"the telephone is an irresistible intruder in time and space"– McLuhan

Impact of Cell Phone Usage on Behavioural Patterns of Undergraduate Students in Pune

An Introduction

1.1 Prelude:

The world today is heading towards the post-modern era of civilisation. This phenomenon is due to the Information Technology Revolution (ITR) that took place during the 1980s and the 1990s, and the first decade of the 21st century.

It was March on 10, 1876 when Abraham Graham Bell demonstrated the functioning of the telephone. People of that period could not have imagined an instrument like today’s cell phone and the entire gamut of communication facilities on offer. It could have been impossible to envisage that anyone could be traced anywhere on the globe within a fraction of a second using this gadget. People in the sixties, seventies and even the eighties of the 20th century, experienced a phone only in the latter stages of their lives. On the other hand, the young generation, post 1990s, is born and brought up in the High-Fidelity Audio Technology and Wire Free world. New media have vastly expanded the options for entertainment and information content. Human civilization is in the midst of a revolution in communication technology that is transforming social orders and cultures around the world. Each new technological device expands the possible uses of the existing technologies. New media can be combined to create media systems with a greater span that can also serve a wide range of highly specific purposes.
In retrospect, the first century of mass communication (that is the 20th century) is referred to as one dominated by technologies that now appear to be expensive and clumsy because they provided a limited array of services to gigantic audiences. People accommodated their needs to what media technologies of that era could provide.

Communication is an individual human need as basic as food, clothing, and shelter. Basic needs are those that are essential for our existence and our very survival. They are the very preconditions of human life (Traber).

Since communication is the basic need of human existence it is dependent on media usage, and this media dependency was identified by Ball-Rokeach and DeFleur in 1976. Dependency is defined by these two exponents as ‘relationship in which the satisfaction needs or the attainment of goals by one party is contingent upon the resources of another party’ (Fortunato, 2005, p. 35). Media possess resources which include the capacity to a) create and gather, b) process, and c) distribute information. Media use is prevalent and purposeful because of the ubiquitous presence and because there are so many needs satisfied through this behaviour (Fortunato, 2005, p. 35). Individual media dependency relates strongly to media use and the uses and gratifications perspective. Ball – Rokeach and DeFluer (1986) identified three needs where audience members are dependent on the media systems: a) the need to satisfy information goals to understand one’s social world, b) the need to act meaningfully and effectively in the world, and c) the need to play, satisfy, exposure, or escape from daily problems and tensions (Fortunato, 2005, p. 36). The society which has experienced Information and Communication Technology during late 1990s onwards became media dependent due to media convergence. This media dependency is both personal and social (Defleur & Dennis, 1991, p. 4).

In other words, ‘we are in the midst of a revolution in communication technology that is transforming social orders and cultures around the world. Each new technological device expands the possible uses of existing technology….. New media have largely expanded our options for entertainment and information content.’ (Baran & Davis, 2000, p. 3).
With change in the social order, the style of communication is changing and simultaneously, behavioural patterns of youngsters are also changing. The theory propounded by a Canadian political economist Herald Innis in his books, ‘Empire of Communication (1950)’ and ‘Bias of Communication (1951)’ focused on the social changes that occurred due to the change in media. “Innis maintained that before elite discovery of the written word, dialogue was the dominant mode of public discourse and political authority was much more diffused. ……….. Similarly, the structure of later social orders also depended on media technology available at a certain point in time. ………Thus, the development of media technology has gradually given centralised elites increased power over space and time.” (Baran & Davis, 2000, p. 286)

Marshal McLuhan extended the idea proposed by Harold Innis and stated that

- **The Medium is the message**, that is, characteristic of all media; the ‘content’ of any medium is always another medium. The content of writing is speech, just as the written word is the content of print, and print is the content of the telegraph (McLuhan, 1964).

- **Hot and cool media**: There is a basic principle that distinguishes a hot medium like radio from a cool one like the telephone, or, a hot medium like the movie from a cool one like TV. A hot medium is one that extends one single sense in ‘high definition.’ High definition is the state of being well filled with data. On the other hand, hot media does not leave so much to be filled in or completed by the audience. Hot media are, therefore, low in participation, and cool media are high in participation or completion by the audience” (McLuhan, Understanding Media).
A careful study of the above statements leads us to the conclusion that the mobile phone is the hottest medium as it converges all the media presently available to mankind. It is also the coolest as it gives ample opportunities to the user to fill the details and at the same time interact with other users. Youngsters from the society are more prone to use this medium.

While commenting on the youth as a stage of human development G.S. Hall (1904) is of the view that adolescence is the period of heightened ‘Storm and Stress Tendency’ to question and contradict their parents, in their mood disruptions, and in their propensity for reckless and antisocial behaviour. Aristotle stated that ‘youth are heated by Nature as drunken men by wine’. Socrates characterised youth as inclined to ‘contradict their parents’ and ‘tyrannize their teachers’. Rousseau relied on the stormy metaphor in describing youth ‘As the roaring of the waves precedes the tempest, so the murmur of rising passions announces the tremulous change’ (Arnett, 1999). Adolescents have problems such as symptoms of internalizing disorders (e.g. anxiousness, insecurity, and depression) and risk taking / rebelliousness (e.g. recklessness, impulsivity and rudeness) (Buchanan & Holmbeck, 1998, pp. 609 - 620).

Practising psycho & behavioural therapist and Counsellor Dr. Shreekant Chorghade (2010) explains this phenomenon as ‘on one hand, they are effervescent, vibrant, full of energy and do not hesitate to experiment with life. On the other hand they are tender, inexperienced, immature, and raw in nature that their personality needs to be moulded. When they are exposed to a vibrant medium like the cell phone, it definitely has an impact on their persona.

Cell phones have now become cross-generational staples as people of all ages communicate with each other across the world (www.ehow.com). Wilson, Carol (2008) reports Americans would rather give up their TV, internet access or wireless email device than give up their cell phone, according to the Pew Internet Project survey and one reason for that strong attachment is that people are doing more with their cell phones than just making phone calls (Wilson, 2008).
Mr. Suhas Gatne, Faculty Audio-Visual Communication Symbiosis Institute of Media and Communication, Pune stated that the cell phone enjoys this status of the well accepted and most popular medium of communication in modern society because of three reasons: a) it is the latest medium thus the novelty of the medium attracts the common people to use it; b) its technology is developing very fast. The advancement of technology is facilitating all types of communication like text, voice, audio, still pictures, video as a confluence. Thus this technology is fascinating and alluring too - for example - with aid of high-speed cellular network, any video, audio, or multimedia files can be shared with a blink of an eye lid. The lightening fast mode of communication has resultanty posted a tremendous boost to the business functioning all over the world. Many mobile phones coming up with video calling or instant messaging, communication and information sharing has become a tremendously fast and interesting process. Cell phones are armed with powerful lenses. And with advanced image capturing abilities, boosted by several image enhancing features, mobile phones with cameras offer dimensions to communication. With the aid of video, sound and animation, mobile phones have increased the effectiveness of a communication process to an unimaginable extent (Dev). And c) it has ubiquity (Katz, 2005) i.e. an omnipresent tendency that means, we are sure of an ‘any-time any-where’ communication possibility. Today let it be a business deal or a personal communication necessity, a mobile number is just enough to guide a necessary soul to the destination of the desired one, that too within a blink of an eye lid. It is because of this portable communication tool that loved ones at any corner of this vast world can be reached to (Dev). All these provide advanced facilities of communication and entertainment to mobile phone users.

With all the above discussions by eminent media scholars it is an important area of communication to find out the impact of the mobile phone, as a medium of communication, on the society, especially on the behavioural pattern of the young generation.

Hence, the researcher has selected the topic titled ‘Impact of Cell Phone Usage on Behavioural Patterns of Undergraduate Students in Pune’ for her Ph.D. research.
The theories forming the basis of this research work are the theories propounded by Harold Innis for media analysis.

1.2 Harold Innis and His theories - A Brief Note:

(Kroker, 1984) Explains Harold Innis (1950) who often reflected on Herodotus’ (c. 484 BC – c. 425 BC) statement: "The ultimate bitterness is this: to have consciousness of much; but control over nothing." By referring to this statement Innis wanted to specify that because of communication technology the modern media-dependent society has a wide range of communication options available but one cannot have control over its usage and implications. About communication technology Innis stated that:

1.2.1 Theory 1: Empire of Communication

Innis’ central idea is the social history of communication media; he believed that the relative stability of cultures depends on the balance and proportion of their media. To begin the investigation into the area of communication, media and their impact on society, he suggests that one should ask three basic questions:

How do specific communication technologies operate?

What assumptions do they take from and contribute to society?

What forms of power do they encourage?

According to Innis, a key to social change is found in the development of communication media. He claims that each medium embodies a bias in terms of the organization and control of information. Any empire or society is generally concerned with duration over time and extension in space (Soules, 1996). David Godfrey, the editor of Empire of Communication summarizes Innis’ distinction as follows:
“For Innis, the organization of empires seems to follow two major models. The first model is militaristic and concerned with the conquest of space. The second model is religious and concerned with the conquest of time. Comparatively, the media that have supported the military conquering of space have been lighter, so that the constraints of long distances could be lessened. Those media that supported theocratic empires had relative durability as a major characteristic so that they could support the concepts of eternal life and endless dynasties.

It was Innis’ conviction that stable societies were able to achieve a balance between time and space-biased communications media. He also believed that change came from the margins of society, since people on the margins invariably developed their own media. The new media allow those on the periphery to develop and consolidate power, and ultimately to challenge the authority of the centre. Oral communication, speech, was considered by Innis to be time-biased because it requires the relative stability of the community for face-to-face contact. Knowledge passed down orally depends on a lineage of transmission, often associated with ancestors, and ratified by human contact. Innis is forthright in his own bias that the oral tradition is inherently more flexible and humanistic than the written tradition, which he found rigid and impersonal in contrast.” (Soules, 1996).

1.2.2 Theory 2: Monopolies of Knowledge

Innis extended the economic concept of monopoly to include culture and politics. If we consider that a society has a network of communications systems, we can see that there are key junctures or nodal points where significant information is stored, and from where it is transmitted to other parts of the system. (Kroker suggests that Innis "sought to explore the interstices of the technological habitat.") Traditionally, the universities have attempted to monopolize certain kinds of information, as have professional associations such as doctors or engineers or lawyers, as have governments.
As both Innis and Michel Foucault have demonstrated, individuals or groups who control access to those points wield great power. Those who monopolize knowledge are also in a position to define what legitimate knowledge is.

Monopolies of knowledge derive their power from several sources, and why, how and by whom power relationships are constructed and exercised through the management of communication processes, and how these power relationships can be altered by social actors aiming for social change by influencing the public mind. The most fundamental form of power lies in the ability to shape the human mind (Castells, Communication Power, 2009).

Monopolies of knowledge tend to polarize societies into a mass of the ignorant and knowledge elite. Monopolies of knowledge encourage centralization of power. Those who control knowledge have the power to define reality (Soules, 1996). Power is the most fundamental process in society, since society is defined around values and institutions, and what is valued and institutionalized is defined by power relationship. Power is a rational capacity that enables a social actor to influence asymmetrically the decision of other social actor(s) in ways that favour the empowered actor’s will (Castells, 2009).

Foucault states (Foucault, 2006), throughout his writings on the dynamic relationship between knowledge and power, insisted that neither is, in fact, a commodity even though it is often treated as such—one cannot own power; power is a process which must continually be reasserted for its continuance. He draws attention to the ways in which those who are ruled contribute to the empowerment of their oppressors.

### 1.2.3 Social Change

Innis’ viewpoint is based on an assessment of how new media arise in the first place, and to understand any medium, the focus must be on its physical characteristics as well as on the way in which it is employed and institutionalized.
He pointed out that there exists a dialectical relationship between society and technology, which means, certain social forms and situations encourage the development of new media; these media, operating within existing situations, react back on society to produce a new cycle of change. But he was not a technological determinist which means that he never believed that all social, political, economic, and cultural change is unavoidably based on the development and diffusion of technology. On the contrary, he does not believe that technology drives social evolution. He does, however, appreciate the considerable power invested in communications technologies and monopolies of knowledge to shape culture. Instability resulting from a lack of balance between time- and space-biased media, and agitation from the margins of the empire can equally drive social change.

Whereas McLuhan seemed ready to accept whatever changes were dictated by and inherent in communication technology. Because he argued that technology inevitably causes specific changes in how people think, in how society is structured, and in the forms of culture that are created, McLuhan is said to be a technological determinist.

1.3 Theory of Generations - A Brief Note:

Mannheim (Mannheim, 1952) defined a generation as a group of individuals of similar ages whose members have experienced a noteworthy historical event within a set period of time. According to Mannheim, social consciousness and perspective of youth reaching maturity in a particular time and place (what he termed "generational location") is significantly influenced by the major historical events of that era (thus becoming a "generation in actuality"). A key point, however, is that this major historical event has to occur, and has to involve the individuals in their young age (thus shaping their lives, as later experiences will tend to receive meaning from those early experiences); a mere chronological contemporaneity is not enough to produce a common generational consciousness. Mannheim stressed that not every generation will develop an original and distinctive consciousness.
Whether a generation succeeds in developing a distinctive consciousness is significantly dependent on the pace of social change ("tempo of change"). Mannheim notes also that social change can occur gradually, without the need for major historical events, but those events are more likely to occur in times of accelerated social and cultural change. Mannheim did also note that the members of a generation are internally stratified (by their location, culture, class, etc.), thus they may view different events from different angles and thus are not totally homogenous. Even with the "generation in actuality", there may be differing forms of response to the particular historical situation, thus stratifying by a number of "generational units" (or "social generations") (Pilcher, 1994).

This theory is also applicable to the various media and the generations who were brought up with those media. The generation which is brought up with a particular communication medium (like the print) will have different culture than that of the generation which is brought up with another communication medium (like television). This theory is important to analyze the role of mobile technology in the shaping of media generations in India.

The researcher used these theories of Harold Innis namely ‘time and space bias of media’ and ‘technology and social change’, Marshall McLuhan’s ‘Hot and cool media’ and Karl Mannheim’s ‘Theory of Generations’ as the touchstone to test the impact of mobile phone technology on the society in general and on youth in particular.

1.4 Role of Information Technology in Human Communication:

Human communication is experiencing a sea change due to information technology. The technological leap in communication has

i. unleashed human imagination, giving it all possible facilities and efficacies to access, retrieve, generate, store, process, reuse, present and
transmit information, the way it desires, with minimal physical and technical noise,

ii. bestowed the speed of light to reach widely, rapidly, and continuously to every nook and corner of the world at a very low cost,

iii. liberated the flow of information making it available to masses at large for its instant and any-form use (text, picture, numeric, audio, audio-visual etc.)

iv. democratised the use of media and provided the ability to analyse and share information. This in turn provides ample opportunities to users in the fields of communication, information, education, and entertainment,

v. and most importantly, removed all constraints of time and space and given total freedom to the communicator and the communicatee to be anywhere on the globe while communicating with each other wherein technological advancements play a major role as a medium for communication influencing all types of behavioural patterns of human communication.

The young generation, which is growing along with mobile technology, must be having some or the other impact on their behavioural patterns. It will be interesting to find the mobile dependency of the young generation, their cell phone usage pattern, and the impact of cell phone use on the behavioural pattern as well as communication pattern of youngsters. To delimit the study, the researcher focused on undergraduate students of Pune as a sample for the study.

Present research is based on the above premise and the researcher used them as a benchmark for her research.