

A Situational Analysis of Internet Consumption among College Students in Silchar

Anindya Deb

Research Scholar, Assam University, Silchar., India

Dr. Silajit Guha

Reader, Dept. of Mass Communication, Assam University, Silchar, India

Abstract

The face of higher education sector has changed beyond recognition after the digital revolution. The soft-copy technology has been able to alter the pattern of many practices. The early digital adopters are in all probabilities to enjoy an edge over the digital laggards. In a developing society, the access to Internet is a contentious issue since it depends on economic capability. The study was undertaken to find out how the students in a remote corner of a developing country are posited with relation to information revolution sweeping across the country. The survey results were put to rigorous statistical tests to find out whether there is any palpable difference among the students in terms of access to the information resources. The study reveals that parental income affects heavily the possibilities of possessing information hardware and thereby a significant section of the students are likely to remain perpetually on the wrong side of information superhighway due to inequitable income distribution. Unless the systemic corrections are in place, the entire society marching into the dawn of information revolution is likely to remain a distant dream.

Introduction

The arrival of Internet on the education sector has been able to jolt the system out of the languor it was blessed with, especially in the higher education sector in India. The advent of the new medium and inroads it has already made in the psyche of an average Indian student's life makes it abundantly clear that higher education is now virtually impossible to be transacted in the absence of Internet mediation even in the remotest parts of the country. While the Internet has been able to alter the pattern of consuming media texts by opting for digital platform through convergence, it has been able to change the practice accessing superior knowledge sources for the students of higher education sector. Gone are the days of bookworm students, the digital text has virtually served a death blow to hard copy education, both in terms of books as well as academic journals. To quote Baudrillard (1988), it's "now a pure screen, a switching centres for all networks of influences." While the hard copies of books and journals still vie for the attention of the students, it is unlikely that they would be allowed to languish in bookshelves in future replacing the all encapsulated habits of the students to suck their lifeblood from the digital platforms. With the Internet becoming an all pervasive medium in addition to its already firmly entrenched hold on communication practices worldwide, the issues like digital divide, digital adopters and digital laggards are coming to the fore.

India, like other developing nations faces the spectre of a digital divide due to its different level of inadequacies. Illiteracy, gender disempowerment, financial incapability and inadequate distribution of material resources in different parts of the country are some of the factors responsible for keeping India in the throes of digital disempowerment. While some parts of nation have been able to galvanize their material and non-material pursuits, a huge tract of the nation remains deeply embedded in the non-digital practice of

their earthly chores. While the transaction of academics has become a completely digitally mediated practice for the students in some parts of the nation and thereby becoming digital natives, most of the students in the country are still very much digital immigrants and busy in overcoming the bottlenecks thrown in by the new digital culture. Education process in India has become a battleground for these two sets of students, students who happen to be early digital adopters and the students who are better understood as digital laggards.

Another important issue looming large in the horizon is the question of digital divide. The fact remains that in most cases, the students, even with poor parental income have now taken to Internet use, but the moot question is how far the issue is of quality use. Accessing Wikipedia and accessing a quality journal are two different issues and impact the quality of a student in two different ways. But qualitative issues apart, in the Indian setting, it is doubly important to understand whether Internet has been able to reach the students in the remotest parts of the nations and whether even the lowest denominators of students, both in terms of parental income and social capital, are able to access them for bringing a change in their approach towards education as well as other perspectives.

Internet culture and digital divide

Culture is a pendulum like topography because of the contentious dispute among scholars and other disciplines. Despite its entropic, chaotic and randomized cacophony, the term 'culture' is useful, valuable and intertwined with the study of new media. By default the study of new media integrates the dominant institutions of the society (Mark Poster, 2001). Slowly but steadily Internet is spreading its tentacles in higher education also more specifically among young students of colleges and universities. Youngsters have become more techno-savvy in the contemporary new media environment

although the penetration is low due to low parental income and education. Illiteracy is one of the determining factors for this great digital divide, i.e., the gap between Internet haves and Internet have nots. Margaret Morse (1998) lamented that Internet promotes patriarchy and capitalism and also is concerned with the fact that Internet erodes the 'sociality' of 'a well functioning society'. There are different perspectives on access to Internet as it increases human capital by supplementing better access to education and training in comparison to those who do not have access to Internet and are further excluded from social and human capital (Ronald E. Rice and Caroline Haythornthwaite, 2006). Many studies show that digital divide exists even in America especially among minorities like African-American and non-white Hispanics. They spend less time in accessing Internet whereas white men, higher income earners, highly educated and more efficient users spend more time online; 57 per cent of white men use Internet and 52 per cent white women using net is a clear example of digital gender divide although the gap is shrinking globally. Also many researches depict that lower education, females, higher age, lower income, and non-U S regions are slow in accessing Internet (Ibid). Another study by the Consumer Federation of America has shown that lower income groups are much less connected and have less education compared to higher income groups. Hence it can be said that age, income and education are the strongest determinants in Internet accessibility.

A study conducted in UK tells about the generation effects, i.e., the children are heavy users than their parents and the gender divide is modest, since boys use the Internet more than the girls (Piet Bakker and Charo Sadaba, 2008). Another study from Portugal too supports a strong association between age and Internet use, where vast majority are youngsters or men below 34 years. Similar research was being conducted in Spain, and there boys and girls aged between 10 and 18 years prefer Internet more rather than television while 38 per

cent prefer Internet and 30 per cent in favour of television (Piet Bakker and Charo Sadaba, 2008). Most importantly, education and wealth are still the strong determinants or independent variable for the widespread Internet usages. Higher education and occupational status are highly correlated with higher Internet use according to a European Commission report (Ibid). The Internet penetration is low in rural and remote areas, as the research from Portugal stated (Centre for Research and Studies in Sociology, 2006).

Another study conducted in US where the rate of adoption is increasing day by day, 59 per cent of the population were with access to Internet between December 2000 and April 2002, from 66 percent in 2003 to 75 per cent in 2004. Globally the top ten countries like Sweden, Hong Kong, US, Iceland, Netherlands, Australia, Canada, Switzerland, Denmark and South Korea show similar impulses with access to Internet from 62 to 74 per cent of each country's population having access. When examined by region it was found that only 1.4 per cent of African people and 7 per cent of Asian were having access to Internet (Ronald E. Rice and Caroline Haythornthwaite, 2006).

In a developing society like India where Internet diffusion is low compared to Western societies, approximately more than sixty five per cent work-forces in the West are information workers or white-collar employees (Arvind Singhal, 1989) and these countries have already transformed into information societies whereas India is still caught in a transition period.

Objectives of the Study

The objectives of the study are to:

1. Understand the association among different income categories as to the affordability in accessing the Internet.

2. Investigate the association between different income categories as to the ownership of laptop by students.
3. Know the relationship between varied income categories with the habit of accessing the different social networking sites to develop relationship with others.
4. Investigate the correlation between different income groups and the reason behind using Internet for academic work.
5. Ascertain the relationship between different income groups with the problems being faced by the respondents.

Research Methodology

The method adopted for the research was survey. The researcher considered only those students who had access to Internet either at home or on mobile phone or in a cyber café or in the college for ensuring that the respondents had a clear perception of what was being asked.

The researcher selected one of the colleges in Silchar by lottery method. A total of 109 respondents were selected. Care was taken to provide equal representation as far as possible for all streams. A close ended-questionnaire was constructed for the purpose of data collection.

The rationale behind conducting the study among college students was that literate youth represented an important segment of the society seeking access to higher education and also they were familiar with the use of Internet

Sampling method: The convenient sampling method was employed for the selection of respondents. For the data analysis, the statistical technique of ANOVA (Analysis of Variance) was adopted because the data supported the technique and also the researcher was

interested in measuring the variation within and between groups (income).

Hypotheses

RH1: There is a significant relationship between different income groups with the financial affordability of students in accessing Internet.

RH2: There is a significant association between different income categories as to the ownership of laptop by students.

RH3: There is a strong relationship between various income categories that have the habit of accessing different social networking sites to develop relationship with others.

RH4: There is a high degree correlation between different income groups and the reason behind using Internet for academic work.

RH5: There is a significant relationship between different income groups with the problems being faced by the respondents.

The Profile of Area and Respondents

Silchar is situated in the southern part of the Indian state of Assam. It is the headquarters of the Cachar district. The city of Silchar is the second largest city in the state of Assam and an important commercial centre and consequently witnesses the settlement of a sizable population of traders from distant parts of India. The main city of the Barak valley is Silchar.

The respondents were selected from one of the colleges from Silchar town and all respondents were Under-graduate College going students of different streams in the age group of 18 to 24 years.

Variables selected and justification: Here the researcher considered income as the predictor variable or determining variable because

parental income played a very important role in access to Internet and other techno-gadgets.

Keeping the income levels of the parents of college students selected, the researcher has made the following income categories under the independent variable of income, which can be an important factor in determining access to the cyber world:

1. Upto Rs 10000 (Lower income)
2. Rs. 10,001- Rs.20,000 (Upper lower income)
3. Rs. 20,001- Rs.30,000 (Middle income)
4. Rs. 30,001 and above (Higher income)

The income categories were convenient to reflect the reality on ground.

Data Analysis

Table 1: Association between income and affordability in accessing Internet.

Income Group	Expensive	Cheap	Can be managed	Total
a) Lower	5	2	12	19
b) Upper lower	2	4	23	29
c) Middle	2	6	15	23
d) Higher	8	5	25	38
Total	17	17	75	109

Further ANOVA has been applied to test the associational significance.

The within-groups sum of squares (SS_w) = $\sum d_1^2 + \sum d_2^2 + \sum d_3^2 + \dots + \sum d_n^2$

Therefore, $SS_w = 640$

And similarly between groups sum of squares (SS_b)=507

The total sum of squares (SS_t) =1147

$df_b=3, df_w=8$;

$MS_b=169, MS_w=80$

Therefore, F ratio= $MS_b/MS_w=2.11$

Hence, for the table value of F for d.f 3 and 8 respectively at .05 level of significance is 4.07.

Analysis of Variance Test Result:

Sources of variation	df	SS	MS	Table value of F at 0.5 level	Significant or not
Between Groups	3	507	169	4.07	Not
Within Groups	8	640	80		

Therefore, the table value is greater than calculated value. Hence the null hypothesis was supported and the logical research hypothesis was rejected thereby stating that different income categories do not vary with the affordability in accessing Internet.

Table 2: Association between income with the ownership of laptop by students.

Income	Yes	No	Total
Lower	2	20	22
Upper lower	10	14	24
Middle	5	18	23
Higher	15	25	40

Total	32	77	109
-------	----	----	-----

After the application of ANOVA, the outcome is

$$SS_w=345, SS_b=13,474. SSt=13,819$$

$$\text{Therefore, } df_b=1, df_w=6 ; MS_b=13474, MS_w=57$$

Hence $F=MS_b/MS_w=235$. Therefore, the calculated value is 236 and table values of F with 1 and 6 df respectively at .01 level of significance is 13.75.

Analysis of Variance Test Result

Source of variation	df	SS	MS	Table value of F at .05 level of significance	Significant or not
Between Groups	1	13,474	13,474	5.99	Significant
Within Groups	6	345	57		

Therefore, the null hypothesis was rejected and the research hypothesis was supported and thereby stating that the ownership of laptop by students varies according to the income levels.

Table 3: Income levels and access to social network sites.

Income groups	Twitter	Facebook	Orkut	Total
Lower income	0	26	0	26
Upper lower	4	21	4	29
Middle income	0	22	1	23

Higher income	1	25	5	31
Total	5	94	10	109

Therefore, $SS_w=1282$, $SS_b=294$ and $SS_t=1576$

$MS_b=98$, $MS_w=160$ and calculated value of F is 0.612 for the corresponding table value of F with 3 and 8 degrees of freedom at .05 level of significance is 4.07.

Analysis of Variance Test Result

Source of variation	df	SS	MS	Table value of F at .05 level of significance	Significant or not
Between groups	3	294	98	4.07	Not
Within groups	8	1282	160		

As the table value is much greater than the calculated value, the research hypothesis was rejected. It can be concluded that there is no association among different income categories with the habit of accessing the social networking sites for developing relationship with others.

Table 4: Association between income and purpose of Internet use.

Income groups	It helps in gaining new knowledge	I get latest information	Helps me make my notes	Can gain Knowledge from various sources.	Total
Lower	9	6	2	9	26

Upper	7	10	2	10	29
Lower					
Middle	11	5	2	5	23
Higher	10	10	2	9	31
Total	37	31	8	33	109

Hence by applying ANOVA the following calculations can be interpreted as:

SS_w (Sum of squares within groups) =162; SS_b (sum of squares within groups) =426; $MS_b=142$, $MS_w=13$; and the calculated value of F is 10.5 and the corresponding table value of F with 3 and 12 df respectively is 3.49.

ANOVA test Result:

Source of variation	df	SS	MS	Table value of F at .05 level	Significant or not
Between Groups	3	426	142	3.49	Significant
Within Groups	12	162	13		

Clearly, the calculated value is greater than table value and therefore, null hypothesis is rejected and the research hypothesis is accepted and can conclude that there is a strong correlation among various income groups as to the purpose of the use of Internet.

Table 5: Income and socio-psychological effects derived from non-use of Internet

Income groups	Lag behind	Can't identify with the group	Psychological impact	Feel isolated	Can't socialize	Better in the examination	Total
Lower	7	2	2	4	9	2	26
Upper lower	6	5	3	6	6	3	29
Middle	6	5	0	5	5	2	23
Higher	4	7	1	4	11	4	31
Total	23	19	6	19	31	11	109

Hence with the help of ANOVA, the following interpretation can be done:

$SS_b=347$; $SS_w=141$; $SSt=488$; $MS_b=115$; $MS_w=7$ and calculated value of F is 16 and corresponding table value of F with 3 and 20 df respectively is 3.10.

ANOVA test Result:

Source of variation	df	SS	MS	Table value of F at .05 level	Significant or not
Between Groups	3	347	115	3.10	Not
Within Groups	20	141	7	-	-

Therefore, it can be said that null hypothesis was accepted and logical research hypothesis was rejected and it can be concluded that there is no association among different income groups as to the

problems being faced by the students when college students do not use Internet.

Conclusion

The interpretation of the survey findings statistically proves that while there may not be much difference in terms of accessibility of the Internet when it comes to parental income, quite predictably so because of the mushrooming of the cybercafés in nooks and corners of the country, the possession of a laptop significantly varies in terms of the parental income. In a developing society where the winds of information society have supposedly begun to sweep, it could be an interesting idea to provide the students with some facilities to help them in accessing Internet from home. Of course, providing the students with laptop is a shortcut available to bridge the yawning gap existing between the polarities, but it is important to remember that net tariff is still quite high in India and the bandwidth is equally poor. The area where the survey was conducted happens to be a victim of poor connectivity and high tariff especially when it comes to accessing Internet in a cybercafé. Taken in entirety, the survey provides a grim picture and in itself speaks of digital divide among the Internet users on the whole. Students with laptop will be in possession of richer information content while getting it at a cheaper rate while students without a laptop would be forced to pay more at cybercafé and would forever remain digital laggard. The students with laptop would find it easier to become only digital adopters and would find it easier to be a part of information revolution leaving their less privileged pals behind. The flipside of the entire debate is that while a good section of the students are an active participants in the process for becoming the members of a digital society even while living in an impoverished place because of a better parental income, their less fortunate colleagues would be forced to continue with the frustration of being

a early digital adopters further eroding the possibility of India becoming an information society in the nearest future.

References

Baudrillard, J. (1985), 'The Ecstasy of Communication', in Foster, H (Ed) Postmodern Culture, (p133), Cambridge: Pluto Press.

Dewdney Andrew and Ride Peter, (2009). The New Media Handbook, New York. Routledge.

King Lucy, Picard G. Robert & Towse Ruth, (2008) 'the Internet and Mass Media', New Delhi. Sage Publication Ltd.

Lievrouw A. Leah, Livingstone Sonia, (2006), 'the Handbook of New Media', New Delhi. Sage Publication Ltd.

Morse Margaret, (1998) 'Virtualities: Television, Media Art, and Cyber Culture', Bloomington, IN: Indiana University Press.

Nachmias David, Nachmias Chava, (1976), 'Research Methods in the Social Sciences', New York. St. Martin Press.

Poster Mark, (2006). 'Culture and New Media: A Historical View', New Delhi, Sage Pub

Rice E. Ronald, Haythornthwaite Caroline, (2006). 'Perspectives on Internet Use: Access, Involvement and Interaction', New Delhi. Sage Pub.

Singhal Arvind, Rogers M. Everette, (1989) 'India's Information Revolution', New Delhi. Sage Pub.

Wimmer D. Roger and Dominick R. Joseph, (2003) 'Mass Media Research'. Singapore. Thomas Asia Pvt. Ltd.