another, adults with teenagers, and science, art, industry, politics and religion together. Previously in human history each medium set the way that men felt, thought and acted about information. Now the electronic media, particularly television, provide a minimum of information but a maximum of involvement of all the senses simultaneously. It is for these reasons that McLuhan stresses the concept that the medium is the message.

While McLuhan uses the term ‘medium’ unproblematically and is quite happy to see it as a kind of technology, whereas other theorists like Mynard (1997) finds the term problematic and shares an uneasiness about conflating ‘media’ and ‘technology’. It is often implicit for Mynard that a medium is a particular use of technology; a harnessing of technology to an intention or purpose to communicate or express. When writing about the electronic media, McLuhan coins the phrase ‘the hidden environment’ (1969) to describe the effects of their presence;

*Media of all kinds exert no effect on ordinary perception. They merely serve human ends (like chairs)… media effects our new environments as imperceptible as water to a fish, subliminal for the most part.* (McLuhan 1969:22)

‘The medium is the message’ wrote Marshall McLuhan, which set the controversy over media effects on its head. No matter what the contents of programme, he argued, people will watch television; it commands their attention as no other medium has.

*Societies have always been shaped more by the nature of the media by which men communicate than by the content of the communication* (McLuhan 1967:1)

Contrary to this is the view of Kumar (2000) who feels that these tools ‘mediate the messages’, they are not the messages themselves. Albrecht
(1954) postulated that media might be considered as an agent of social change. According to this view the media are thought to be active in bringing about changes in the attitudes or behaviour of mass audience. For Lerner (1958) also, media are powerful tools for changing people’s participation attitudes and aspirations. Schramm (2000) said that they are miraculous in their power to bring about change. So, the general impression is that mass media have an awesome power over the mind of the individual, although the information received by Gill and Sabbarwal (1992) indicates that in case of media messages, at times people rely more heavily on interpersonal communications for deciding on issues which may challenge strongly held life long convictions.

Mass Media and Culture

Culture can be defined as a way of life, a composite of historical and living traditions, beliefs, values and practices reflect as much in patterns of childbirth, marriage and death, as in the music, dance, drama, clothing, public tastes and values and in the religious practices of the given social system (Reddi 1989). According to Hirsch (1971) media serves as a major communication link between groups, collecting together the members of different tastes, cultures for common exposure to the larger, dominant popular culture. It acts as an integrative influence in the society. If everyday population could ‘get on television’, we might begin to have a clearer image of culture (Williams 1982) as media can only provide a multicultural society. According to Reddi (2000) mass media are the transmitters of mass culture, the urban, western and influential elite control and dominate the mass culture scene, the norms and values of communication are in direct conflict with the values of society. The accessibility of communication satellites and transmission of foreign television programmes have not only revolutionized the communication system, but have also posed a serious threat to our social and cultural ethos (Mahajan and Luthra 1993).

The above view points underline the fact that culture is in the hands of media and elites and consequent upon this is a ‘multicultural society’, which implies a situation having a coexistence of several cultural groups. Thus the term multiculturalism infers a diversity or multiplicity of cultures. Culture is an
extremely important, complex and ephemeral term. Kaplan (1996) used the term 'polyethic' than multicultural; 'poly' meaning 'many', simply states that a society's composition is characterized by many different ethnic groups. Ethnic has come to be associated with ethos (custom) indicating mutually reinforcing bonds through religion, culture, custom and also, but not necessarily through biological origin. Thus multiculturalism means presence of various cultures in one society.

One more concept related with culture is 'cultural imperialism' which tends to suggest a 'hypodermic needle' model of international effects, 'American' values being injected into third world hearts and minds (Mohammadi 1996). The term media and cultural imperialism came to be used emphasizing the one way flow of products and services. The concerns surrounding media and cultural imperialism focus on the damage that can be brought to emerging nations and states by the increased availability of western originated cultural artifacts, which allegedly undermine the cultures, morals and values of the developing countries (Richards and French 2000). There has been a recurrent fear of 'Americanization' (Frith 1996) and the core states which have powerful capital, exploit the poor peripheries economically, with their culture dominating the culture of the latter by mass media (Wallerstein 1974). The same view is put forward by Richards and French (2000) according to which developed societies impose their values and beliefs on developing societies.

Alexander (1978) feels that the information given by the media has a constructive role for society. It does produce bias but this bias is 'moral' and has a good and necessary social function which is integrative in nature. On the other hand Schramm (1964) argued that mass media could help accomplish the transitions to new customs and practices and in some cases to different social relationships. Tuchman (1978) on the other hand professes that media reflects a mythical world where people live without comprehending what really goes on around them. We give utmost importance to media in our lives, so that we can not even think of staying without it. Media happened to us one day and has become a permanent member of our family (Berry 1988).

Today's media ensure that something new is rapidly and almost universally transmitted through all or most strata of the population, from one
city to countryside. This has the effect of accelerating, diffusing and standardizing the cycles of ‘fashion’ spreading new ideas and patterns of conduct, commodities and services to everyone, since most people are exposed to the same media or communication.

Frankfurt school is best known for its characterization of the diverse forms of the popular culture as a single ‘culture industry’ that ensures the continued obedience of ‘the masses’ to market interests. Horkheimer and Adorno (1972) described the culture industry as an ‘iron system’ that occupies consumers’ leisure time with amusements designed to enable them to bear the exhaustion and boredom of their increasingly ‘rationalized and mechanized’ work. The consumer is never left alone long enough to consider resisting the economic and social system. The culture industry claims to serve the consumers’ needs for entertainment, but conceals the way it standardizes these needs, manipulating them to conform to what it produces. Within this context, the present study tends to analyse computers as a culture industry and adolescents as young consumers of this culture.

Anti Social and Prosocial Effects of Media Content on Adolescents:

Before we begin examining the various anti social and prosocial effects of media on adolescents, let us first understand the term ‘adolescent’.

Who is an Adolescent?

‘Youth’ is a much debated term and there is no wide agreement on its meaning. The nature of youth is kept confused and frequently mixed up with such terms as the adolescence, puberty and pubescence. The meaning of the term ‘youth’ in Webster’s English Dictionary (2002:1144) is: “adolescence, puberty, pubescence, youth are frequently used interchangeably to refer to that part of life which is between childhood and manhood.”

Youth the most inclusive of these terms, applies sometimes to the entire period of childhood to maturity and sometimes to the period only between the maturity of sexual organs and attaining to other types of maturity. More than the other terms, ‘youth’ suggests the vigour, innocence and ingratiating attributes generally associated with this early period of life and so has come to suggest vigour or fullness of life generally.
Adolescence designates the same period as youth in its most restricted sense but carries a stronger implication of immaturity, suggesting the experience or awkwardness or mental or emotional instability often characteristic of that period of life; in legal use, it designates the period from puberty to full legal age of maturity. Strictly, puberty designates the age at which the symptoms of sexual maturity appear, as the growth of beard and alteration of voice range in boys or breast development of girls. More broadly, puberty covers the earlier period of adolescence. Pubescence is sometimes used as the equivalent of puberty, or more specifically, signifies the early years of sexual maturing or it is often marked by physical symptoms, which make the afflicted adolescent acutely self-conscious of his/her changing body.

So, an adolescent is one on the path from childhood towards adulthood. Recognition of the life stage between childhood and adulthood as a subject of modern scientific inquiry began in the early 20th century with the publication of Antonio Marro’s *La Puberta* (1898) and G. Stanley Hall’s highly influential compendium *Adolescence* (1904). Hall viewed adolescence through the lens of Ernst Halckel’s biogenetic principle, which holds that the human life span recapitulates the phases of human, biological and social evolution (*Gould 1977*). Hall maintained that late childhood corresponds to a period of peaceful savagery in the instant past, whereas adolescence represents a “neo atavistic” period of migration into a challenging environment, which prompted physical, social and psychological conflict and growth.

Nevertheless, the study of adolescence has been indelibly marked by the “storm and stress” motif. Each phase of life reflects social norms and institutional constraints and serves as principal source of identity for the individual by specifying appropriate behaviors and roles (*Elder 1980*). The study of adolescence as a life phase requires that it be situated in the life course, that its distinctive features be identified in comparison to both childhood and adulthood. Indeed, adolescence is frequently depicted as a transnational period of semi autonomy, reflecting movement from the complete dependence of children on their parents to the establishment of one’s own livelihood and family in adulthood (*Kett 1977; Katz 1979 & Gillis 1974*).
Hurrocks (1951) defined adolescence as a way of life and a span of time in the physical and psychological development of an individual. It represents a period of growth and change in nearly all aspects of the child’s physical, mental, social and emotional life. It is a time of new experiences, new responsibilities and new relationships with adults as well as peer. It is remembered as the time when our identities were established, when potentialities for accomplishment themselves were at their height. For many it is remembered as the period of being most alive. The friendship formed in these years, and the first love, have a kind of special permanence in our minds. So, adolescence is not simply a biologically determined period of life but also a socially organized phase of life (Friedenberg 1959).

Adolescence which is considered as exciting, besides a life altering phase of growth and development, demands not the crowd but space and time, privacy and room for expansion, freedom and opportunity for experimentation, responsibility and faith. One relative stable factor in this period of change is electronic media.

Williams (1982) introduced the concept of ‘electronic environment’ in his book ‘The Communication Revolution’. Electronic media includes television, radio, fax, machine, computers, press etc. Television era began in India modestly on September 15, 1959 as a medium of education, rural and community development. Our television environment is as important a part of our environment as air and water in our physical environment. While television has remained the most prominent medium in the last few decades, showing its presence in almost every aspect of human life, computer has taken it over almost like a storm. Many of the functions earlier performed by television, have now been replaced by CDs, video games have been substituted by computer games, and so on. It is worthwhile therefore to study the impact computer use has had, especially on children. However, so far we have empirical evidence on social effects of television. In some respects these can guide us towards formulating a research problem on social effects of computers. Before discussing the theoretical models let us have a look at the prosocial and antisocial effects of media content. The antisocial effect of viewing television and motion pictures is one of the most heavily researched areas in all mass media studies. Comstock, Chaffee and Katzman (1978)
reported that empirical studies focusing on this topic outnumbered work in all other problem areas by four to one, and this emphasis is still apparent more than a decade later.

The impact of prosocial content is a newer area and grew out of recognition that the same principles underlying the learning of antisocial activities ought to apply to more positive behaviour. Concern over the social impact of the mass media was evident as far back as the 1920s, when many critics charged that motion pictures had a negative influence on children. In 1928, the Motion Picture Research Council, with support from the Payne Fund, a private philanthropic organization, sponsored a series of 13 studies on movies’ influence on children. After examination of film content, information gain, attitude change, and influence on behaviour, it was concluded that the movies were potent sources of information, attitudes, and behaviour for children. Furthermore, many of the things that children learned had antisocial overtones. In the early 1950s, another medium, the comic book, was chastised for its alleged harmful effects (Wertham 1954).

In 1960, Joseph Klapper summarized what was then known about the social impact of mass communication. In contrast to many researchers, Klapper downplayed the potential effects of the media. He concluded that the media most often reinforced an individual’s existing attitudes and predispositions. Klapper’s viewpoint, which became known as the minimal effects position, was influential in the development of a theory of media effects. In the late 1950s and early 1960s concern over the antisocial impact of the media shifted to television. Experiments on college campuses by Bandura and Berkowitz (summarized in Comstock and Paik, 1991) showed that aggressive behaviour could be learned by viewing violent media content and that a stimulation effect was more probable than a cathartic effect.

The increasing popularity of video games during the early years of this decade opened up another avenue of inquiry for researchers. Results of some of the early studies in this area (Silvern and Williamson 1987) suggest that playing video games can lead to increased aggression levels in young children and is related to their self-concepts (Funk and Buchman 1996).

More recent research has reinforced this conclusion. Anderson and Dill (2000) measured aggressive personality traits, delinquent behaviors, and
video-game playing habits of 227 college students. Those who reported playing more violent video games in the past engaged in more aggressive behaviour and had lower academic grades in college. Sherry (2001) conducted a meta-analysis on 20 studies that examined a possible link between video-game playing and antisocial attitudes and behaviours. He concluded that, like the research results on exposure to TV violence and antisocial behaviour, there was a weak but statistically significant link between playing violent video games and aggression.

Other researches in this area too examined that the prolonged exposure to nonviolent pornography had many antisocial effects (Donnerstein, Linz, and Penrod 1987; Zillmann and Bryant 1989; Allen, D'Alessio, and Brezgel 1995).

**Theories of Media Effects**

The media are powerful sources in any society. Interestingly enough, an average person would normally claim that society is certainly affected by the media but that he or she, personally is not. Still, most people remain extremely interested in media effects and equally confused about them. Do violent television and films cause violence in society? Does internet use leads to socialization or isolation of an individual? The best answer to these and most other media effects questions is, "it depends." Several researchers have pointed out that this answer is not ambiguous as it might sound.

The answer "it depends" should not be met with despair and a throwing up of the hands. The answer "it depends" does not mean that we do not know what is going on. In contrast to what we knew 40 or 50 years ago, we now have some more definite ideas of what "it" depends on (Severin and Tankard 1997:322).

Effect models that place primary emphasis on effects of media go by names such as Catharsis Theory, Social Learning Theory, Cultivation Theory and Uses and Gratifications Approach. All these theories begin with television content as the stimulus to which children are exposed. Children look at and listen to what television presents and are affected by what ever is most clearly and cogently presented.
Catharsis Theory

The Catharsis approach suggests that viewing fantasy expressions of hostility reduces aggression because a person who watches filmed or televised violence is purged of his or her aggressive urges. This theory has some obvious attraction for industry executives because it implies that presenting violent television shows a prosocial action. The central theme of catharsis theory is that people in the normal course of daily life build up frustrations that eventually lead them to engage in aggression. For the catharsis theorist, viewing violent television content provides audiences with vicarious aggressive experiences. This serves as a harmless vehicle for relieving their feelings of hostility or frustration. It lessens their own need to engage overtly in aggressive acts. The basic prediction made by catharsis theory then, is that exposure to violent television content decreases the probability of violent behavior by television viewers (Feshbach 1961). Feshbach and Singer (1971) contend that televised violence may have a more important catharsis function for lower class as opposed to middle class audience members. They reason that the family training or socialization given to middle class children equips them with fairly good capacity to control their aggressive impulses. In contrast the family training given to lower class children does not produce well developed internal control mechanisms, thereby making them more dependent on the external control provided by cathartic theory.

Social Learning Theory

Since these early studies, many experiments and surveys have used social learning as their conceptual basis. As spelled out by Bandura (1977), the theory explains how people learn from direct experience or from observation (or modeling). Some key elements in this theory are attention, retention, motor reproduction, and motivations. According to Bandura, attention to an event is influenced by characteristics of the event and by characteristics of the observer. For example, repeated observation of an event by a person who has been paying close attention should increase learning. Retention refers to how well an individual remembers behaviours that have been observed. Motor reproduction is the actual behavioural
enactment of the observed event. For example, some people can accurately imitate a behaviour after merely observing it, but others need to experiment. The motivational component of the theory depends on the reinforcement or punishment that accompanies performance of the observed behaviour.

Applied to the effects area, social learning theory predicts that people can learn antisocial or prosocial acts by watching films or television. The model further suggests that viewing repeated antisocial acts makes people more likely to perform these acts in real life. Another suggestion is that desensitization accounts for people who are heavily exposed to violence and antisocial acts becoming less anxious about the consequences.

Other research has continued to refine and reformulate some of the elements in social learning theory. For example, the arousal hypothesis (Tannenbaum and Zillmann 1975) suggests that for a portrayal to have a demonstrable effect, increased arousal may be necessary. According to this model, if an angered person is exposed to an arousing stimulus, such as pornographic film, and is placed in a situation to which aggression is a possible response, the person will become more aggressive.

Other research has shown that social learning theory can be applied to the study of the effects of viewing pornography. Zillmann and Bryant (1982) showed that heavy exposure to pornographic films apparently desensitized subjects to the seriousness of rape and led to decreased compassion for women as rape victims. A similar finding was obtained by Linz, Donnerstein and Penrod (1984). Men who viewed five movies depicting erotic situations involving violence towards women perceived the films as less violent and less degrading to women than did a control group not exposed to the films. In sum, social learning theory is a promising framework for integrating many findings in this area.

Cultivation Theory

How do the media affect audience perceptions of the real world? The basic assumption underlying the cultivation, or enculturation approach is that repeated exposures to consistent media portrayals and themes influence our perceptions of these items in the direction of the media portrayals. Thus cultivation theory seeks to explain how television content influences children’s
mental images of the world in which they live. Its major proponents have been the communication theorists such as George Gerbner (Gerbner and Gross 1980; Gerbner, Gross, Morgan and Signorielli 1986). This theory simply argues that the more one is exposed to a particular construction of social reality, the more one will come to perceive that reality in similar terms. Cultivation is said to produce an indirect effect on viewers that develops cumulatively through repeated exposure, rather than in response to exposure to any particular program. The theory asserts that most of children's television viewing presents them with a consistent view of society in programs that influences in a process similar to erosion or cultivation. In effect, learning from the media environment is generalized, sometimes incorrectly, to the social environment. Some of the early researchers indicated that media portrayals of certain topics could have an impact on audience perceptions, particularly if the media were the main information sources. Siegel (1958) found that children's role expectations about a taxi driver could be influenced by hearing a radio program about the character. Defleur and Defleur (1967) found that television had a homogenizing effect on children's perceptions of occupations commonly shown on television. The basic hypothesis of cultivation analysis is that the more time one spends living in the world of television, the more likely one is to report conceptions of social reality that can be traced to television portrayals (Gross and Morgan 1985).

Uses and Gratifications

The functions of mass media in modern society have been described in different terms by several scholars, all of whom agree upon its pervasive influence on any society. The utility theory stresses the terms 'uses' and 'gratifications' maintaining that we usually pay attention to, perceive and remember information that is pleasurable or that in some way helps to satisfy our needs or interests. Even if this information is not consistent with our ideas, yet we will attend to it if we expect it to be useful to us in some way (Katz, Blumler and Gurevitch 1974). Becker (1979) holds that individuals not only selectively expose themselves to media messages but also selectively avoid media messages.
The uses and gratifications perspective takes the view of the media consumer. It examines how people use the media and the gratifications they seek and receive from their media behaviors. Uses and gratifications researchers assume that audience members are aware of and can articulate their reasons for consuming various media content. The uses and gratifications approach has its roots in the 1940s, when researchers became interested in why people engaged in various forms of media behavior, such as radio listening or newspaper reading. These early studies were primarily descriptive, seeking to classify the responses of audience members into meaningful categories.

Ruggiero (2000) argues that researchers must expand the uses and gratifications model to accommodate the unique features of the internet such as interactivity and demassification. He also contends that the growing popularity of the internet will make the uses and gratifications approach even more valuable in the future.

The advent of the Internet has spurred a renaissance in uses and gratifications research as investigators describe Internet motivations and compare and contrast their results with the uses and gratifications from traditional media. To illustrate, Valkenburg and Soeters (2001) found that Internet use among their sample of 8 to 13 year olds was most related to an enjoyment of using computers and finding information. Ferguson and Perse (2000) examined the World Wide Web as a functional alternative to TV and discovered that many of the motivations for using the web were similar to those for viewing television.

All the theories we have discussed so far stress the media’s effects on individuals but these same media appear to have significant long term effects on culture too. The role that the media play in changing us as a society is difficult to measure.

Most of these perspectives also clearly reveal that children are the first unit of society, directly under the influence of media. During the formative years of life, there is a curiosity among the children to know and learn new things from the different sources; and television contents play a significant role to meet their curiosity. Conventionally, children have learned about their own culture and themselves through the traditional agents of socialization: the
family, school, religious institutions and the peer group. In the present social scenario, however, adolescents stand at the crossroads of many competing agencies of socialization. The numerous channels of communication connect the individuals to the larger social world. It is a process whereby we learn and internalize the values, beliefs, and norms of our culture and, in so doing, develop a sense of selfhood. Though socialization we learn to perform our social roles as friends, students, citizens and so forth. Through the process of socialization continues throughout life, yet it is especially crucial for children and adolescents. Some of the agencies of socialization operate through interpersonal interaction and others through mediated representations; some are waning in importance at this stage while others are just beginning to exert their influence. It is through these institutions, especially the family, that children acquire many of their social attitudes and learn the values of their society.

Now a days, these conventional agents of socialization are replaced by the media, and television has been called as a member of the family (Singer and Singer 1977; Berry 1988), it is a family activity that involves an intermeshing of the constantly changing personal agendas, moods and emotional priorities of each family member with the fluctuating agenda of programmes that emanates from the television sets (Lull 1980).

**Empirical Studies Highlighting the Positive Portrayal of Television:**

Empirical studies on social impact of television point out towards two tendencies, opposite to one another; one highlighting the positive side of TV which can also be termed as socializing effect of television; the other treating it as negative and can be termed as an isolating instrument. All the empirical studies adequately highlight the psychological, sociological and physiological effects of television.

The first, emphasizing the socializing effect of TV argues that TV helps to bring a family closer as it punctuates time and family activity, such as meal time, bed time (Narayan 1987); television can bring the people of the world closer; it can cut tension and reduce conflict (Wirth 1988). Television is not only a great window to the world; but also a multicultural door to the universe (Berry 1988). Newcomb and Hirch (1984) argue that television provides a
cultural forum showing the range of response, the directly contradictory readings of the medium, that we use to its multiple meanings. Television is a ‘mirror that society holds up to itself and says, “this is what I am”’ (Tierney 1981). Dorr (1986) came out with an interesting finding that even television viewing is not on; it can be a stimulus to social interaction. Television facilitates discussion as it provides a subject for interaction. Literature on television indicates some of its other functions too. Electronic media (television and computers) provides images and ideas that can have important meaning for its users. These also act as a source of information, education, entertainment and consumerism and it is through these functions that they are likely to influence the viewers irrespective of gender or age.

Apart from socializing the young ones, TV also performs the task of resocializing them in terms of imitation of television models and development of child’s image of them; who then tries to emulate the new social role criteria (Chombart and Jose 1985). The child of today comes into contact with groups other than those in school; for instance through the mass media, which gave him/her access to remote groups and their cultures.

**Empirical Studies Highlighting the Negative Portrayals of Television**

Some scholars have highlighted the dysfunctions of television. Researchers like Marie Winn (1981) take the media, especially television to be plug-in-drug. Lazarsfeld and Merton also argue that media have a narcotizing dysfunction that distracts audiences from real problems and in fact prevents them from doing anything. In other words, the mass media have a drug like addictive effect, lulling audiences into passivity and sense of elation. It has so much become a part of our life that we cannot even imagine a day, without television. On 23rd August 2001, this idiot box was silent for 24 hours in Chandigarh and Mohali, inviting a lot of criticism from the viewers. Thus we can say that TV has become an integral part of our lives. The content of television is heavily biased quantitatively with respect to gender, race, class, violence, life events and much else. Besides, ‘frequency of messages has yet to be demonstrated to be isomorphic with viewers receptive processes’ (Durkin 1985). Newton was the first to call television ‘a vast wasteland’. Television was then something one watched only occasionally, just like going
to movies (Glasser 1988), but today we don’t know what to do without television. Lang and Lang (1953) speak of how television ‘refracts’ reality. It is an ability to fill in ‘what really happened’ from television accounts to construct the everyday world from the mass-mediated image. Some studies reveal that the children, who rely heavily on media advice and models, are less integrated with the family or the peer group; while others do not since their activities outside home provide them greater stimuli and other role models. The role of the primordial agents of socialization, i.e. the family, the peer group, and the working group, has probably been reduced (Rosengren 1994).

Thus new environment or the newer media forms such as computer games, internet, satellite television etc. have become a part of children’s and young people’s lives and they are especially significant for the socialization of younger people. Not only are they confronted with the proliferation of new communication facilities at early ages but their responses to them are speedier. Media especially the electronic, tends to be the most influential socializing factor for the youth today. As Rosengren (1994 b) has put it, effects of changes in the media structure seem to reach young people more rapidly than old people’, often negating, or atleast countering the impact of family and neighborhood. However, the electronic media, particularly the TV and now computer, tend to affect not only the physical but even the mental and psychological make up of children in several ways. Various studies show that children spend a good deal of their free time in front of television set rather than any other activity (Singer and Singer 1981; Arora 2000). Sheehan (1983) reported that more than half of all elementary school children watched television while eating their evening meals. Robinson (1972) investigated that the activities that decreased as a consequence of this were sleep, social gatherings away from home, other leisure activities (e.g. correspondence and knitting) conversation, and household care.

With the advent of electronic media, i.e. television and computers, our social roles and identities have become blurred or reconfigured in response to new kind of environment. As Meyrowitz’s (1980) principle example is what he calls the ‘blurring of childhood and adulthood’, which is a result of the new patterns of information flow initiated by television. Television brings adults and children together in social situations that were once distinct and allows
children to see parts of the social world that were previously hidden or difficult to access. In particular, according to Meyrowitz, television permits children to be ‘present’ socially, if not physically at ‘adult interactions’. Television gives children a much clearer view of the world of the adult secrets, they see more closely the ‘backstage’ behavior of adults. As a result, the adult world is much less mysterious to television age children; in large parts because they know that there is an adult backstage that is at least partially hidden. Postman (1982) also hold the same view that electronic media introduce children to an adult world they should not yet know about, it is violent, racist and commercial. According to Reddi (2000) young are the most unfortunate victims, if only because they are at a most absorbent and vulnerable age with great expectations and equal demands, it creates new myths among the children because it has an impact on passive imagination (Cazeneuve 1964), contributes to more limited intellectual growth because it spoon feeds and therefore provides little to think carefully about (Gross and Morgan 1985).

Heavy doses of televised crime, violence and brutality make the children aggressive, disturbed and anguished (Churchill 1981; Halloran et al. 1970), the aggression may turn into general animosity towards society or into something as a state of mind. It can also lead to maladjustment in taking up adult roles (Malik 1986). Juvenile offenders learned a variety of criminal techniques from television (Heller and Polsky 1976). Multi channel television often creates friction among siblings (Kaur 1997), or between parents themselves.

Electronic media have now emerged as the most potent means for raising the awareness, especially among the illiterate populations. However, whether it can bring about desirable social changes including modernization, the instilling of self discipline, civic and economic awareness, political rights etc., depends upon the content of communication as well as its receptivity at the other end. From the above findings it is clear that for children television is as real and influential as a parent or a school. They are increasingly being exposed to cultures different from their own. They are absorbing new ideas and impressions about the world-mediated by television long before they are capable of rationally articulating their own thoughts. Television viewing is also adversely affecting their reading, writing and concentration skills, besides
Human-Computer Interaction

A technical idea of interactivity has taken shape most strongly within the discipline of human-computer interaction (HCI). This is a scientific and industrial field which studies and attempts to improve the interface between computers and users. An interactive mode of computer use was first posited during the years of mainframe computers when large amounts of data were fed into the machine to be processed. At first, once the data were first entered, the machine was left to get on with the processing (batch processing). Gradually however, as the machines became more sophisticated, it became possible to intervene into the process whilst it was still running through the use of dialogue boxes or menus. This was known as operating the computer in an ‘interactive mode’ (Jensen 1999). This ability to intervene in the computing process and see the results of your intervention in real time was essentially a control function. It was a one way command communication from the operator to the machine. This is a very different idea of interaction from the popularized senses of hyper textual freedom described above (Huhtamo 2000).

Brief History of the Internet

The idea behind the internet is usually traced to a 1962 memo written by an MIT scientist who discussed a “galactic network” of interconnected computers through which everybody could connect to everybody else. As any online user knows, the internet has grown at a blazing speed. It was only in the mid 1990s that the internet became a reality for average computer users, but since that time, the internet has grown rapidly and it affects almost every area of our lives.

Just a few years ago most users of computer networks were academicians, hobbyists, “netheads”, and technophiles- the people the computer industry calls “early adopters” in contrast, many users today are just ordinary people who are not particularly interested in the technology but who have a job to do and who choose to use computer networks as a tool for
doing it. While computer networks remain entirely inaccessible to most sections of society, for some groups and within some communities access to an online service or the internet is almost as commonplace as having a telephone. Our computer driven society demands that students develop the ability to operate in a technological environment, acquiring the knowledge and skills necessary to be productive. In addition, so much of our planet is rapidly becoming connected via the internet that online protocol has become an intrinsic part of technology based curriculum. Increasingly, online computer use is growing and spreading widely. Estimates indicate that 149 million people are online worldwide, and that number is increasing at the rate of 12% a month (Suler 1996). With this trend, educators and researchers are beginning to wonder about the impact of the internet on the social skills and psychological well being of our children.

In recent years, computers and the internet have appeared with greater frequency within the popular media. There have been a number of successful Hollywood, Bollywood and small screen soap operas about the internet. In these media, we can see both the positive view of the internet as trendy and useful alongside the negative critique of the internet as the home of malicious hackers, criminals, and illegal activities. These useful and potentially dangerous portrayals of the internet often coexist side by side. Let us explore the various positives and negatives of internet on adolescents.

**Empirical Studies Highlighting the Positive Portrayal of Computers and Internet**

There is no shortage of academic and theoretical critiques casting a positive light on the internet. There are studies about the possible benefits of participation in online communities. Researchers have written about the freedom of anonymous users to experiment with their multiple selves (Turkle 1995) and their gender (Stone 1993). There are some who praise the benefits of the internet as it helps in actually grooming the social skills of youth. Simon (1997) was of the view that when we think of children and computers, the image of endless hours of playing games comes to mind. There are many opportunities for children and youth to interact online in productive and positive ways. He said that there are many online magazines and virtual
forums in which youth write and communicate their ideas. Thus internet offers
a good way to youth to express themselves. Tapscott (1999) hold the view
that “.... when kids are online, they're reading, thinking, analyzing, criticizing
and authenticating - composing their thoughts. Kids use computers for
activities that go hand-in-hand with our understanding of what constitutes a
traditional childhood. They use the technology to play, learn, communicate
and form relationships as children always have. Development is enhanced in
an interactive world” (www.victoriapoint.com/childtechnology.htm).

Empirical Studies Highlighting the Negative Portrayal of Computer and
Internet.

There is also no shortage of researches about the negative theoretical
critiques of online communities

Kroker and Weinstein in the book Data Trash: The Theory Of Virtual
Class (1994), warn of the increased loneliness of the online community. They
mentioned,

“The ‘virtual community’ of electronic networking has such
charismatic appeal today because, like a failing spacecraft, we are re-
entering the burning atmosphere of the lonely (virtual) crowd........A
technologically generated community that has no existence other than
as a perspectival simulacrum, and on behalf of the media-net functions
as a violent, but always technically perfectible force-field (the ‘perfect
sound’, ‘more memory capacity’) for hiding the loneliness within............
Consequently, the ruling ideological formula of virtual culture: electronic
mediation at the (recombinant) top; organic disconnection from below”

Another study called ‘Homenet’ (1995) undertaken by the Carnegie
Mellon University suggest that greater use of the internet was associated with
decline in participants’ communication with family members in the household,
decline in the size of their social circle, and increase in their depression and
loneliness. Taking another twist, further findings suggest a small but
significant number of people blame excessive online use for the break up of
their marriage (Eykyn 1999).
Various studies suggest the existence of addictive behaviour patterns among heavy internet users (Greenfield 1999; Young 1998). Identified symptoms of the disorder include: a) using the computer for pleasure, gratification, or relief from stress; b) neglecting work, school, or family obligations; c) feeling irritable and out of control or depressed when not using it; d) spending increasing amounts of time and money on hardware, software, magazines, and computer related activities (Gawel 1998).

Referring to the study, it was found that teenagers are much heavier internet users than their parents. While adults tend to use the internet as a part of their job and to get employment-related communication, teenagers were more likely to use the internet to play games, to listen to music, and to meet new people. Weinstein (1998) holds the belief that internet users will lose the savvy, skills and patience to conduct social relations in the corporeal world and the internet will intensify the negative effect television has already had on our social skills and has deteriorated the values and social functioning of our youth. Internet has been declared as a prime culprit for its innate game playing capabilities, suspected addictive tendencies, and beckoning sexually explicit temptations (Fainaru 1998).

Recent research on internet usage suggests that time spent on the net displaces time spent on the other media, particularly television. TV viewing suffers because a great deal of internet usage is in the evening hours, when people traditionally watch TV (Weaver 1998). Since the internet is so new that research about the effects of the medium has yet to emerge, nonetheless, there are some indications about what is to come. Stevens (1998) raises questions about the impact of pornography web sites, particularly on the young people. DeKeseredy, Schwartz, and Bergen (1998) suggest a connection among viewing pornography on the internet, male peer support, and abuse of women in dating. This area will probably be examined closely in subsequent years. Another potential harmful effect has been labeled “internet addiction” (Young 1998). This condition is typified by a psychological dependence on the internet that causes persons to turn into “online alcoholics” who ignore family, work, and friends as they devote most of their time to surfing net. Young estimated that perhaps 5 million people may be addicted. Nie and Erbring (2000) report that heavy internet users spent less time talking...
to family and friends over the phone and spent less time with family and friends in person. On the other hand, the Pew survey (2000) found the opposite. Their results suggest that internet use actually sustain and strengthen social and family ties.

These competing views have come from within general society and academia. For some, internet is a useful resource, an efficient way to communicate, and something without social stigma attached. On the other side are those who feel that computer networks are dangerous places which allow very easy access to bomb making instructions and child pornography. How these divergent views are relevant sociologically?

**Sociology of the internet**

There is a huge literature, dubbed 'internetphilia' by Korinna Patelis (2000), which argues that the internet offers a solution to a series of intractable problems. It is represented to be a patent medicine for our social ills: the decline of social community, political apathy, national prejudice, social discrimination, public disempowerment, and much else. It is often argued that the internet is shrinking the universe and promoting international understanding (Rheingold 2000). This view focuses on the potential of internet technology to enable free and equal exchange between people around the globe. What it ignores is the way in which this global interchange is distorted by unequal relations between rich and poor. Language is another significant point to be discussed here. Less than 10 per cent of the world speak English as their first language. But English is becoming intelligible to a growing number of people, and has begun to assume the function once occupied by Latin in medieval Europe as the shared language of a transitional elite. In the late 1990s, an estimated 85 per cent of the web was written in English (Kramarae 1999).

Mass media research follows a typical pattern when a new media develops. This research is conducted in phases. Phase 1 concerns an interest in the medium itself: the technology used, functions, access, cost. Phase 2 deals with the users of the medium: who they are, why they use it, what other media it displaces. Phase 3 pertains to the social, psychological, and physical effects of the medium, particularly any harmful effects. Finally phase 4
involves research about how the medium can be improved. Research examining the internet has generally found this pattern (Wimner and Dominick 2003).

The internet is such a recent development that it is too early to write the history of internet research or to talk about theoretical developments. Phase 3 research about the effects of the medium has yet to emerge. Nonetheless, there are some indications about what is to come.

Internet has an amazing capacity about the ways individuals and groups are using the internet to build communities or so called virtual communities. Virtual communities involve a combination of physical and virtual interaction, social imagination, and identity. They may be distinguished from physical communities in that virtual communities can extend the range of community, and individuals can tailor their personal communities (Bauman 2000; Wellman 2001).

Williams (1976) notes in his analysis of the history of the concept of community that the term 'community' entered the English language in the 14th century from Latin by way of French. ‘Community’ referred primarily to the geographically localized group of people until approximately the 17th century. But beginning between the 17th and 19th centuries, "community expanded to include the group of people who hold something in common (as in community interest) or who share a common sense of identity even if they do not live in a single locale. This expansion of meanings was accompanied by a self conscious separation between the idea of community and the idea of society. The distinction between the community and association has come down to us from the work of German sociologist, Tonnies (1887/1940) as a contrast between a more direct, more total and more emotionally charged set of relationships (community/Gemeinschaft) and the formal, abstract, and instrumental relationships associated with the idea of society (Gesselschaft) which in turn is closely related to the concept of nation state and its bureaucratically mediated institutions.

Rheingold, initiator of the Well, an early and famous virtual community, illustrates this new form of personal/community regeneration when he writes....
My flesh and blood family long ago grew accustomed to the way I sit in my home office early in the morning and late at night, chuckling and cursing, sometimes crying, about words I read on the computer screen. It might have looked to my daughter as if I were alone at my desk the night she caught me shortling on line, but from my point of view I was in living contact with old and new friends, strangers and colleagues (Rheingold 1994:www.virtualcommunity.com).

Even the term virtual has a history. Curiously the “virtual” came into English language from Latin and French about the same time as did the community. Initially it referred to things that had special and effective physical capacities, linking it closely to our ideas of virtuous. But in the 17th and 18th centuries, like community, the meaning of virtual underwent changes. The complete Oxford English Dictionary (1998:931) identifies this new meaning as something “an image or environment generated by computer software with which a user can interact realistically using a helmet with a screen inside, gloves fitted with sensors, etc.” At the same time, virtuality became associated with optics, referring to an apparent image created by refraction upon rays of light.

Rheingold, who appears to have coined the term “virtual community,” provides a definition that accords reasonably well with the “so in essence or effect” of virtual in extending the term apply to communities when he wrote, “... people in virtual communities do just about everything people do in real life, but we leave our bodies behind. You can't kiss anybody and nobody can punch you in the nose, but a lot can happen within those boundaries” (Rheingold 1994:www.virtualcommunity.com).

Before the emergence and application of digital technologies, T.V. for instance was widely perceived as the bad object and this inscription has been important as a foil to celebrations of interactive media superiority over broadcast television (Boddy 1994). Television is associated with passivity, encapsulated in the image of a T.V viewer as an inert ‘couch potato’ subject to its ‘effect’, while the interactive media ‘user’ conjures up an image of someone occupying an ergonomically designed, hi-tech swivel chair, alert and skilled as they navigate and make active choices via their screen-based interface.

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Certainly every commercial web site appears to have added an interactive layer to attract more traffic and there is a great deal of diversity in the ways people are using internet and the range of online social interaction that occurs (Kling 2000). As international email conversations become quick and easy, and chat rooms eliminate spatial barriers and make long distance sociability instantaneous, many researchers studying computer mediated communication and the virtual world have to grapple with the potential for communication technologies to compress time and space as well (Harvey 1990), but it has also had profound consequences for the individuals who interact with one another over these vast distances and for their local culture. These consequences have led to what Turkle (1995) called an "identity crisis," wherein the sense of self in virtual spaces becomes multiple as a function of diverse relationships and social arenas. People cruising the chat rooms searching for relationships often times portray themselves in a way that will make them attractive to others. There are the obvious "millionaires", but mostly people come on portraying themselves, not necessarily as themselves as they truly are, but as they would like to be, or at least how they would like others to see them. Goffman's (The Presentation of Self in Everyday Life 1971) theory suggests that in this environment individuals have the opportunity to present their "idealized self". This of course creates a problem when the two people actually arrange to meet in real life, and neither is anything like the character they portray online. If one or both of the characters have not been playing their "real" selves, then the other finds that they have actually "fallen in love" with an icon, an ideal type - the character created by that person.

Email correspondence is quicker than face to face conversations. Further, email interactions tend to have aspects of each of these modes of communication; email interactions are a little like letters and a little like conversations. Many people email simple requests because it is less invasive than a phone call and hence seen as more polite. In this instance, the individual is willing to wait longer for the interaction to unfold than it would over the phone. As such, communicative interaction is stretched out. These more stretched out conversations have become a part of daily life in many social arenas.
Wellman and his colleagues (Chmielewski and Wellman 2000) suggest that even though new users of the internet may initially substitute online “weak” social relationships for physically close “strong” social relationships (Kraut et al. 1998 and Nie and Erbring 2000), over time this effect disappears. In fact, long term users of the internet are more likely to maintain contact with those they are close to, including those in close physical proximity, with the result of stronger ties between colleagues, family and so forth.

The internet undoubtedly creates possibilities for interaction that people did not have before (Cherny 1999; Davis and Brewer 1997; Herring 1995). Such interactions leads to the enacting of networks, and often the traces (e.g. e-mails, web pages) of these interactions remain as influences on social relationships, the distribution of social goods, and the structure of work. (Wellman et al. 1996; Wellman and Gulia 1996). Internet communication, like the telephone and the telegraph, is less personal and allows for fewer forms of communication than do interactions in real space. There is no voice intonation or facial expression nor are there other extra linguistic cues. However, internet communication is also cheap (once it is in place) and instantaneous. It allows people to communicate over great distances, and they may share pictures, diagrams, and so forth.

The absence of the rich nonverbal cues that guide us well in face to face encounters are missing, so the ‘cold’ nature of online communication can lead to problems. Further, many online activities are asynchronous, that is, my turn and your turn, rather than simultaneous as with face to face. As a result, “on-line activities are troublesome especially loss of gender information and in this situation women users suffer more from losing these nonverbal cues, as they are said to be better at using them face to face” (Wallace 1999:210).

Using computer is fun and they help us in so many ways as we have discussed above. Computers can do amazing things at the touch or click of a button, bringing you to power, convenience and control.

Is it good or bad to introduce young children to computers? People opposed to it argue that computers do not allow natural growth in a child who needs more real life experiences than a computer can possibly give. The supporters would however make a counter argument, saying that computers are only an aid in addition to the normal learning process and open a new
scope for learning. Either way, there is this given factor that the world today has computers and, secondly, they will be forced to learn using them if they have to move along with the world as computers are now a more important tool than the age old pen. To say that you are educated but cannot use a computer is today as ridiculous to say ‘I am literate, but cannot use a pen’. According to the researchers, the appropriate age for introducing computers is anytime after three, as children grow older, they start accessing the internet, which needs supervision (Bains 2001). This clearly shows that the first immediate area of effect is children who are the heavy consumers of computers. ‘On an average, 14 out of 20 computers are used to access pornographic sites. Most of my customers are basically children who come here only to access these sites’ said Amritpal Singh from Frontline Cyber Café in Phase VII, Mohali (Sandhu 2001). During my visit to some cybercafes I came to know from the owners that the school and college going students (12-18 years) were their most frequent customers. They pool the money and sit for hours in front of computers and the most popular sites which they open are related with pornography (www.worldsex.com, www.desibaba.com) and blue films. Children prefer going to those cyber cafés that provide separate cabins with tinted gasses or even full length doors with a bolt which provide absolute privacy. ‘If an old man is watching porn site how can you stop a child sitting next to him’? said one of the cyber users. According to international internet rules, government also cannot put a ban on these sites (Sharma 2000). UT DIG Ajay Kashyap points out that watching a pornographic site or downloading matter for personal use is not an offence. However the Indian Penal Code (Sections 292 and 293) does deal with obscenity. So what is the way out, when the law has no teeth and any software preventing access to these sites is easily bypassed (Sandhu 2001)?

Sex, drugs, gambling and rock ‘n’ roll are the biggest growth industries on the net. A survey by internet statistics company ‘netelevisionalue’ showed that over one third of the net users had visited a porn site (Riaz 2001). Many a times, a child may enter some ‘illegal’ or ‘unlawful’ chat room accidentally or out of curiosity. Many such chat rooms have been created for adults and carry sexually explicit conversations. Gaining access to pornographic material is quite easy. Almost all popular chat sites such as IRC, excite, yahoo! or even
rediff have chat rooms such as the hot tub, boys for boys, the x dungeon, etc., which are a haven for exchange of files containing pornographic images (Khanna 2001). Now a days, one can easily know the password of others while chatting and can access his/her connection. People also capture websites of others and make changes on it, a phenomenon resulting into ‘cyber crime’.

Besides all these implications, the exercise of this very power could make us lose control over our own body or, in extreme case, even cripple it. The most common complaints of the people working on computers are related with eyes or vision, stress, strain, posture, back and neck problems etc. (Bains 2001).

After looking at both, TV and computers, we can very easily draw differences between these two. So far as TV is concerned, literature clearly reveals that it is like a permanent member of the family, the whole family watches TV together, which includes family discussions on some programmes, and with this family members get a chance to talk to each other. On the contrary computer is to be operated by one person alone and there is no chance for family members to sit together and indulge in discussions. Thus we assume that an excessive use of computer may lead to social isolation.

**Theoretical framework**

The parallel between computers and other kinds of electronic media, especially television, notwithstanding, there can be no denial of the fact that computer is not merely a medium passing on messages to the users. It has an additive quality of being an interactive mode, which may not always be used for gaining information. It has the unique attribute in that the user too can send messages, make his own input and indulge as an active participant, rather than being merely a passive user. This makes it more problematic. Most of the theoretical perspectives discussed earlier in this chapter, therefore would explain only a part of computer effects, conceiving computer as a medium and user as a receiver. These perspectives are unable to explain the long lasting and radical effects computer can exercise on the structuring of social relationships, designed by this machine. The pertinent question therefore is, how are these new emerging relationships through the computer
impacting upon the traditional ones? None of the existing perspectives deals with this issue. Yes, the conception of ‘culture industry’ developed by neo Marxists tends to visualize the electronic media (e.g. computers) as manufacturers of a culture, so readily being adopted by the contemporary societies. Hence the present study has attempted to examine the social effects of computer use on adolescent users in terms of the new images and reality ‘constructed’ by the medium of computer, where the ‘virtual’ may become more real than the ‘real’ itself.

Formulation of the Research Problem

Whereas the tremendous impact of TV upon children has already become a subject of systematic research, as is indicated by the review of literature in preceding discussion, the urban upper and middle class adolescent is today being extensively exposed to cyber technology, with even greater implications. The young children, having been fed up with the TV channels, find fascination in playing games on computers, surfing and chatting on the internet. The trend becomes obvious if we throw a look at the sudden mushrooming of cyber cafes not only in posh upper class markets but even among dhabas and rehri markets. The clientele these shops attract ranges from the poorest to the most affluent. Since a very small proportion of the population can afford a computer of their own, this tendency has been effectively exploited by small and big entrepreneurs alike, who are renting out these services. It is a different thing that they themselves may not know much of computers.

Parents and peer group are the most important and immediate groups with which the child has a direct and face to face contact. These groups are termed as ‘primary’ by Cooley and ‘significant others’ by Mead. What kinds of changes occur within these groups with the introduction of computers have not been studied. While a number of studies have already been conducted on effects of television on intra family ties, children etc., there is not much literature on the effects of an increased use of computers, especially the internet, upon intra familial ties. The present study aims to study the changing equations between parents, peer group and adolescents.
In addition, commercialization of this facility, solely for profit making has all of a sudden exposed young minds to a flood of information, without any discrimination as to what is good or bad for them. Hence we require more empirical studies to assess the social effects of this phenomenon. The present study has been designed in this backdrop.

An investigation into the effects such trends have on people, especially the youth, is pertinent at this juncture since these have long term social and cultural bearings. Both sitting in front of TV as well as the computer implies the physical preoccupation of an individual with it, at the cost of a social activity which he otherwise would have undertaken. While some academicians and researchers consider TV viewing as a social activity, participated by all the family members, it is argued here that computers necessarily lead to an ‘isolating’ experience. Since there are no separate theoretical models on the social effects of cyber technology, it is interesting to recapitulate studies on television and will help us in differentiating the two electronic media. Two distinct perspectives have emerged, one, which looks at TV viewing as a ‘socializing’ experience and the other which treats it as an isolating exercise. Both view points have been substantiated but in specific contexts. For instance, TV provides a common platform for a family or a neighborhood, where it is jointly owned. It then becomes a community watching with physical proximity and verbal interaction between the viewers. Post telecast discussions among the viewers usually generate a social interaction too. But its socializing capability does not go beyond. Studies have shown that both adults and children often neglect other activities (mostly socializing) for the sake of watching their favourite programmes. Further, more than one TV set in a household have been found to distance family members both physically as well as socially (Kaur 1997) both within themselves as well as from others.

Before undertaking this research project, researcher interviewed some cyber users and cyber owners who helped in understanding how people portrayed themselves in chat rooms, how anonymity and gender bending was present in the on line relations and how children have an easy access to several rooms of child pornography. Although all the activities may be viewed as only a text based content, it is still viewed as a felony and immoral by
society, and one may theorize that such communicative behaviour may affect the development, socialization, and sexual behaviour of the children or adolescents involved in such conversations.

Objectives

In view of the existing literature it may be inferred that with the growing trend and an increasing dependence on electronic media, the ties both among as well as within families tend to weaken. Hence it may be assumed that computers would be expected to further reduce the interaction between the members of the family. However the specific objectives of the present study are listed below.

1. What is the association between the socio economic status of the adolescents and the nature of access they have, to computers?
2. What are the purposes for which adolescents use the computers and how these vary between private and commercial locales?
3. Is there any association between the prolonged use of computers and
   a) physical ailments
   b) academic performance and
   c) social interaction among adolescents?
4. Which of the two roles the computer is performing in case of adolescents -‘isolating’ or ‘socializing’?
5. How do the factors such as gender, age, socio-economic status, schooling etc., intervene in the interplay between computers and adolescents?
6. Finally, how is the computer perceived by the adolescents, their parents and teachers- a boon or a bane, and why?

Research Methodology and Data Collection

The present study was conducted in the city of Chandigarh. This city as well as its schools make a typical case representing socio economic distinctions within its population, making it convenient to distinguish one socio-economic segment from the other. In Chandigarh almost every sector has one government school, while some of the sectors have more than one government school. Some government schools are known as high schools.
and others as Model schools. The names of the government schools depend upon the sector in which they are located, for instance, school in Sector 33 is known as 33 Model School and a school in Sector 15 as 15 Model School and so on, whereas private schools are known by different names.

Since the present study undertook a comparative analysis among upper, middle and low socio-economic groups of adolescents, four schools were purposely selected. These were Shivalik Public School, Sector 41, Government Model School of Sector 40, Government Model School of Sector 33 and S.D. Public School of Sector 32. During the pilot study, students of 10+1 and 10+2 in the medical and non medical streams reported that they were busy in tuitions during evening hours and hence spent less time with computers as compared to students of arts stream. Thus, population for this study consisted of all the students of classes 10+1 and 10+2 of the arts stream in each of these four schools.

Hence, the universe for this study comprised of the students studying in these four schools, which represented upper, middle and lower socio economic groups respectively. The rationale behind choosing two government and two private schools was twofold: 1) these represented children of different socio economic background and ii) all these schools were co-educational institutions, which enabled us to examine gender differences.

The sampling frame for this study consisted of all students of 10+1 and 10+2 students of arts stream in these schools. The information regarding the school students was obtained from school authorities. Further, students who used computers daily were identified. In the final stage, 50 students from each of these schools, who used computers, were selected by using the method of systematic random sampling, making the total sample of 200 students. In addition to students, 15 cyber users were interviewed in the cybercafes. Cybercafes near these schools and popular cyber cafes of the city were selected purposely and interviews with the adolescent users were also conducted there. Data was personally collected from 12 teachers in these schools. Besides, a sample of 20 parents of adolescents was interviewed in order to know their reactions towards the impact of computers on the children. In addition to this, 8 cyber cafe owners were also interviewed. Selection of the Cyber owners’ was based upon their willingness to respond. Finally, 7 case
studies were made a part of the present research study since these cases were peculiar in many respects. A few of the case studies were narrated by a clinical psychologist while others were reported during the field work.

Before finalizing the interview schedule for the adolescent respondents, a pilot study was conducted on a smaller sample of respondents. It helped me to know if the respondents understood the questions adequately and if there were any irrelevant questions or any hesitation among the respondents in answering the questions. After this pretesting, any flaws if found, were removed. Thus, final interview schedule was constructed to elicit relevant information from the adolescent students. However, an effort was made to conduct the interviews in the absence of any peer or family pressure. Both open ended as well as fixed alternative questions were framed to obtain relevant information. During the pilot study, it was observed that the cyber users were not giving much time for interview and they were found to be in a hurry. So for the cyber users, parents and teachers no separate interview schedule was prepared, rather unstructured, detailed discussions were held depending upon the availability of their time. For cyber owners separate interview schedule was constructed to elicit information from them regarding the use of computers by adolescents and the commercial tactics of the business.

After the collection of data from various sources as mentioned above, relevant information given by adolescent respondents were tabulated and simple frequency tables were made. Frequencies were interpreted in the form of percentages. Both quantitative and qualitative data have been used for drawing inferences. Besides, the structured interview schedule in the field, in depth discussions with the respondents, cyber users, cyber owners and parents were also conducted and various interesting facts came to the fore. As there were many interesting narratives, I have used their quotes and statements in verbatim at relevant places. A few case studies which reflected interesting behaviour patterns of the children towards computer have also been discussed in the research. Therefore, an effort was made to draw generalizations based on the qualitative and ethnographic data.

The Chapter scheme of the present study is as follows:

1. Introduction and Formulation of Research Problem
2. Adolescent Computer Users: A Socio Economic and Demographic Profile
3. Where, How Much and Why are Computers Used? : Adolescents’ Revelations
5. Computers - A Necessary Evil ? An Ethnographic Account
6. Conclusions and Inferences