Chapter 5: Results and Discussion

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Mass media operate at various levels and the present work was aimed at finding out the perception about the new medium, the Internet, the purposes of its use and gratifications sought from it and its influence on the users.

The main objective of the study was to map the pattern of use of Internet facility within the context of its use viz., access in home, workplace, and cybercafe. Another task was to find out the diffusion of other media in the households of the initial subscribers of the Internet services in Chennai City. The goal of the researcher was also to measure the relationship between perceived anxiety while using computers and the use of Internet service. Besides, the study also explored the various uses of the new medium, and the needs of the respondents they satisfied.

5.1: Media Access

The access to other media by Internet households was elicited from the respondents to find out the diffusion of other media and
facilities that have preceded Internet access. While all houses had radio and television receivers, nearly 90% had VCRs. The medium that had gained entry into three fourths of Internet households is the cable television. About 40% had cellular telephone connectivity and almost a third of the respondents had compact disc player at home. About a half of the subscribers had a video camera at home. All households had a vehicle at home and in half of the Internet subscribers' homes, there was a car. These characteristics indicate that the subscribers of the Internet were mainly from the upper echelons of the society who could afford the aforementioned facilities. It is a long way from here before making this medium accessible to the common man or placing it within the reach of the urban middle class.

5.2: Internet in households

Computers in the 1980s should have found its way into the households had they been linked to other technologies at home. As long as they were treated as standalone units, their potential
usefulness was limited. This is not to mean that standalone technologies were not in households; all the domestic technologies are unifunctional like refrigerators and television sets. However, these were well integrated into the household environment while the computers, developed for research and industrial purposes, had no specific privilege initially in the domestic context. This technology was not considered essential to run the household. People have not still come to think that they could not do without Internet connectivity while the telephone, the automobile and refrigerator have become a must-be-owned-category.

Even within the household, the need for the computers is rather low and for most people non-existent. The technological space it occupies in terms of priority is rather down in the order. Even the physical or social space is not well defined. Many families are not sure where to place the computer: in the bedroom: in the living room or the study? Though many more can afford, it is the question of the perceived need for it.
5.3: Internet and Need fulfillment

Internet services are being selected either to fulfill needs formerly met by other media or perhaps even needs not formerly met by conventional media. The question as to what communication needs do Internet services fill was poised? Interestingly, "surfing the net" be motivated by more than a quest for information - by a need for entertainment or time passing. Computers are mainly information processing tools and educational tools, but according to market research computer purchasers cite information and education as the motivators for purchasing their computers.

The Knowledge and Nature of Surfing dimensions dealt with these aspects and found that most users accessed Internet for the information component and have opined that there was abundant information available. That the net has also altered the way one looked at and processed information was the perception of a majority of users of the net. For the net surfers the web gave the current and
that of the present study's finding that most people found it as an information provider and that the web is an entertainer.

**5.4: Gratifications sought**

Perse and Courtright's study does yield some information about the possible utility of computers for satisfying communication needs: Learning needs, passing time, and diversion were found to be the top three gratifications sought when using computers. Do these uses of computers also apply to Internet browsing? It is easy to see how the ability to access information, use educational software, and exchange ideas with other people on-line are all ways people might meet learning needs through on-line service use. On-line games and videos, as well as, browsing or exploring the Internet are examples of time passing, entertainment, and diversion activities that are possible with the medium. The *psychological motive* dimension sought opinion like the net providing diversion from monotony, scope for escaping immediate reality, relaxing, giving a pleasant feeling and filling ones time. This dimension of the Internet use was agreed to positively by most respondents. Even in the workplace, e-mail use, was to fill time passing, diversion, and entertainment needs - the three motivators.
for computer use from the Perse and Courtright study\(^1\) - depending on the situation.

The Nielsen study and the Pitkow and Kehoe study found that common uses of the Internet include searching for information, browsing and exploring, e-mail, discussions, accessing news and magazines, and shopping. The present study found the common uses of the Internet to know the latest information, to be current and up to date, to relax and have a pleasant feeling. Browsing also enabled the surfers to fill their leisure time and pick up conversation. For some it substitute real life companionship. Some surfed when they had nothing else to do. Browsing was also done without any fixed agenda. All these confirm the findings of Pitkow and Kehoe study of the common uses of Internet.

While some of these activities clearly fall into the three previously mentioned categories, other activities such as e-mail and on-line discussions could be used for any number of purposes.

Those who preferred to email and those who wanted to browse had different views about the Internet and its uses. There were perceptible differences between the users who had dissimilar preferences. For net
surfers with either preference, the medium satisfied their curiosity to learn and offered wider scope for solutions. It aided their professional growth and it was an educative process in many ways.

But for the rest of the dimensions, there have been clear statistically significant differences to those who browsed and mailed using Internet held distinctive viewpoints. Diversion from monotony, escaping from reality, relaxing while surfing, feeling pleasant and filling time was perceived differently by surfers and mailers. The interpersonal dimension of picking up conversation, establishing professional contact, and avoiding problems of face to face communication was also dealt with differently by people with different perceptions. This could be read with work related to email use by Steinfield.

A traditional assumption had been that e-mail systems were used primarily for task-related communication (Steinfield 1986). However, numerous studies indicate that a large portion of e-mail with in work settings is of a social nature. Rice and Steinfield (1994) found that the use of e-mail fell into three categories often seen in uses and gratifications research - entertainment, consensus/control, and surveillance. Within the
cluster of entertainment related uses, office e-mail was used to "fill up free time", "take breaks from work", and participate in entertaining events."

In workplace, the respondents for the present study have opined about the use and access of Internet services and that endorses the viewpoints of Steinfield and Rice. There have been significant differences between student and non-student users in the perception and use of Internet and the context of use of the medium i.e. among those who accessed it in home, workplace and cybercafe. Social context of use of the medium has been documented by Feenberg⁴, Fulk, Schmitz, & Steinfield⁵, Georgoudi & Rosnow⁶, and Martin, O'Shea, Fung, & Spears⁷.

The general findings are presented in accordance with the objectives stated earlier. Internet is being used widely by the respondents in the Chennai City even at the initial stage of its introduction. The socio economic background of the initial subscribers is predominantly in the socially upscale group. Widespread diffusion in the middle class will have to be traced in future. The new medium is being put to a range of uses and it gratifies a variety of needs of the respondents.

Specific to research questions raised in the study the findings are revealing.
Two categories of respondents were studied for their use and access pattern. As was hypothesised, their use markedly varied in both purpose and pattern. Their information seeking habit was distinct, evident from the significant mean differences. The objective of the student going to the net was different from that of the non-student. The perception of entertainment by the students and non-students were different.

The perception of the medium per se was very different for the two categories of users. The fact that the net gave them visibility was viewed differently by students and non-student users.

Internet is used by students and others for very different purposes. That the net provides them scope for finding better alternatives was perceived very differently by the two categories of users. Similarly browsing as a creative process was perceived very differently across categories.

In terms of the access of the Internet medium, women, for the first time in the entire history of media diffusion, have come on equal terms with men. No significant difference could be found as regards the quantum of usage of the net between men and women respondents. Neither could
there be any difference in terms of access to the medium at home, in
workplace and in cybercafes.

In terms of the context of use, students accessing Internet in
academic institutions were more than the non-students in their offices and
institutions. At home, non-students had a slight edge over the students.

The preferred use of the Internet medium to either browse or to mail
was thought to influence the perception and utility of the medium. Except
in certain cases, preferred use was not of any significance in altering the
perception of the users.

Computer related anxiety and perception of satisfaction while
computing were associated with the use and access of Internet. In the
analysis these two variables were treated as intervening variables and
monitored for their influence on the nature and use of Internet.

More than the satisfaction derived while computing, the anxiety
related to the computers had a significant influence on their perception of
the uses of the medium and the access to it. The aforementioned general
findings of the study reveal the various facets of Internet as a mass medium
and the perceptions of the people. The study raises several issues.
5.5: Internet as mass medium

From the skeletal service provided by the government monopoly, Videsh Sanchar Nigam Limited, India has come a long way in providing Internet service to the common man. Thanks to the private operators, there are many nodes in most cities in India and the charges have come down. Still with 50,000 connections throughout the country [Rammanohar Reddy C, 1997]⁸, it will be very difficult to compare with the world average of telecom access. Our telephone density is 50 times lesser than the US and five times less than the average for the developing country. Similarly the PC density is 250 times less than the US and seven times less than the developing country’s average [Prabir Purkayastha, 1997]⁹

Though limited to urban centres, the medium has potential to percolate to the rural centres and if the state and central government initiatives bear fruit, every Indian will have access to cyber café sooner. Though at present there is lopsided growth favouring the urban people, the Internet has the potential to become a decentalised communication network for information and communication exchange.
The use of the Internet for information is widely accepted. In fact, the net is full of information overload and we lack standards to systematise the inflow and outflow of information through the net making it almost chaotic for information flow. As time progresses more and more diffusion will take place of the medium, changing audience perception by [Umphrey op cit]. This must be read in conjunction with Kottaks' report on the changing nature of the audience about the uses of media perception on the length of time. Studies taking in to account the length of Internet connectivity could be a better measure of media's effect on the users than the current levels of accessing. This is in confirmation to Oshavasky's [op cit] idea that the diffusion pattern of the new media use will change over time in the general trend adoption.

In the CommerceNet/Nielsen Internet Demographics Survey, [3,4] the gender distribution of those who are estimated to use Internet was 53% women and in the Current Population Survey [1995] it was 51.9%[Donna Hoffman et al 1996]. The present study confirms equal access of Internet by women and men, and that Internet access across gender was not statistically significant.
Internet as a medium of current and abundant information provider was the view endorsed by the respondents. That the new technologies would take the people away from the traditional information sources [Atkin op cit] can be more carefully examined till such time new evidence is produced, and endorse Rogers' [op cit] view of the complimentary role of the medium. The fact that cybercafes spring up by the day indicates that more people are tempted to use it. The cyclic phenomenon of more and more users triggering the process of setting up of such cafes would widen the diffusion. Differing perceptions about the medium by student and non-student respondents is interesting. Rubin and Windhal's [op cit] explanation of media use as instrumental viewing - goal oriented use of media content to satisfy information needs is supported by this study. The net users browse to pass time, have fun, find new information, go after information specifics, and netchat when they have else to do. These new uses were never thought of when the computer network was put in place.

What started of as a bulletin board service with teleinformation exchange has grown into a culture of its own. Internet has no target
community as primary audience but an interpretative community with shared habits of mind.11

Internet is a medium of entertainment. Many use it as an exciting way to pass time, a creative pursuit in search of something, and to cap it all get lost in the abundance of information across the user categories and their education background. The vast opportunity it provides for the internauts [an Internet browser in the net jargon, like astronaut] to enjoy the fare dished out is ever expanding. Newer researches are being carried out to enhance the fun enjoyed in the net. Real time play back options have come up to receive the audio files simultaneously when browsing the textual content. He interpersonal dimension of the net is revealing. Computer mediated communication is effectively used to exchange information, build impressions and compare values. What was thought of as impersonal communication because of not being present in the immediate reality and the use of an instrument has in fact become superior. In asynchronous conversation [non-simultaneous communication], the communication was in fact better than face to face interaction. Groups which had ample time to engage in activities that enhanced the quality of production and gave
attention to well being of member-support function in a group activity tended to ask personal questions and enhanced the understanding of each other which made group task completion easier [Walther and Burgoon, 1992]. Internet community will be in the mainstream of everyday life. Its demographics will look more and more like the demographics of the world itself... The single biggest application of networks is email...It is creating a totally a new social fabric [Negroponte, 1995].

What about other possible reasons for using on-line services that are not seen in the conventional media including ones stemming from the use of alternative personas and identities on many of the services? Could the ability to transcend race, "age, gender, and mobility motivate users of on-line services?

As we saw with computer use, and on-line service use in the few existing studies, e-mail in reality is used for entertainment purposes more than thought. Ninety percent of World Wide Web users in the Nielsen study and 79% of people in the Pitkow & Kehoe reported engaging in browsing or exploring otherwise known as "netsurfing". This result seems to indicate that time passing, diversion, and entertainment needs may in fact
be the primary category of what is driving on-line service use. However, Hoffman and Novak (1994) posit that netsurfing and "time-passing" ritualistic use characterize "early interactions with hypermedia". They anticipate that increasingly instrumental use will develop over time while frequency of engaging in browsing will decrease. While time studies should be conducted to test their assertion, if the uses and gratifications of on-line services parallel conventional electronic media closely, then the use of on-line services in a ritualistic manner is not likely to disappear with time.

Increasingly on-line applications and content seem to be designed for entertainment, diversion, and time passing. Blumler & Katz (1974) argued that audience needs have social origins which generate certain expectations about mass media, leading to differential patterns of media exposure which result in both the gratification of needs and in other (often unintended) consequences. This does assume an active making motivated choices. However, McQuail suggests that dominant stance of recent researchers in this tradition is that personal social circumstances and psychological dispositions influence both general habits of media use and beliefs and expectations about the benefits offered by media, which shape specific acts
of media choice and, followed by assessments of the value of the (with consequences for further media use) and, possible applications of benefits acquired in other areas of exposure and social activity. Chat groups, on-line comic strips, interactive extensions of television programs, audio, video, and absurdities such as cameras on fish tanks and bathrooms are increasing in an environment once characterized by databases, search and retrieval programs, and academic/ military/ government information. On-line services catering to certain segments of society such as children and the elderly focus less on information germane to these groups and more on fostering a sense of community and providing pass time activities targeted at the demographics of the user (Rigdon, 1994)16.

On the other hand, Internet commerce by means of actual transactions, product information, and advertising on the Internet is also increasing. However, there is also still a plethora of information and research tools available on-line.

With so many different activities, types of content, and options on-line how does someone decide what to do or know what to do "unless they come to the on-line service seeking gratifications of some sort or another
based on their psychological or social conditions? People can engage in passive use of the radio or television if already on or even turned on for no real reason.

Denis McQuail\textsuperscript{17} offers the typology of common reasons for media use: information or opinion and decision choices; satisfying curiosity and interest learning; self-education gaining a sense of through knowledge personal identity; finding reinforcement for personal values; finding models of behaviour; gaining insight into one's self; integration and social interaction; gaining insight into circumstances of others; social empathy identifying with others and gaining a sense of belonging; finding a basis for conversation and social interaction; having a substitute for real-life companionship; enabling one to connect with family, friends and society; entertainment; escaping, or being diverted, from problems; relaxing; getting intrinsic cultural or aesthetic enjoyment; filling time.

All the above mentioned gratifications have been agreed to be received by the net surfers in the current research. The multivariate analysis of variance clearly depicted the results of the main and interaction effects of independent variables on the dependent variables. Gratifications received
by men and women surfers were different and among student and non-
student users. The purpose of surfing varied along with the context of
media use measured in terms of the place of access of Internet.

With few studies of Internet use, one can only guess when trying to
ascertain what the motives are that lead people to use on-line services.
Palmgreen (1984) cautions that in studying new communications
technologies "researchers should not be wedded to gratification typologies
that the very changes under study may have rendered incomplete, if not
obsolete." Thus, it may be that previous research has not yet uncovered the
gratifications on-line users are seeking to fill. Use of alternative personas
and identities on many of the services on-line is common. Could the ability
to transcend race, age, gender, and mobility motivate users of on-line
services? Parks quotes Brockman as noting that "cyberspace creates and
'identity workshop' in which people learn and test social skills (Parks,
1996)." Conventional media uses and gratifications research has not
provided a category of gratifications for such activities.

Luckily the uses and gratification approach assumes that one can
merely ask "individuals who use the medium...what purposes motivate
specific uses of a medium or its content" (Rubin 1987). However, since netsurfing is such a popular activity according to previous research it seems fair to hypothesize that gratifications such as entertainment, time passing, and/or diversion are in fact likely to be identified most frequently by users. This study attempts to begin the process of determining what the uses and gratifications are for the World Wide Web by identifying the different uses and motivations for use of the web.

E-mail was both frequently listed by respondents and frequently engaged in by respondents. The results of the present study comes as no surprise to support the finding of the earlier attempts that half the sample listed e-mail as their preferred use of the net. Of the respondents listing e-mail, many reported they used it moderately to heavily. E-mail use was motivated by a variety of factors according to respondents.

The medium itself meant differently to different groups of people. It expanded possibilities and allowed the surfers to communicate with words and pictures. It gave a sense of participation and offered certain credibility to those who had the Internet account. These facets put together constituted a dimension of Internet called the nature of medium.
Most users agree to the diversion from monotony the medium offered. The medium provided scope for relaxing, and gave a pleasant feeling and filled the respondents' time. It has also given an opportunity for the surfers to escape from the immediate reality. These gratification items constituted the psychological motivation of using the medium. Across quantum of use and the preferred use, this seemed to be different. This will mean that heavy and light users of the net had different degrees of motivation to use the net and the gratifications sought would not be the same among them. Mailers and surfers had a significant difference between them to indicate that the use of the net was different. While the mailers might relax by sending a couple of e-letter to the acquaintances, the surfers would wander about here and there to pass time and their perspective would be different.

Interpersonal motive seems to drive the media use by the respondents. The net had enabled the users to pick up conversation, establish professional contact, helped avoid face to face communication, and for some it seemed to substitute real life companionship. Users at times surfed when they did not have anything to do. The interpersonal
motive dimension was also significant on two counts. Whether the user mailed or surfed determined the nature of his or her interpersonal motive. The frequency of use also differentiated their perception among light, moderate and heavy users.

Thus, the gratifications for using Internet services as attempted in this study appear to cluster into six categories. The first category is the nature of surfing dimension. This dealt with the creative part of surfing, filled with fun, an exciting and solitary activity done regularly. Second was nature of the medium that motivated the users to communicate with words and pictures. Thirdly, entertainment or psychological motivation was the reason for using it to get diversion from monotony and to give a pleasant feeling. Fourth is interpersonal exploration which motivated people to use the Internet to pick up conversation and establish professional contact. Fifth is the information component, the users found abundance of information which were current and up to date. The net had altered the way the information is being searched and processed. Finally, there is purpose of surfing dimension, which delineates the browsing function, the education process, the scope for wider solutions to problems etc.
This study sought merely to begin the process of identifying uses and gratifications of the Internet in order to be able to develop and adapt U&G scales. Uses and Gratifications standbys such as entertainment, time passing, and surveillance were frequently cited in this study as expected suggesting that at least at present time the Internet may not be filling radically new gratifications. Socializing, a gratification or motivation found in studies of the telephone (LaRose & Mettler, 1990\textsuperscript{21} and O'Keefe & Sulanowski, 1995\textsuperscript{22}) also seems to be a major gratification of the Internet. O'Keefe & Sulanowski's telephone study found another gratification that appears also to map on to the Internet; "acquisitions" or interpersonal dimension. Then there is the troublesome category of information seeking-exploration-novelty-surveillance. Additional preliminary research needs to be conducted in order to gain a better understanding of this information seeking for fun type activities.

Further exploratory research should also be conducted using a sample of known heavy users of the Internet. The respondents queried in this study were labelled heavy users for the purpose of the present study. This neither indicates that they were a provider of on-line content nor did
anyone reveal that they use the technology specifically to meet people, activities investigated by other researchers (Parks 1996 & Pitkow & Kehoe 1995).

It is possible that with closed-ended questions in this study, respondents will not have been possible to register all of the activities they in fact engage in. Eventually it may be of interest to investigate in further detail whether heavy and light users of Internet services are seeking different gratifications.

While uses and gratifications does appear to hold promise for explaining and organizing the typologies of Internet use, whether the theory can be refined so that it does a better job predicting Internet use than it did predicting use of conventional media remains to be answered. The strength of the theory lies in that it actually attempts to explain why we choose the media we choose and why certain media outlets are gratifying or rewarding at certain times.

End notes


24 Pitkow, op cit