

# Use of Internet Among Undergraduate Students From Mumbai, India

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## Abstract

### Background and Aims

Internet has been a boon and has certainly helped to bring the world closer. It has been a great medium for students to communicate and get information. It has transformed academic landscape. At the same time many research papers have cited misuse of internet by students. Therefore, a cross sectional study has been conducted to investigate the use of internet facility among undergraduate students from Mumbai University using a validated questionnaire.

### Materials and Methods

A total of 150 students (75 male and 75 female) were scored using the questionnaire to determine the number of hours they spend on the use of internet and also the purpose for which they use internet.

### Results and Conclusion

The study showed that more than 90% of students spend 2 hours or more daily surfing on internet. For 40% of the students reason for surfing is nonacademic work. Thus it is essential to orient the students on using internet for their studies for better career and life.

### Keywords

Internet, Students, University, Mumbai, India, Academic

## I. Introduction

The Internet has completely transformed the information technology, computer and communications world. Invention of the telegraph, telephone, radio, and computer set the stage for this unprecedented integration of capabilities. The Internet is at once a world-wide broadcasting capability, a mechanism for information dissemination, and a medium for collaboration and interaction between individuals and their computers without regard for geographic location. The Internet represents one of the most successful examples of the benefits of sustained investment and commitment to research and development of information infrastructure [1].

The initial idea of developing internet is credited as being Leonard Kleinrock's after he published his first paper entitled "Information Flow in Large Communication Nets" on May 31, 1961. In 1962, J.C.R. Licklider became the first Director of Information Processing Techniques Office (IPTO), USA and gave his vision of a galactic network. In addition to ideas from Licklider and Kleinrock, Robert Taylor helped create the idea of the network that later became The Advanced Research Projects Agency Network (ARPANET) [2].

Internet is a multipurpose tool with numerous potentials. It enables students to communicate with other students abroad and thus share each other's ideas, knowledge, experiences, and cultures. It enhances skills and capabilities of students, which assist them in studies and in professional life. The academic landscape in education sector has been comprehensively transformed by the

recent advances in Information and Communication Technologies (ICTs). Consequently, the teaching and learning processes along with educational programs and pedagogy of instruction are being restructured, reformed to meet the expectations of a whole new breed of students entering the Universities. ICT applications in education sector can greatly enhance the quality of education. The learners, through multifaceted ICT applications, can control the content, time and pace of learning. It is also one of the greatest recent advancement in the world of information technology and has become a useful instrument that has fostered the process of making the world a global village. This is a universal fact that the use of internet has a great impact on the student's academic carrier [3].

The internet offers two main benefits: communication and information [4]. Internet usage has the potential to improve the quality of education. It has been reported that computer-based learning can increase understanding of theoretical and critical concepts [5]. The popularity of the Internet as a teaching-learning tool increased with the introduction of the web browser, which uses a hypertext concept [6]. With text and graphical images, and later video, audio, and animated objects, it became easily distributed over the Internet. The value of the Internet for educational purposes is enhanced as it brings about positive changes to teachers and instructors, who taught students to learn, work, communicate, and play [7].

At the same time several studies have revealed that students use internet for non-academic purpose. The rapid addiction of students to the internet is becoming an issue that the Institutions' Managements should be ready to address as the internet is posing an unhealthy risk to students' careers, academics and personal/social lives [8]. More so, the host of Singles' Sites, Music's, social sites, videos Sites and others have been distractive paradigms to most students that are pleasurable inclined. These sites affect not only the productive life of students in terms of academics but cause distraction to them.

A series of problems resulting from the misuse of Internet accompanying the excessive use of Internet, arouse attentions of researchers all over the world [9-11]. Developmental stressors, coupled with free access to Internet services, may contribute to college student's vulnerability to Internet behavior dependence [12-13]. Research indicates that Internet addiction is often associated with other forms of mental distress such as depression, impulse control disorder, and low self-esteem [14]. In the Western countries and in South East Asian countries, several studies have focused on internet behavior patterns in adolescents [15-18]. However, there is a paucity of such studies in India. The present study aims to investigate the use of internet facility among undergraduate students from Mumbai University using a validated questionnaire.

## II. Aim and Objectives

The aim of this study is to investigate the implication of the use of internet facilities by the students of the Mumbai University, Mumbai, India. The objectives include:

1. To discover how many hours the students used on internet for non-academic purposes.
2. To find out the purpose why students use internet.

**1. Methods**

The study was a cross sectional study. It was conducted among under graduate students in Mumbai University who were directly contacted by study team member randomly. The period of study was March to April 2015. A survey questionnaire was used as the tool to gather the information and data for the study.

Data analysis was done by descriptive statistics. Percentages were determined from the quantitative data frequencies sorted out from the filled questionnaires.

**2. Results**

Out of 150 students interviewed 75 (50%) were males and 75 (50%) were females. All the students were in the age range of 17 to 21 years. All the students had their own computer with either wifi connection or cable internet network. Table 1 shows distribution of students according the field of the study in the University of Mumbai.

Table 1. Distribution of students according to study field.

Field of study	Frequency	Percentage %
Electronics and Telecommunications Engineering	55	36
Pharmacy	25	17
Mechanical Engineering	25	17
Bachelor of Science	18	12
Catering and Hotel management	15	10
Computer engineering	12	8
Total	150	100

A breakdown of the data above shows that the majority of the students were from the Department of electronics and telecommunications engineering (37%), followed by pharmacy (17%) and mechanical engineering (17%), followed by bachelor of Science (12%), catering and hotel management (10%), and finally computer engineering (8%).

We requested our respondents to indicate the number of hours they spend on surfing the internet. Table 2 shows that 120 students (80%) spent 3-5 hours daily, followed by 15 students (10%) spent 1 hour daily, 14 students (9.33%) spent 2 hours daily and finally 1 student spent 7-10 hour daily surfing on internet.

Table 2: Number of Hours Spent Daily on Internet by Students

Hours / day spent on internet	Frequency	Percentage %
1 hour	15	10.00
2 hours	14	09.33
3-5 hours	120	80.00
7-10 hours	1	00.66
Above 10 hours	0	00.00
Total	150	100

Students were also requested to indicate the reasons for internet use. Table 3 shows that 90 students (60%) used internet for

academic work, followed by 30 students (20%) used it for chatting and making friends, 10 students (7%) used it for playing games and 20 students (13%) students used it for more than one reason. None of the students used internet for commercial purpose.

Table 3: Reasons for Internet use by Students

Reason for internet use	Frequency	Percentage
Games	10	7
Chatting and making friends	30	20
Commercial purpose	0	0
Academic work	90	60
More than one response	20	13
Total	150	100

**III. Discussion and Conclusion**

Our results indicate that majority of the students spend 3 to 5 hours daily on internet. Students do not only use internet for pure academic work which can help them to understand the subject and help to improve the knowledge, academic performance. The fact that 40% students use internet for nonacademic work when looked along with the time spent daily on internet suggests non judicial use of internet by students. Our results are consistent with the similar studies in India [19], Nigeria [20], and Turkey [21] which indicated students spent much time on internet and also on nonacademic sites. We feel that it is advisable for students to more focus on more academic sites rather than nonacademic. This can be managed by their institutes through counselling, seminar and workshops. Students should be suggested to browse specific sites related to their subject and which can be followed by a group discussion in their class which can be beneficial to all the students. Parents can also offer guidance to students to focus and understand priorities while studying. In this era of rapid expansion of information technology students should use internet as the advantage for knowledge improvement. They should learn to balance between social and academic use. This will help them to improve subject knowledge and quality of their work.

**References**

- [1] Leiner BM, Cerf VG, Clark DD, "Brief History of the Internet", Internet society. [Online] Available: <http://www.internetsociety.org>
- [2] Who invented the internet? [Online] Available: <http://www.computerhope.com/issues/ch001016.htm>
- [3] Devi CB, Roy NR, "Internet Use among University Students: A Case Study of Assam University Silchar", Pratidhwani – A Journal of Humanities and Social Science. 2012, 1(II), pp. 183-201.
- [4] Warren, A., Brunner, D., Mair P., Barnet, L., "Technology in Teaching and Learning: An Introductory Guide. London: Kogan Page, 1998.
- [5] Laurillard, D., "Learning through collaborative computer simulation", British Journal of Educational Technology, 23 (3), pp. 164-171, 1992.
- [6] Ciglaric, M., Vidmar, T., "The use of Internet technologies for teaching purposes", European Journal of Engineering Education, 23(4), pp. 497-503, 1998.
- [7] Charp, S., "The millennium classroom", T.H.E. Journal, 27(10), pp. 10-12, 2000.
- [8] Caldwell, C. D., Cunningham, T. J. (2010), "Internet addiction and students: Implications for school counselors", Retrieved

- from [Online] Available: [http://counselingoutfitters.com/vistas/vistas10/Article\\_61.pdf](http://counselingoutfitters.com/vistas/vistas10/Article_61.pdf)
- [9] Kraut R, Kiesler S, Bonka B, Cummings J, Helgeson V, Crawford A. "Internet paradox revisited", *Journal of Social Issue*. 2002; 58 (1), pp. 49-74
- [10] Pratarelli ME, Browne BL., "Confirmatory factor analysis of Internet use and addiction", *Cyber. Psychology & Behavior*, 5(1), pp. 53-64, 2002.
- [11] Young K., "Internet Addiction: The emergence of a new clinical disorder", *Cyberpsychol Behav*. 1996, 3, pp. 237-44.
- [12] Kandell, J. J., "Internet addiction on campus: The vulnerability of college students", *CyberPsychology and Behavior*, 1(1), pp. 11-17, 1998.
- [13] Goel D, Subramanyam A, Kamath R., "A study on the prevalence of internet addiction and its association with psychopathology in Indian adolescents", *Indian J Psychiatry*, 55, p. 140-3, 2013.
- [14] Young KS, Rogers RC., "The relationship between depression and internet addiction", *CyberpsycholBehav*. 1(1), pp. 25-28, 1998.
- [15] Siomos KE, Dafouli ED, Braimiotis DA, Mouzas OD, Angelopoulos NV, "Internet addiction among Greek adolescent students", *Cyberpsychol Behav*, 11, pp. 653-657, 2008.
- [16] Ghassemzadeh L, Shahraray M, Moradi A., "Prevalence of Internet addiction and comparison of Internet addicts and non-addicts in Iranian high schools", *CyberpsycholBehav*, 11, pp. 731-733, 2008.
- [17] Canbaz S, Sunter AT, Peksen Y, Canbaz MA., "Prevalence of the pathological Internet use in a sample of Turkish school adolescents", *Iran J Public Health*. 38, pp. 64-71, 2009.
- [18] Cao F, Su L., "Internet addiction among Chinese adolescents: prevalence and psychological features", *Child Care Health Dev*. 33, pp. 275-281, 2007.
- [19] Chathoth VM, Kodavanji B, Nayanatara AK, Pai SR., "Internet behavior pattern in undergraduate medical students in Mangalore", *International Journal of Innovative Research in Science, Engineering and Technology* 2013, 2.
- [20] Ojo, Abosede Ibrionke OA., "The use of internet facilities among the tertiary institution students: Ogun state institute of technology, Igbesa, Nigeria, under study", *Internet technologies and applications research*, 1(1), pp. 1-5, 2013.
- [21] Sahin YG, Balta S, Ercan T., "The use of internet resources by university students during their course projects elicitation: A case study", *The Turkish online journal of educational technology*, 9(2), pp. 234-244, 2010.