# Comparison of the Internet usage patterns, E – Book reading habit in Tamil and Perceived barriers for it among Arts and Science College Students in a Rural and an Urban City in Tamilnadu during 2014

### Dr. Semmal,

Associate Professor, Physiology, Sri Ramachandra University, Chennai **Dr. Apitha Sabapathy**,

Head - Department of Tamil, MGR Janaki Arts & Science College, Chennai S. Kathirvel,

Corporate trainer, past zonal President (JCI Manapaarai, India)

#### **Introduction:**

Internet usage has witnessed a steep increase in the recent years; this significant expansion of the Internet at the eve of the twenty first century has allowed the Internet to occupy a central part of human life. Expertise in computer usage and intelligent handling of the Internet allows humans to communicate freely across an international electronic computer network with its inherent extraordinary potential for expansion. The Internet, with its huge resources, acts as an essential purposeful tool to cater the rapidly increasing population of youngsters who wish to align with the modern times. The scope of information technology in developing countries should not be slowed down due to limited accessibility to computers and the internet, at home and at educational institutions. Internet allows to reduce social isolation; it also has additional psychosocial benefits like communication with friends and family, and exploration of hobbies which can be realized with greater ease.

### Aim:

To assess and compare the Internet usage patterns, E – Book reading habits in Tamil and the perceived barriers for it among arts and science college students in a rural and an urban city in Tamilnadu during 2014.

## **Materials and Methods:**

The study was conducted among college students enrolled in various arts and Science College in a rural (Manappaarai, Trichy District) and an urban city (Chennai) in Tamilnadu; the timeline of the conduction of the study was during July 2014. The carefully designed questionnaire which contains four separate parts was administered; [1] To assess the Demographic Data; [2] To assess the Internet Usage pattern; [3] To assess the E - Book reading Pattern in Tamil; [4] To assess the Perceived Barriers in Internet Usage.

The demographic data allowed the retrieval of information related to name; age; gender; curse of study; year of Study; marital status; and E- mail ID; pin code of the current area of residence; pin code of the area of schooling. The responses obtained were noted in a Likert Scale Format (SD – Strongly Disagree; D – Disagree; N – Neutral; A – Agree; SA – Strongly Agree; NR - Not Responding). All the data were entered into Microsoft Excel sheets and the appropriate statistical analysis was accomplished to arrive at the results.

# **Results and Discussion:**

As a response to the query regarding expertise in handling the Internet, 58 % of students from urban and 39 % of students from rural areas expressed that they are well expertise with Internet usage whereas,34 % of students from urban and 55 % of students from rural areas expressed that they are not expertise in handling the Internet. As a response

to the query regarding the user friendliness of the Internet and its effectiveness in providing useful information about the Tamil Diaspora, 29 % of students from urban and 22 % of students from rural areas express that they are user friendly and effective whereas, 40 % of students from urban and 49 % of students from rural areas express that it is not user friendly and effective.

Katz J et al (1997) opined that social and work networks are important in the uptake of the Internet among the greater population; similarly we were able to observe that the rural students express greater difficulty to locate the relevant websites related to Tamil research (31%) than the urban students (26%). As a response to the query regarding the awareness of Internet address of authentic Tamil related websites, 52 % of students from Urban and 34 % of students from rural areas express that they are well aware; whereas 40% of students from Urban and 49 % of students from rural areas accepted their overwhelming levels of difficulty in this domain.

As a response to the query regarding the pattern of browsing the internet, 36 % of students from urban and 13 % of students from rural areas accept that they remain always online; whereas only 19% of students from urban and 07 % of students from rural areas inform that they browse the Internet for more than 3 hours everyday.16% of students from urban and 12% of students from rural areas opine that they browse the Internet only half an hour every day. 18 % of students from urban and 33 % of students from rural areas express that they only occasionally browse the Internet. Interestingly, 7% of students from urban and 18% of students from rural areas declare that they have never browsed the Internet. Google and Facebook turn out to be the most frequented sites by the students in both the rural and the urban populations; whereas the site that was most frequently visited in particular reference to Tamil research was Tamil Wikipedia.

Based on the response to the query regarding the behavior of browsing the web to read Tamil E books, it was learned that it is less among the rural students (14%) when compared to the urban students (26%). Moreover, 38% % of students from urban area feel that the subject materials used in the classroom were also readily available over the internet as well; whereas this belief does exist only among 18% of rural students. 31% of students from urban and 39% of students from rural areas feel that the currently available E - books in regional languages on the Internet were unreliable resources to procure authentic information for research purposes. 23% of students from urban and 41% of students from rural areas expressed their willingness to reconfirm the facts furnished in the E - books, with the information in the printed books. Similar to our findings, Trocchia P et al (2000) also found that social support influences the efficacy and perception of usefulness of technology.

As a response to the query regarding the routes frequented to arrive at the E books, Google search engine stands first, next comes the sources as E mail attachments from known fellow researchers, references linked in wikipedia pages and the various E books stores follow the thin segments of resource providers; there is a conspicuous absence of awareness about Google Scholar and Google Books among both the populations.

Regarding the comparison between the behavior of spending time in the college central library among the digital section and the printed book section, more students from urban (34%) than from rural (30%) areas prefer the digital section while less students from urban (41%) than from rural (48%) areas prefer to spend more time in the printed books sections. In line with this specific finding, we were able to observe that when questioned about experiencing pleasantness to read Tamil books in paper format and as E book format, more rural students vote for printed books (28%) than the E books (13%), whereas more urban students (35%) than the rural students (29%) support the E books than the printed books, probably this is due to the fact that E books invade the viewer ship platform only after

the initial exposure; this finding can be explained based on a similar observation by Cody JM et al (1999) that training reduces anxiety and increases efficacy in using technology.

From the questionnaire to assess the perceived barriers in Internet usage, it was observed that, unreliable technical availability (low bandwidth and low signal) were cited as the main reason for avoidance of internet use among the urban students (54%) whereas a staggering 83% of rural students declare it to be the prime reason for distancing them from the technical revolution unraveling in the modern world. Unreliable technical availability (Electrical Failure) was cited as the reason for avoiding Internet use by 32% of urban and 66% of rural students reflecting the general impact of interrupted availability of electricity in a growing economy as that of India.

Katz J et al (1997) conducted a study in the western population and found that the majority of internet users (56%) learned about using the internet from their home based on the assistance derived from friends and family and only 40% ventured out to learn a course, which was often limited to a few days only, or they learned internet using skills at work, but in our study we were able to observe that more percentage of students (68%) from rural areas have access to the internet in a place other than their home (ie from an internet center) whereas 41% of students from the urban areas have adequate access to the internet from their homes itself. Similar to our finding Morrell RW et al (2000) were also able to observe that the major reasons for humans to be not using the Internet is the lack of knowledge about the web, as well as computer ownership and access. Health problems were cited as a reason for perceived difficulty of computer use among 27% of urban and 16% of rural students, reflecting the comparative increase in the use of computers by the urban students.

From the questionnaire to assess the perceived risk element in internet usage, fear of credit card stealing, fear of sharing the personal information, fear of internet addiction are more among the urban than in the rural students. Concern about the E mail password security is more among the urban students (44%) than among the rural students (19%) reflecting the trend for greater awareness regarding the concept of internet security among the urban population. Remaining anonymous in the internet requires a high level of expertise and being exposed of one's identity is a normal sequence of events, this factor actually belittles the affinity for internet among many students. Privacy is not the only cause of concern as a source of subjective fear in the internet world.

In our study we were able to observe that both demographic and usage behavior traits would be influencing their own effects in terms of perceived risk in internet usage, similarly, more students from the urban population (38%) opine that changes in the software happen at a faster pace than the students from the rural background (20%).32% of students from urban and 15% of students from rural areas feel that internet usage is habit forming reflecting the fact that more level of usage leads to more habit forming scenarios and reduced anxiety. More rural students (38%) feel that internet leads to lack of physical contact than the urban students (14%). Both the populations, urban (56%) and rural (31%) perceive that the current level of laws regarding protection of Internet users, are insufficient in their armament. 31% of rural students believe that most of the E mails are accessed by persons other than their owners whereas only 12% of the urban students believe so. More students from the urban areas (43%) feel that stalking and impersonation are common in internet raising the security and private concern as barriers for online shopping related activities when compared to students from rural background (21%). This can further be explained by the finding by Bandura et al (1998) that the level of Internet efficacy in actuality reflects an individual's beliefs about his or her ability to competently use the Internet. Lack of efficacy would lead to generation of anxiety in using the system, thus computer anxiety predicts the level of Internet participation

### **Conclusions:**

The results from the above study allow us to compare and decipher a broad and clear picture of the prevailing trend in Tamilnadu between the rural and urban college students thereby easing the road map to focus on designing and implementing learning modules for computer and Internet training for students studying in arts and science colleges.

Life in the modern world is overwhelmed by the enormous ability of computers to gather and distribute vast bits of information in lightening speed; this has also increased the concern of privacy and anonymity on a large scale. Moving in the direction of increasing the safety for privacy and reducing the security risk are to be accomplished as priorities, thus allowing alleviation of the major obstacles in internet usage pattern among the rural students. The complexity of navigating the network taxes both working memory and spatial ability and is a significant barrier; this necessitates the web sites to be designed more simply and uniformly. Conduction of training programs would positively increase the individual's knowledge about computer technology and will be beneficial in reducing the potential barriers and increasing the perception of ease of use of technology in the direction towards Tamil.

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