



# Knowledge of Internet and its Applications: A Survey of Secondary Students in Bihar

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## ABSTRACT

Universalization of Internet has some usefulness for everyone. It has been perhaps the most amazing and miraculous innovation in the field of communication. Information dissemination is probably the biggest achievement of Internet. Now internet has paved in our daily life for almost all our needs. Students are among the beneficiaries who surf the Internet for the purpose of gathering information. Hence an attempt has been made to study the knowledge of Internet use among college students. A Sample of 170 students of Darbhanga was used in this study. The result shows that gender and age were not statistically significant over the knowledge of internet and also about its application. Language has also nothing to play with regard to knowledge of internet and its application but there is a significant difference in the knowledge of Internet of Urdu medium student. English medium students were high gainer in knowledge of internet and in using of applications. Male and female students were not significantly different but male students have more knowledge about Internet and its applications.

## 1. INTRODUCTION

Kemp (1976) said, "Indeed, information has been described as the fifth need of man ranking after air, water, food and shelter". Word Internet is considered as Global network of networks. The Internet can be used as an additional convenient method for exploring different possibilities and solutions. But now it is an important and substantial means to explore different information for different purposes. The internet is a useful tool for all in a technologically sophisticated world. The Internet is also widely used in education. The use of Internet for education is very important. It is now being used to teach in schools and colleges to get more out of its ocean of information (Usun, 2003).

Bao (1998) surveyed Internet use at Seton Hall University. The findings reported that 40.2% of respondents used the Web on a daily basis, 38.3% weekly, and 10.7% on a monthly basis. About 10% respondents said they seldom or never used the Internet. It was also discovered that students and faculties searched the internet for information related to both their academic (83.2%) and nonacademic studies (73.8%).

Odell, Korgen, Schumcher and Delucchi (2000) studied Internet use among female and male college students at institutions of higher learning in Georgia, Hawaii, New Jersey, Massachusetts and Rhode Island. They found that while the gap in use of the Internet has nearly closed, there remain differences in how male and female undergraduates use the Internet

Korgen, Odell, and Schumacher (2001) investigated internet use among students, focusing on whether or not there are differences by race/ethnicity. They reported that use of internet is affected by presence or absence of a computer in the home..

Stern's (2002) study was on the information competence of incoming students into universities and how they use the Internet for general and academic research.

Hong, Ridzuan and Kuek (2003) studied students' attitudes towards the use of the Internet for learning at the University of Malaysia Sarawak. The study revealed that in general, students there had positive attitudes towards learning through the Internet. The students had the basic skills in using the Internet and perceived the learning environment in the university to be conducive to the use of the Internet as a learning tool.

Tenopir (2003) undertook a project for the US Council of Library and Information Resources (CLIR) and analyzed over 200 studies about the users of online information resources. She concluded that college and university students use the internet more than the library.

More recent statistics for the United States indicate that, by the end of 2002 connected 166 million people connected to the Internet, representing 59 percent of the population (Cyber Atlas, 2003). Coupled with this high connection rate and increasing use of fast connection systems such as cable modems, Americans

also spend a lot more time on the Net than the citizens of other countries (Cyber Atlas, 2003). But in case of India, user has increased from 5,000,000 in the year 2000 to 100,000,000 by 2011. Yet India is included in the list of low internet penetration countries (Inamdar et al., 2004).

Luambano and Nawe (2004) investigated the Internet use by students of the University of Dar es Salaam. Their findings revealed that the majority of the students were not using the Internet due to the inadequacy of computers with Internet access, lack of skills in internet use and slow speed of computers. It was also revealed that most students who used the internet did not use it for academic purposes. It was suggested that more computers connected to the Internet should be provided and that training should be given to the students on the use of internet so that they could also be enable to take advantages in their studies.

Ruzgar (2005) studied the purpose of the Internet use and learning via Internet. It was concluded that the Internet has become an integral part of college life and its usage is approaching 100 percent among students. It was found that 36 percent of the students spent 1-10 hours per week on the Internet. In terms of activities online, sending/receiving e-mail topped the list, followed by reading news and finding sports information, research for school-related work, chat, research for products and services, and downloading images. Due to their online activities, students watched less television.

Badu and Markwei (2005) studied the use of the Internet and its resources by academic staff and postgraduate students at the University of Ghana. Their findings showed that academic staff and postgraduate students were fully aware of the Internet and most of its services. It was also found that academic staff used Internet more than postgraduate students. Apart from e-mail, the frequency of using the Internet resources was very low. Staff and students indicated that they need training for an effective use of the Internet.

Ani (2010) investigated the extent and level of internet access as well as the use of electronic resources by undergraduate students in three Nigerian Universities and found that undergraduate students use the internet extensively.

Ozad (2010) explored the use of the Internet in tertiary media education. It was suggested that in addition to using the Internet as a source of information, students majored in communication and media should also use it as a tool of communication

Khan (2012), conducted a study on "Use of Information Sources by Faculty Members, Research scholars and Students of the Faculty of Commerce, AMU, Aligarh: A Survey" The purpose of this study was to find out the level of use of information sources by faculty members, research scholars and students of the faculty of commerce, AMU, Aligarh. The survey reveals that the maximum number of Faculty Members as well as Research Scholars uses Journals for getting their

required information, while Students prefer general books for getting their required information.

After observation of different studies it is clear that Internet has an important role in student's life for their different academic needs. They are also using Internet for their communication with others. But in India there are diversities for Internet facilities. Internet access is not available for all students and those who have access they are facing some technical problems. This study was specially taken to assess the knowledge of students about Internet and its uses.

### 1.1 Objectives

1. To study the knowledge of Internet of secondary school students on the basis of gender, locality and language of teaching.
2. To study the knowledge of Internet applications of secondary school students on the basis of gender, locality and language of teaching.

### 1.2 Hypotheses

1. There will be no significance difference in knowledge of internet of secondary school students on the basis of gender.
2. There will be no significance difference in knowledge of internet of secondary school students on the basis of locality of residence.
3. There will be no significance difference in knowledge of internet of secondary school students on the basis of language of teaching (Hindi vs. English).
4. There will be no significance difference in knowledge of internet of secondary school students on the basis of language of teaching (Hindi vs. Urdu).
5. There will be no significance difference in knowledge of internet of secondary school students on the basis of language of teaching (English vs. Urdu).
6. There will be no significance difference in knowledge of internet application of secondary school students on the basis of gender.
7. There will be no significance difference in knowledge of internet application of secondary school students on the basis of locality of residence.
8. There will be no significance difference in knowledge of internet application of secondary school students on the basis of language of teaching (Hindi vs. English).
9. There will be no significance difference in knowledge of internet application of secondary school students on the basis of language of teaching (Hindi vs. Urdu).
10. There will be no significance difference in knowledge of internet application of secondary school students on the basis of language of teaching (English vs. Urdu).

## 2. RESEARCH DESIGN

### 2.1 Research Method

In the execution of the present study, descriptive survey method of research was employed. This method has been the most popular and the most widely used research method in social sciences.

### 2.2 Population & Sample

In this study all secondary school students of Darbhanga city constitutes the population. A stratified random sample was drawn from this population, which consisted of 170 secondary school students giving due representation on the basis of gender and locality and language of teaching.

### 2.3 Tools Used

*Internet knowledge and applications questionnaire:* This questionnaire was developed by Dr. Kiran Lata Dangwal and Raghvendra Pratap Singh. It consist 28 items related to knowledge of Internet and knowledge of Internet applications. Each of the items has three alternate answers.

*Personal Information Blank:* It was used to get demographic information of the students like age, class, location of school, name, gender, father's name, and name of the school.

## 3. DATA PRESENTATION, ANALYSIS & INTERPRETATION

The main objective of the study is to find out the knowledge of Internet and its application of secondary school students. This study is planned and carried out to test the assumptions and tentative well defined hypotheses which may be accepted or rejected. The analyses had been done in two steps:

1) Knowledge about Internet of secondary school students.

2) Knowledge of Internet application of secondary school students.

**Table 1: Difference between the knowledge of Internet on the basis of gender**

Groups	N	M	t	Significance
Male	93	6.376	0.582	NS
Female	77	6.623		

Table 1 is showing that the mean value of male and female participants of Internet knowledge is 6.376 and 6.623 respectively. Obtained t value is 0.582 which is not significant at any level of significance. So hypothesis 1 "There will be no significance difference in knowledge of internet of secondary school students on the basis of gender" stands accepted.

But mean value of females is higher rather than males. One reason could be that female students learn internet with more curiosity and attention because in a traditional Indian family they are restricted to go outside the home.

**Table 2: Difference between the knowledge of Internet on the basis of locality**

Groups	N	M	t	Significance
Rural	91	6.462	0.135	NS
Urban	79	6.519		

Table 2 is indicating that the mean value of rural and urban participants of Internet knowledge is 6.462 and 6.519 respectively. Obtained t value = 0.135 which is not significant at any level of significance. So hypothesis 2 "There will be no significance difference in knowledge of internet of secondary school students on the basis of locality" stands accepted. According to high mean value it can be interpreted that urban students are having more knowledge about internet due to the availability of resources. Urban students are having easy access to Internet and technological instruments.

**Table 3 Difference between the knowledge of Internet on the basis of language of teaching (Hindi vs English)**

Groups	N	M	t	Significance
Hindi Medium	62	7.455	1.599	NS
English Medium	55	6.357		

Table 3 are showing data regarding knowledge of internet of students studying in Hindi medium and English medium school. Mean value for Hindi Medium and English medium schools are 7.455 and 6.357 respectively. Obtained t value = 1.599 and this value does not found significant at any level of significance. Thus hypothesis 3 "There will be no significance difference in knowledge of internet of secondary school students on the basis of language of teaching (Hindi vs. English)" stands accepted. Further the higher mean value of Hindi medium school is revealing that Hindi medium students are more inquisitive towards Internet. One possible reason behind this could be that Hindi medium schools are not affluent as English medium schools regarding physical and ICT resource.

**Table 4 Difference between the knowledge of Internet on the basis of language of teaching (Hindi vs. Urdu)**

Groups	N	M	t	Significance
Hindi Medium	62	7.455	4.837	Significant
Urdu Medium	53	5.094		

Statistics of Table 4 is showing that the obtained t value= 4.837 is significant at 0.01 level in case of Hindi and Urdu medium students. Students of Hindi medium schools scores high in comparison to students of Urdu medium schools. So hypothesis 5 that "There will be no significance difference in knowledge of internet application of secondary school students on the basis of language of teaching (Hindi vs. Urdu)" stands rejected.

The fact behind this result could be that Urdu medium schools are following a traditional way of teaching where no ICT tools are available. Urdu medium students were also facing language problem because English is the main language used in Internet application and their knowledge of English is very poor due to some social and religious factors.

**Table 5: Difference between the knowledge of Internet on the basis of language of teaching (English vs. Urdu)**

Groups	N	M	t	Significance
English Medium	55	6.357	1.822	NS
Urdu Medium	53	5.094		

It can be observe from Table 5 that in case of students studying in English and Urdu medium schools mean values of their knowledge of Internet are 6.357 and 5.094 respectively. Obtained t value is 1.822 which is not significant. So hypothesis 5 "There will be no significance difference in knowledge of internet of secondary school students on the basis of language of teaching (English vs. Urdu)" stands accepted. Language competency is a major factor in Internet using, because on Internet, English is a universal language and widely used so here students from English medium schools got privileged.

**Table 6: Difference between the knowledge of Internet's applications on the basis of gender**

Groups	N	M	t	Significance
Male	93	39.548	1.684	NS
Female	77	38.065		

Table 6 is showing data of knowledge of Internet applications of male and female students. Mean values of male and female students are 39.548 and 38.065 respectively. Calculated t value is not significant at any

level of significance. Hence, hypothesis 6 "There will be no significance difference in knowledge of internet application of secondary school students on the basis of gender" stands accepted. High mean value of male students could be because more time to use of Internet and also having more independence of having mobile phone and other devices.

**Table 7: Difference between the knowledge of Internet's applications on the basis of locality**

Groups	N	M	t	Significance
Rural	91	38.418	1.118	NS
Urban	79	39.405		

Data on Table 7 is showing the mean values of knowledge of Internet application of students belonging to rural and urban background. Mean values are 38.418 and 39.405 respectively and the obtained value is 1.118 which is not significant at any level of significance. So hypothesis 7 that "There will be no significance difference in knowledge of internet application of secondary school students on the basis of locality of residence" stands accepted. As urban students were having more knowledge of Internet so they also have more knowledge of Internet application in comparison to student belonging to rural background.

**Table 8 Difference between the knowledge of Internet's applications on the basis of language of teaching (Hindi vs English)**

Groups	N	M	t	Significance
Hindi Medium	62	35.575	3.382	Not
English Medium	55	39.000		Significant

It is clear from Table 8 that calculated t value of scores of knowledge of Internet application of Hindi vs. English medium students is not significant at any level of significance. On the basis of results, hypothesis 8 "There will be no significance difference in knowledge of internet application of secondary school students on the basis of language of teaching (Hindi vs. English)" stands accepted.

High mean value of English medium students showing that they are having more knowledge about different applications of Internet, because language is no bar for them in using Internet application. Low value of scores of Hindi medium students may be because there are very few applications which are using Hindi language.

**Table 9: Difference between the knowledge of Internet's applications on the basis of language of teaching (Hindi vs Urdu)**

Groups	N	M	t	Significance
Hindi Medium	62	40.377	3.846	Significant
Urdu Medium	53	35.575		

Table 9 is revealing data regarding knowledge of Internet application of Hindi and Urdu medium students. With having significant t value 3.846 both group of students were significant differ on knowledge of Internet applications. Hence hypothesis 9 "There will be no significance difference in knowledge of internet application of secondary school students on the basis of language of teaching (Hindi vs. Urdu)" stands rejected. Due to language bar Urdu medium students had little knowledge about Internet so their knowledge of Internet applications gone down accordingly.

**Table 10: Difference between the knowledge of Internet's applications on the basis of language of teaching (English vs. Urdu)**

Groups	N	M	t	Significance
English Medium	55	40.377	1.003	Not
Urdu Medium	53	39.000		Significant

Table 10 is showing the mean values of English and Urdu medium students which are 40.377 and 39.000 respectively. Calculating t value is not significant at any level of significance. Thus hypothesis 10 "There will be no significance difference in knowledge of internet application of secondary school students on the basis of language of teaching (English vs. Urdu)" stands accepted.

## DISCUSSION

This study is a preliminary about the knowledge of Internet and its application among college students. It arose that found no difference between the knowledge of Internet and its application of college going students. On the basis of mean value it was found that male students have more knowledge of Internet and information of internet application. In a typical Indian family where patriarchal system is following where male member got more time and opportunities to interact form outside of family and due to patriarchal system they are also more privileged rather than female members of family.

Locality is also important for imparting knowledge of Internet. However this research did not find any significant difference due to locality of students but high mean value of urban students supports this fact. In urban setup there are established network of internet availability and resources that is why urban students got more information about internet ant its applications.

The results of the present study identified the level of knowledge about Internet and its applications as social networking, emailing, entertainment and educational pursuits as the most frequent purpose for internet use.

The concerned stake holders and educational administrators should make overall attempts to provide the necessary infrastructure facilities such as high speed

network connection to access the e-resources and to conduct some training programs for the students.

## REFERENCES

- Ani, O. E. (2010). Internet access and use: A study of undergraduate students in three Nigerian universities. *The Electronic Library*, 28(4), 555-567.
- Badu, E. E., & Markwei, E. D. (2005). Internet awareness and use in the University of Ghana. *SAGE Journal Online*, 21(4), 260-268.
- Bao, X. M. (1998). Challenges and opportunities: A report of the 1998 library survey of Internet users at Seton Hall University. *College & Research Libraries*, 59 (6), 535-543
- Cyber Atlas Staff, (June 16, 2003). "May 2003 Internet Usage Stats, [http://cyberatlas.internet.com/big\\_picture/geographics/article/0,,5911\\_151151,00.html](http://cyberatlas.internet.com/big_picture/geographics/article/0,,5911_151151,00.html)
- Cyber Atlas Staff, "Population Explosion," June 11, 2003, [http://cyberatlas.internet.com/big\\_picture/traffic\\_patterns/article/0,,5931\\_2222541,00.html](http://cyberatlas.internet.com/big_picture/traffic_patterns/article/0,,5931_2222541,00.html)
- 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*.55:140-3. 2013.
- Hong, K. S., Ridzuan, A. A., & Kuek, M. K. (2003). Students' attitudes toward the use of the Internet for learning: A study at a university in Malaysia. *Educational Technology & Society*, 6(2), 45-49.
- Inamdar SC, Rotti SB (2004). Computer use among medical students in an institution in Southern India. *Nat. Med. J. India*. 17 (1):8-10.
- Khan, Abdul Mannan, (2012), "Use of Information Sources by Faculty Members, Research scholars and Students of the Faculty of Commerce, AMU, Aligarh: A Survey", *Library Philosophy and Practice* (e-journal), Paper 782.
- Korgen, K., Odell, P., & Schumacher, P. (2001). Internet use among college students: Are there differences by race/ethnicity? *Electronic Journal of Sociology*, 5 (3). Retrieved June 11, 2007, from <http://www.sociology.org/content/vol005.003/korgen.html>
- Luambano, I., & Nawe, J. (2004). Internet use by students of the University of Dare es Salaam. *Library Hi Tech News*, 21(5), 13-17.
- Odell, P. M., Korgen, K., Schumacher, P., & Delucchi, M. (2000). Internet use among female and male college students. *Cyber Psychology and Behavior*, 3 (5), 855-862.
- Ozad, B. E. (2010). The use of the Internet in media education. *The Turkish Online Journal of Educational Technology*, 9(2), 245-255
- Ruzgar, N. S. (2005). A research on the purpose of Internet usage and learning via Internet. *The Turkish Online Journal of Educational Technology*, 4(4), 27-32.
- Stern, C. M. (2002). Needle – Haystack + You: How undergraduates search and use the Internet. *STC Proceedings*. From <http://www.stc.org/confproceed/2002/PDFs/STC49-00054.pdf>
- Tenopir, C. 2003. Uses and users of electronic library resources: An overview of recent analysis of research studies. Available: <http://www.clir.org/pubs/abstract/pub120abst.html>.
- Usun, S. (2003). Undergraduate Students Attitudes towards Educational Uses of Internet, *Interactive Educational Multimedia*, 7, 46-62.
- Xiaolei Liu, Zhen Bao, Zhenghong Wang. Internet Use and Internet Addiction Disorder Among Medical Students: A Case from China. *Asian Social Science*.6:1, 2010.