Internet usage and dependency among college students in relation to economic status: A comparative study

MAHJABEEN
Assistant Professor
Justice Basheer Ahmed Sayeed College for Women
Chennai (T.N.) India

ABSTRACT

The aim of the study is to understand the difference between the gender of college students and the type of college in terms of internet usage and dependency and also analyse the influence of economic status on internet usage and dependency. The sample of the study consists of 1200 college students belonging to the age group of 17-21 years. Of the 1200, 600 belonged to government colleges and 600 were from private colleges. To assess the student's internet usage and dependency two questionnaires namely, 'The Young People's Internet Usage' Questionnaire by Child Exploitation and Online Protection (CEOP) Centre, UK and 'Internet Behaviour Questionnaire' by Institute of Hygiene and Applied Physiology, Swiss Federal Institute of Technology at Zurich (ETH), Switzerland were used. Descriptive and inferential statistics were computed to analyse the data collected. The findings of the present study report higher internet usage and dependency among male college students. In addition, private college students were found to use internet frequently with increased dependency than the government college students. Further, students belonging to high family monthly income group had higher internet dependency and used internet more in comparison to students of other income groups.

Key Words : Internet usage, Internet dependency, College students, Economic status

INTRODUCTION

Internet has evolved into a powerful tool in the hands of the devil as people are slowly drifting away from their social ties due to high internet addiction. Though people use this tool for communicating with others, the ultimate reason is actually to maintain proper interpersonal relationships in this fast paced world (Bargh and McKenna, 2004).

Access to internet facilities have increased over the last decade with increased affordability at home as internet has become an integral part of day-to-day activities. A study done by DeBell and Chapman (2003) revealed that greater number of adolescents and children in America were found to have access to internet with exposure at a very young age. Numerous educational benefits can be gained with the use of internet as there would be increased access to information and enhanced communication with teachers and classmates. But when used for purposes other than education, internet users tend to experience academic, relationship, financial, and occupational difficulties, as well as physical impairments with the advent of prolonged internet addiction (Chou, 2001).

The primary motivation of this study is to analyse financial inequality and its influence on internet usage among college students. Further, the study aims to understand the difference between the gender of college students and the type of college in terms of internet usage and dependency. Hence, this paper aims to explore the internet usage and dependency among college students in Chennai with respect to their economic status.

METHODOLOGY

Participants :

The present study was conducted on 1200 male and female college students belonging to the age group of 17-21 years in the city of Chennai, Tamil Nadu, India. Of the 1200 college students, 600 belonged to Government colleges and 600 were from the Private colleges. College students were chosen in such a way that each has an equal and independent chance of being selected.

Measures :

First part of the questionnaire included questions relating to name, gender, age, college studying, family's monthly income was obtained in order to study the differences in gender, type of college and family income with regard to internet usage and internet dependency.

Internet usage :

The second part of the questionnaire contained questions to identify the high internet users. In this connection, the researcher gathered information relating to internet activities and observed the usage pattern among the general public. The Young People's Internet Usage Questionnaire(http:// derwen.wikispaces.com/file/view/Young_People%27s_Internet_Usage_Questionnaires.pdf) was used here. This questionnaire is adapted from Child Exploitation and Online Protection (CEOP) Centre. CEOP is a UK cross agency and cross business department of the Serious Organised Crime Agency, and is dedicated to eradicating the sexual abuse of children. It has produced a website about online safety, with different sections containing advice for 5-7, 8-10, and 11-16 year olds, as well as parents and teachers.

Internet dependency :

The third part of the questionnaire was comprised of questions to identify internet dependency among students. An In-depth review on internet dependency was done to list the questions. In this connection Institute of Hygiene and Applied Physiology, Swiss Federal Institute of Technology at Zurich (ETH), Switzerland had developed the "Internet Behaviour Questionnaire" (http:// www.paolocoletti.it/ advancedcomputer/exercisesC/internet_ questionaire.htm) with areas relating to social aspects, usage, feelings and experience. From this, the researcher picked up questions relevant for internet dependency and specific to the Indian scenario. The internet dependency inventory is in the closed ended form. It comprises of 10 questions which are to be answered either by a 'yes' or a 'no'. The higher the score the higher is the dependency on the internet.

Data analysis :

The data obtained through the questionnaire were coded, classified and tabulated for further statistical analysis. Further, the data were processed and analyzed using SPSS (Statistical package for Social Sciences) Version 16.

RESULTS AND DISCUSSION

The percentage distribution of the selected demographic factors with respect to the use of internet are presented in Table 1.

Table 1 : General details of the selected college students						
Demographic details	Internet usage (N=1200)					
	Low (N= 260)		Moderate (N= 538)		High (N= 402)	
	Male (N= 74)	Female (N=186)	Male (N= 228)	Female (N=310)	Male (N=204)	Female (N=198)
Type of college						
Government	33.8	24.7	28.1	34.8	1.5	46.5
Private	66.2	75.3	71.9	65.2	98.5	53.5
Class studying						
Under graduation-1st year	6.8	19.9	6.1	36.5	1.0	42.4
Under graduation-2nd year	16.2	2.7	14.9	5.2	3.4	5.6
Under graduation-3rd year	67.6	61.8	72.4	41.9	73.0	32.6
Post-graduation-1st year	5.4	10.2	3.9	6.5	22.1	13.1
Post-graduation-2nd year	4.1	5.4	2.6	10.0	0.5	6.1
Family's monthly income						
Less than 10000	43.2	58.0	12.7	12.6	13.1	13.1
Rs.10,000-Rs.20,000	32.4	22.6	30.7	18.4	24.0	14.6
Rs.20,000- Rs.30,000	8.1	8.6	7.0	27.4	25.0	15.2
Rs.30,000 and above	16.2	10.8	49.6	41.6	37.9	57.1

Note. The students who used the internet everyday were categorized as "High Internet Users", the students who used the internet more than once a week and once a week were categorized under "Moderate Internet Users" and the students who used the internet once a month and once a year were categorized as "Low Internet Users".

From the low internet usage category, it can be noted that 66.2% of the males of the private college use the internet when compared to 33.8% of the males of government colleges. Also 75.3% of the females of the private college use the internet as compared to 24.7% of the females from government college females. In the high internet usage category, it is seen that 98.5% of males and 53.5% of the females of private colleges use the internet when compared to 1.5% of males and 46.5% of females of the government colleges.

It is also observed from Table 1 that the college students studying in their 3rd year under-graduation course used the Internet more when compared to the other students studying in I and II year under graduation and I and II post-graduation.

With respect to family income, 37.9% of the males and 57.1% of the females who had a family income of Rs. 30,000 and above were high internet users as compared to the other income groups. Also it is noted that 43.2% of the males and 58.0% of the females who had a family monthly income of less than Rs.10,000 were low internet users as compared to High internet users.

Table 2 compares the internet usage and dependency based on the gender of the college students.

It is evident from the Table 2 that there is a significant difference on the internet usage between male and female college students ($t=12.09$, $p<.01$). The male college students (M =31.64, SD=6.12) were found to use internet more than female college students (M =19.83, SD=3.55). Similarly, while considering the dependency on the internet usage among the college students, the

Table 2 : Comparison of internet usage and dependency based on gender of college students

Internet	Gender	N	Mean	Std. Deviation	Std. Error Mean	't' value
Usage	Male	506	31.64	6.12	0.75	12.09 **
	Female	694	19.83	3.55	0.63	
Dependency	Male	506	4.09	2.26	0.10	6.91 **
	Female	694	3.20	2.16	0.08	

Note. ** $p < .01$

result shows that the males (M=4.09, SD=2.26) were more dependent than the females (M=3.20, SD=2.16) on internet (t=6.91, p<.01).

The comparison of internet usage and dependency based on the type of college of the students is shown in Table 3.

Table 3 : Comparison of Internet usage and dependency between the government and private college students

Variable	College	N	Mean	Std. Deviation	Std. Error Mean	't' value
Internet usage	Government	338	16.86	16.55	0.90	10.15 **
	Private	862	27.93	17.15	0.58	
Internet dependency	Government	338	3.49	2.08	0.11	0.87
	Private	862	3.61	2.31	0.078	

Note. ** $p < .01$

From the results of Table 3, it is evident that there is a significant difference in the internet usage (t = 10.15, p<.01) among the private and government college students, showing that the private college students (M=27.93, SD= 17.15) use the internet more than the government college students (M= 16.86, SD= 16.55). Whereas, no significant difference in internet dependency was found between the private (M= 3.61, SD=2.31) and government college students (M=3.49, SD=2.08).

The comparison of internet usage based on the family's monthly income of the college students is shown in Table 4 (a) and 4 (b).

Table 4 (a) : Comparison of Internet usage based on the family's monthly income of the selected college students

Variable	Sources of variation	Sum of squares	df	Mean square	F
	Between groups	45484.67	3	15161.56	
Internet usage	Within groups	329834.1	1196	275.781	54.98 **
	Total	375318.8	1199		

Note. ** $p < .01$

Table 4 (b) : Duncan's multiple range test

Monthly income	N	Subset			
		1	2	3	4
Less than Rs.10000	585	19.01			
Rs.10000– Rs. 20000	271		27.15		
Rs.20000 – Rs. 30000	171			30.31	
Rs.30000 and above	173				35.34

The results of one way ANOVA done to compare the internet usage of the college students with respect to their family income levels is shown in Table 4 (a). It is evident that there is a significant difference in the internet usage of college students based on the family income levels (F

[3, 1196] =54.98, p<.01).

In order to find the source of difference, the Duncan's Multiple Range Test was conducted with results displayed in Table 4 (b). Results suggest that those students who were from high monthly family income (Rs. 30,000 and above) had high usage of internet when compared to other income (Less than 10000, Rs. 10000– Rs. 20000 and Rs. 20000 – Rs. 30000), respectively.

The comparison of internet dependency based on the family's monthly income of the college students is shown in Table 5 (a) and 5 (b).

Table 5 (a) : Comparison of Internet dependency based on the family's monthly income of the selected college students

Variable	Sources of variation	Sum of squares	df	Mean square	F
	Between groups	40.49	3	13.49	
Internet dependency	Within groups	6000.14	1196	5.02	2.69 **
	Total	6040.64	1199		

*Note.** p<.01

Table 5 (b) : Duncan's multiple range test

Monthly income	N	Subset	
		1	2
Rs.30000 and above	173	3.14	
Less than 10000	585		3.62
Rs.10000– Rs.20000	271		3.69
Rs.20000 – Rs.30000	171		3.71

The results of one way ANOVA done to compare the internet dependency of the college students with respect to their family income levels is shown in Table 5 (a). Results suggest a significant difference in internet dependency (F [3, 1196] =2.69, p<.01) of the college students based on their income.

In order to find the source of difference, the Duncan's Multiple Range Test was conducted with results displayed in Table 5 (b). The findings shows that those students who had a high family monthly income (Rs. 30,000/- and above) had high internet dependency when compared to other income (Less than Rs. 10000, Rs. 10000– Rs. 20000 and Rs. 20000 – Rs. 30000), respectively.

Discussion :

It is interesting to note a significant difference in usage and dependency based on the gender of the selected college students, as the males showed a higher rate of internet usage and dependency when compared to the females. This result is supported by Prabhu (2016) though it remains in contrast with the findings of Gross (2004) and Subrahmanyam *et al.* (2001).

On the basis of family income levels, significant difference was noticed and it revealed that the students who were from high family monthly income had higher internet dependency and used internet more when compared to other groups, thereby indicating the presence of financial inequality or bias in internet usage among the students belonging to various family income group. This is supported by Zhixian (2008). Qazi and Khan (2016) recorded the expenditure incurred to internet services and concluded that people with higher income tend to spend more on the internet services, thereby supporting the findings of the present study.

The results of the internet usage and dependency among the selected government and private

college students showed that the private college students used the internet more than the government college students. This difference in internet usage among the type of colleges might be due to the economic background of the family as a survey by OECD (2012) revealed that students who attend privately schools are socio-economically advantaged than those who attend government schools.

Findings :

1. Male college students showed higher internet usage and was found to be dependent than the female college students.

2. Students belonging to high family monthly income group had higher internet dependency and used internet more in comparison to students of other income groups.

3. Private college students were found to use internet frequently with increased dependency than the government college students.

Recommendations for further research :

1. Prevalence of internet addiction among students in different states of India may be surveyed.

2. Effects of internet usage on the general knowledge, awareness and career options may be assessed.

3. A comparison between the internet usages among students in the developed and developing countries may be carried out.

REFERENCES

Bargh, J.A. and McKenna, K.Y.A. (2004). The internet and social life. *Annual Rev. Psychol.*, **55** : 573-590.

Chou, C. (2001). Internet heavy use and addiction among Taiwanese college students: an online interview. *Cyber Psychol. &Behavior*, **4** : 573–585.

DeBell, M. and Chapman, C. (2003). Computer and Internet Use by Children and Adolescents in 2001: Statistical Analysis Report. National Center for Education Statistics.

Gross, E.F., Juvonen, J. and Gable, S.L. (2002). Internet use and well-being in adolescents. *Soc. Psychol. Study Soc. Issues*, **58** (1):75-90.

OECD (2012). Public and Private Schools: How Management and Funding Relate to their Socio-economic Profile, OECD Publishing.

Prabhu, S.P. (2016). Internet addiction among arts and science college students. *IOSR J. Humanities & Soc. Sci. (IOSR-JHSS),* **21** (9) : 76-81.

Qazi, Rahman and Khan (2016). The relationship between internet usage, socio economic status, subjective health and social status. *Business & Econ. Rev.*, **8**, (Special Edition) : 67-82.

Subrahmanyam, K., Greenfield, P., Kraut, R. and Gross, E. (2001). The impact of computer use on children's and adolescents' development. *Appl. Developmental Psychol.*, **22** : 7–30.

Zhixian, Y. (2008). Internet use patterns in the United States. Chinese Librarianship: *An Internat. Electronic J.*, **25**.

****