

Research Paper

Profiling of male and female internet users: A research study of Punjab Agricultural University

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ABSTRACT: Advances in technology have caused vital changes in many domains of societal and individual life. No doubt that the internet has become a powerful tool for communication purposes, to exchange ideas and even useful to participate in local, national and international networking. Internet pattern focuses items such as profile of the students and place of accessing internet and time spent on accessing it. The main aim of the study was to examine the gender differences in internet usage pattern among male and female respondents of the university. Proportionate random sampling technique was used to draw a sample of 200 students representing male and female respondents. Questionnaire was used as a data collection tool and the results revealed that majority of the male respondents were accessing internet in the hostels while female students were accessing at home. The average time spent on using internet was found to be maximum in case of male respondents. The difference in time spent on accessing internet between both the genders was found significant while mean time of surfing internet at different places was found significant in case of college computer lab, university library and friends' home. Male respondents were more active than their female counterpart on accessing internet so it is recommended that female respondents should be made aware about the facilities provided by the university and library resources and capacitated to use them.

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The internet is information's "super highway" that connects people, data and other computers (Potosky, 2007). Incorporating information and communication technologies (ICTs), particularly the internet, into teaching and learning in higher education has become an important issue in both economically developed and rapidly developing countries since it is the need of hour. Internet provides a new communication medium that enables access to vast amount of information across a wide variety of dimensions thus it has become a potential driving force of education. For students and teachers, the internet is becoming an increasingly important part of the educational process because it provide field of education with many opportunities. It transports teachers and students beyond the walls of their classrooms and provide them an access to people around the world in addition to the vast amount of information. Many researchers have examined the influence of internet on student. It helps students to broaden their academic knowledge by accessing to the information world and also by easy communicating to their academic community. It is a valuable source to retrieve information for their research and assignments (Tella, 2007). As noted by Ruzgar (2005), new technologies are rapidly changing our ways of communication and also the art of teaching, as well as extending ways of learning. The dramatic growth of internet usage has changed the lives of millions of people around the globe during the last decade.

The technological progress and current developments in computer and internet technology increasingly influence everyday life, particularly adolescents' lifestyle (Wang et al., 2012). The role of computer and internet as the means for socialisation, education, information access, entertainment, shopping and communication for the youth is important (Tewari, 2007). In fact, college students are increasingly taking advantage of the internet and web to complete course assignments (Browne et al., 2000 and Pew Research Center, 2002) and also use the internet nearly as much for social communication. But just as they use the internet to supplement the formal parts of their education, they go online to enhance their social lives. Studies indicate that as online information resources proliferate, college students are making fewer visits to the campus library to retrieve information and that their use of the World Wide Web as an information resource is increasing overall (Pew Research Center, 2002). University reference librarians have become expert web users in order to give students the assistance they need in finding relevant and credible information, but students do not always take advantage of librarians' expertise. In fact, recently, college librarians reported a decrease in the number of reference desk visits by students as campus online services have proliferated (Pew Research Center, 2002).

Gender differences in internet usage and web information seeking behaviours have attracted considerable interests (Hupfer and Detlor, 2006). It is also well documented in the last two decades (Li and Kirkup, 2007). Majority (73%) of the respondents were female and resided in campus (69.0%). Thirty six students (20.5%) were identified as dependent internet users (Siraj *et al.*, 2015). Various levels of gender disparity exist in the adoption of the internet with a significant gender bias toward men. Although the internet has frequently been characterized as male-dominated, the recent years have witnessed a rise in the number of female users. Liu and Huang (2008) study on male/female differences in web searching materials by focusing on the online reading environment indicated that there was a significant difference between genders in which female readers had a strong preference for paper as a reading medium than male readers. Li and Kirkup (2007) investigated difference in use of and attitudes toward the internet and computers generally for Chinese and British studies and gender difference. The findings of the study revealed that men in both countries were more likely than women to use email or chat rooms. Men played more computer games than women; Chinese men being the most active games players. Men in both countries were more selfconfident about their computer skills than women, and were more likely to express the opinion that using computers was a male activity and skill than were women. Gender differences were higher in the British group than the Chinese group. However, others argue that gender differences in behaviour are shaped as much by socializations by generation (Selwyn, 2007).

The gender bias study in internet use is important because the ability to use technologies has become increasingly critical to educational and economic success. Thus keeping in view the increasing use of internet and gender variations that exist, the present study entitled "Profiling of male and female internet users" was planned with the following objectives.

- To study the profile of male and female internet users.

- To study the time spent on accessing internet by the male and female users.

■ RESEARCH METHODS

The present study was conducted on students of Punjab Agricultural University; Ludhiana representing *i.e.* Bachelor, Master and Doctorate student. Proportionate random sampling technique was used to draw a sample of 100 male and 100 female students from all colleges of the university. The survey instrument was developed and pre-tested on a group of 20 non sampled students. Pre-tested semi structured questionnaire was personally distributed among sample students. The collected data were analysed by using frequency, percentage and t test.

■ RESEARCH FINDINGS AND DISCUSSION

The data presented in Table 1 depicted that more than half of the males and females were in the age group of 21-25 years. Nearly 40.0 per cent of males and females were in the age range of 17-20 years. Majority (86.5%) of the male and female students was hostlers. The results of the studies conducted by Javed and Iqbal (2010); Nath and Sahu (2011) and Thanuskodi and Ravi (2011) also concluded that the internet users in majority were in 19-30 years of age group. With regard to gender, Kadli et al. (2010), Rachana (2010), Nath and Sahu (2011) and Tikam (2011) found more male users than female contrary to the present study.

More than half males (52.5%) belonged to rural

Table 1 : Distribution of respondents according to their	(n=200)			
Respondents' profile —	$\underline{\qquad \qquad Male (n_1=100)}$		Female (n ₂ =100)	
Age (vears)	1	. 70	· · · · ·	%
17-20	39	39.00	36	36.00
21-25	56	56.00	63	63.00
>25	5	5.00	1	1.00
Place of residence	5	5.00	1	1.00
Home	17	17.00	10	10.00
Hostel	83	83.00	90	90.00
Family profile				
Family background				
Rural	52	52.00	38	38.00
Urban	31	31.00	44	44.00
Semi-Urban	17	17.00	18	18.00
Family type				
Nuclear	72	72.00	83	82.18
Joint	28	28.00	17	17.00
Family size				
Upto 4	42	42.00	49	49.00
5-8	37	37.00	35	35.00
>8	21	20.00	16	16.00
Family education				
Illiterate	0	0.00	1	1.00
Primary	29	29.00	14	14.00
High School	55	55.00	62	62.00
Higher Secondary	6	6.00	17	17.00
Graduate	7	7.00	4	4.00
Postgraduate	3	3.00	2	2.00
Ph.D.	0	0.00	0	0.00
Fathers' occupation				
Business	16	16.00	19	19.00
Service	28	28.00	57	57.00
Farming	56	56.00	24	24.00
Family income (Rs./Annum)				
Upto 2 lakhs	32	32.00	39	39.00
2-4 lakhs	36	36.00	30	30.00
4-6 lakhs	23	23.00	22	22.00
6-8 lakhs	5	5.00	6	6.00
8-10 lakhs	2	2.00	2	2.00
>10 lakhs	1	1.00	2	2.00

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areas closely followed by the urban areas (31.3%).In contrast, nearly 50.0 per cent of the female students belonged to the urban areas followed by rural areas (37.6%). More than half of the male and female respondents were from nuclear family and nearly 20.0 per cent of them were from joint family. Majority (90.0%) of the male and female respondents had family size upto 4.

The findings of the study revealed that a large percentage of male and female respondents (58.5%) had family education upto class 10th followed by primary level (21.5%). The male respondents belong to farming families were 56.0 per cent which followed by 28.0 per cent from services class families. In contrast 57.0 per cent of female respondents belong to service class families followed by farming families (20.0%). The trends of taking up farming as a secondary occupation even in rural area may be the cause of majority of families being from service class background.

More than half of the male respondents had family education upto class 10th followed by primary level (28.2%). In case of female counterpart 60.0 per cent of the female respondents had family education upto class 10th followed by senior secondary level. Majority of the male respondents belonged to farming families with income upto 2-4 lakhs followed by service class families (28.2%) with income upto 2 lakhs. In contrast, more than half of the female respondents belonged to service class families with income upto 2 lakhs followed by farming families with income upto 2-4 lakhs.

The results of the study are concurrent with the findings of Nath and Sahu (2011) who observed in his study that internet users' primary source of income was private service followed by government job (17.4%) and very less respondents' source of income was business. He also found that a large number of internet users (42.0%) had family income 30 thousands and above and 28.9 per cent were in 20 -30 thousands category with less than 6.9 per cent in below 10 thousands category.

It is evident from Table 2 that majority (88.0%) of the male respondents were using broad band connection to access internet followed by mobile internet (54.0%) and 26.0 per cent of the respondents were using Wi-Fi and only 16.0 per cent were dependent on net connector for accessing internet.

Female respondents were using broad band connection (94.0%) maximum for accessing internet followed by mobile internet (28.7%) and similar percentage (19.8%) of female respondents were dependent on net connector and university Wi-Fi for accessing internet. The reason for higher percentage of respondents using broadband connection for accessing internet can be the low range of Wi-Fi in the hostel campus.

The results presented in Table 3 indicated that majority (73.7%) of the male respondents were accessing

Table 2 : Distribution of respondents according to mode of accessing internet				
Methods	Male (n ₁ =100)	Female ($n_2=100$)	
Methods	f	%	f	%
Broad band connection	88	88.89	95	94.06
Mobile internet	54	54.55	29	28.71
Net connector	16	16.16	20	19.80
Wi- Fi	26	26.26	20	19.80

*Multiple responses

Table 3 : Distribution of respondents according to their place of accessing internet (p)				(n=200)
Place of access	Male $(n_1=100)$		Female (n ₂ =100)	
	f	%	f	%
Home	49	49.49	72	71.28
Departmental computer laboratory	18	18.18	22	21.78
College computer laboratory	35	35.35	23	22.77
University library	70	70.71	45	44.55
Friend's home	14	14.14	5	4.95
Cyber cafe	23	23.23	15	14.85
Hostel	73	73.74	65	64.36

*Multiple responses

internet in the hostels followed by university library (70.7%). When we compare this data with female respondents, it shows that maximum percentage (71.2%) of female respondents were using internet at home followed by hostels (64.3%). About 20.0 per cent even reported the use of internet in the cyber café, departmental computer lab by both the genders. The difference may be due to the variation in residence of the students. The results of the study conducted by Thanuskodi (2013) also concluded that female users accessed internet maximum at home.

The time spent by the respondents on using internet has been given in Table 4. It can be seen that 34.3 per cent of the male respondents were using internet for 2-4 hrs per /day followed by 27.2 per cent and 25.0 per cent who were using it for less than 1 hrs/day and 1-2 hrs/day, respectively. Only 13.0 per cent were using it for 4-6 hrs/day and above. Bujala (2012) also studied the gender differences in internet usage among respondents in Poland. The findings revealed that men spent 12.08 hours per week and women spent only 9.05 hours per week on accessing internet. It clearly indicates that men are more intense users than women. The results of the study also concurrent with the findings of Padma and Ramasamy (2014) who reported in their study that majority of the users spent 1 hours/day on accessing internet.

The average time spent on using internet was found to be maximum in case of male respondents (2.2 hrs/ day) followed by female respondents (1.6 hrs/day). The difference in time spent by respondents of both the genders was found to be significantly different ($p \le 0.05$).

It was observed that (Table 5) time spent by both the genders in the hostels was similar. However, the variation existed in mean time spent on university library and home. Female respondents spent maximum time in hostels followed by home and university library while male respondents spent maximum time in the hostels followed by university library and home. Least time was spent by both genders at friends' home for accessing internet.

The difference in mean score was significant (p<0.01) between the gender with regard to time spent on surfing internet at college lab and university library. However, significant difference was (p<0.05) there in time spent on internet at friend's home. No significant difference was observed in the use of internet at home, department computer lab, cyber café and hostel. The results of the study are in concurrence with the findings Unnikrishnan *et al.* (2008) who reported that in their

Table 4 : Distribution of respondents according to time spent on accessing internet(n=200)					
Time (hrs/day)	Male $(n_1=100)$		Female $(n_2=100)$		
	f	%	f	%	
Less than 1	27	27.27	27	26.73	
1-2 hrs	25	25.25	47	46.53	
2-4 hrs	34	34.34	18	17.82	
4-6 hrs	7	7.07	5	4.95	
>6 hrs	6	6.06	4	3.96	
Average	2.21		1.64		
t value		2 13*			

* indicates significance of value at P=0.05

Table 5 : Mean time spent by respondents on surfin	(n=200)		
Place	Male $(n_1=100)$	Female (n ₂ =100)	t value
	Mean \pm SD	Mean \pm SD	
Home	1.32±2.38	0.93±1.29	1.45
Deptt. computer laboratory	0.45 ± 1.14	0.24 ± 0.60	1.64
College computer laboratory	0.61±1.24	0.21 ± 0.48	3.02**
University library	$1.74{\pm}1.94$	0.72 ± 1.40	4.27**
Friend's home	0.28±1.13	0.03±0.17	2.20*
Cyber café	0.48 ± 1.45	0.28 ± 0.71	1.24
Hostel	2.40±2.81	1.96 ± 2.41	1.19

* and ** indicate significance of values at P=0.05 and 0.01, respectively

studies the majority of the users accessed the internet in the hostels. The findings are in disagreement with those reported by Okon and Ani (2010) and Loan (2011) who found cyber cafes to be the most used place. The differences may be due to the lack of proper facilities in those particular universities.

Conclusion :

The use of internet is rapidly becoming a key component of lives of college students. The academics increasingly depend upon the internet for educational purposes. A majority of academic and research institute provide internet services to students. Majority of the students under the study were from 21-25 years of age group and relied on hostels. Most of them accessed the internet through broad band connection and very less through mobile internet. Majority of the male students were accessing internet in the hostels while female students were accessing at home. The average time spent on using internet was found to be maximum in case of male students. The difference in time spent on accessing internet between both the genders was found significant and mean time of surfing internet at different places was found significant in case of college computer lab, university library and friends' home. Male students were more active than their female counterpart on accessing internet so it is recommended that female students should be made aware of the facilities provided by the University and library resources and capacitated to use them. More college and departmental centered facilities should be provided for use during the working hours.

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REFERENCES

Browne, M.N., Freeman, K.E. and Williamson, C.L. (2000). The importance of critical thinking for student use of the Internet. College Student J., 3: 391–398.

Bujala, A. (2012). Gender differences in internet usage. Acta Universitatis Lodziensis Folia Sociologica, 43: 49-67.

Detlor, B. (2006). Gender and web information seeking: A selfconcept orientation model. J. American Soc. Information Sci. & Technol., 57(8): 1105-1115.

Hupfer, M.E. and Detlor, B. (2006). Gender and web information

seeking: A self-concept orientation model. J. American Society Information Sci. & Technol., 57(8): 1105-1115.

Kadli, H.J., Kumbar, D.B. and Kanamadi, S. (2010). Students perspective on internet usage: A case study 16:121-130.Retrieved from:Error! Hyperlink reference not valid.

Li, N. and Kirkup, G. (2007). Gender and cultural differences in internet use: A study of China and the UK. Computers & Edu., 48: 301-317.

Liu, Z. and Huang, X. (2008). Gender differences in the online reading environment. J. Documentation, 64(4): 616-26.

Loan, A.F. (2011). Internet use by the college students across disciplines: A study. Annal Lib. Inf. Stu., 58: 118-127.

Nath, C.S. and Sahu, M. (2011). Profile of internet users in Odisha: A study on frequency of use and usage pattern. *Siddhant*, **11** : 173-185.

Okon, E. and Ani (2010). Internet access and use: A study of undergraduate students in three Nigerian universities. Electro Lib., 28: 555-567.

Padma, P. and Ramasamy, K. (2014). Internet usage pattern of engineering students: A study of the engineering colleges in Sivagangai district, Tamil Nadu state (India). Internat. J. Library & Information Studies, 4: 104-114.

Potosky, D. (2007). The internet knowledge (iknow) measure. Computer Human Behaviour, 23: 2760-2677.

Ruzgar, N.S. (2005). A Research on the purpose of internet usage and learning via Internet. Turkish Online J. Educ. *Technol.*, **4**:1-4.

Selwyn, N. (2007). An exploration of undergraduate students' gendered perceptions of information and communication technologies. Sex Roles, 56 (7-8): 525-536.

Siraj, H.H., Salam, A., Hasan, A.N., Jin, H.T., Roslan, R.B. and Othman, M.N.B. (2015). Internet usage and academic performance: A study in a Malaysian Public University. Internat. Med. J., 22:83-86.

Tella, A. (2007). University of Botswana undergraduates use of internet: Implications on academic performance. J. Educ. Media Lib. Sci., 45(2): 161-85.

Teo, T.S.H. and Lim, V.K.G. (2000). Gender differences in internet usage and task preferences. Behaviour & Information Technol., 19: 283-295.

Tewari, B. (2007). Youth and internet. Proc. 8th Int. Conf. on Asian Youth and Childhoods, pp. 22-24, Lucknow, India.

Thanuskodi, S. and Ravi, S. (2011). Use of digital resources by faculty and research scholars of Manonmaniam Sundaranar University, Tirunelveli. J. Library & Information Technol., 31

:25-30.

Tikam, V.M. (2011). Gender differences in the usage and attitudes towards the internet among students. *American J. Library & Information Sci.*, **5**: 51-57.

Unnikrishnan, B., Kulshrestha, V., Saraf, A., Agrahari, A.C., Prakash, S., Samantary, L. and Parida, A. (2008). Pattern of computer and internet use among medical students in Coastal South India. *South East Asian J. Med. Edu.*, **2** : 18-25.

Wang, L.J., Luo, J., Luo, W., Gao and Kong, J. (2012). The Effect of Internet Use on Adolescents' Lifestyles: A National Survey. *Computers Human Behavior*, 28: 2007–2013.

■ WEBLIOGRAPHY

American Federation of Teachers (AFT) (2001). A virtual revolution: Trends in the expansion of distance education. Retrieved from online at: *http://www.aft.org/higher_ed/downloadable/VirtualRevolution. pdf*.

Dholakia, R.R., Dholakia, N. and Kshetri, N. (2003). Gender

and Internet Usage.Retrieved from: http://ritim.cba.uri.edu/ wp2003/pdf_format/Wiley-Encycl-Internet-Usage-Gender-Final.pdfHupfer,M.E. &

Javed and Iqbal (2010). A study of internet addiction amongst college level students. Retrieved from:*http://www.iqraisb.edu.pk/icbte/Proceeding_ICBTE_2010/Proceeding* %20Papers/118.pdf

Pew Research Center (2002). The internet goes to college: how students are living in the future with today's technology. Retrieved from: *www.pewinternet.org/reports/pdfs/PIP_College_Report.pdf*

Rachana (2010). Profile of internet users at cyber cafes of Mumbai.Retrievedfrom:http://agropedia.iitk.ac.in/ openaccess/?q=content/profile-internet-users-cyber-cafesmumbai

Thanuskodi, S. (2013). Gender differences in internet usage among college students: A comparative study. Retrieved from:*http://digitalscommons.unl.edu/libphilprac/1052*.

