Internet Access, Use and Gratification among University Students: A Case Study of the Islamia University of Bahawalpur, Pakistan

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ABSTRACT: This study aims to investigate the attitudes of students at the Islamia University of Bahawalpur, Pakistan towards learning through the Internet. A structured questionnaire was used for data collection. It was found that a vast majority of the students learnt how to use the Internet by themselves or with the assistance of their friends. The findings showed that their attitude towards the Internet was very positive and they used it mainly for study purpose. They used online databases, dictionaries, encyclopedias and online courses. Google was the most popular search engine for retrieving information on the Internet. However, the use of free database services provided by the Higher Education Commission (HEC) of Pakistan was not satisfactory. The respondents were also dissatisfied with the Internet service provision, slow speed of the Internet connection and inadequate number of computers in computer labs.

I. Introduction

The Internet is an educational tool with numerous potentials. It may be used to replace the traditional classroom lectures or supplement traditional instructional methods. The Internet enables students to communicate with other students abroad and thus share each other's ideas, knowledge, experiences, and cultures (Lui, 1997). The Internet enhances skills and capabilities

of students, which assist them in studies and in professional life. Students with high CGPA (Cumulative Grade Point Average) use the Internet more for their studies and gain more knowledge and information across the world (Awais, Bilal, Usman, Waqas, & Sehrish, n.d). University students should be encouraged to use academic and reliable resources in their term project and homework for successful investigation. They should use e-journals, e-libraries, e-books, and online databases as academic resources for their related courses (Shahin, Balta & Ercan, 2010).

II. Purpose of the Study

The main purpose of this study is to investigate the attitudes of students at the Islamia University of Bahawalpur, Pakistan towards the Internet, specifically how they access the Internet, what they use the Internet for, how frequently they use the Internet, what Internet services they use most, how satisfied they are with the Internet services provided by the university, and what problems they face during an Internet search.

III. Research Methodology

A survey research protocol was used to achieve the purpose of the study. A comprehensive review of the related literature was conducted. A literature-based and peer-reviewed questionnaire, including open-ended and closed-ended questions, was developed. The targeted population of the study was Master's students in Science and Arts Faculties at the Islamia University of Bahawalpur, Pakistan. A purposive sample of one hundred students who used Internet was taken from both faculties. Acquired data were analyzed for the Internet use frequencies, percentage and descriptive statistics with SPSS v. 17.

IV. Literature Review

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. Ani's findings revealed that undergraduate students use the Internet extensively. However, access to the Internet in the university libraries, departments/faculties and university computer/ICT centers was grossly poor due to the infrastructure. The majority of the respondents relied on private, commercial Internet

services, and cybercafés. It was also found that Internet education for the respondents is needed for the use of electronic resources and databases.

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.

Hong, Ridzuan and Kuek (2003) studied students' attitudes toward 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 conducive to the use of the Internet as a learning tool.

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. Because of 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.

Chou and Hsiao (2000) explored the Internet addiction among Taiwan's college students. Their findings indicated that the Internet addiction did exist among some of Taiwan's college students.

Some Internet addicts spent many hours a day on the Internet, including BBSs, WWW, e-mail and games.

Kumar and Kaur (2006) suggested that the Internet service should be provided round the clock for its maximum use. More computers should be provided along with more efficient staff. Bandwidth for fast Internet connectivity, printing facility, and training programs should be provided. Sites for entertainment should be blocked.

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.

V. Data Analysis and Interpretation

1. Respondent Profile

The study used a purposive sample of one hundred students at the Islamia University of Bahawalpur, Pakistan, of which 50 were from the Science Faculty and 50 from the Arts Faculty.

Table 1: Respondent Profile

Faculty	Frequency	Percent
Faculty of Science	50	50
Faculty of Arts	50	50
Total:	100	100

2. Age of Respondents

Table 2: Age of Respondents

Age	Frequency	Percent
20-25	90	90
26-30	8	8
31-35	1	1
36-40	1	1
Total:	100	100

Table 2 shows that the majority (90%) of the respondents were aged between 20-25 years. Eight respondents were 26-30 years old. Only 1.0 % of the respondents were between 31-35 & 36-40 years old.

3. Gender of Respondents

Table 3: Gender of Respondents

Gender	Frequency	Percent
Female	51	51
Male	48	48
Missing value	1	1
Total	100	100

Table 3 shows that 51% of the respondents were female and 48.0% were male. One of the respondents did not indicate his or her gender.

4. Access to Internet

Table 4: Access to Internet

Access to Internet	Frequency	Percent
Departmental Computer Lab	41	41
Library	27	27
University Hostel	18	18
At Home	19	19
Internet Café	3	3
At Friend's Home	1	1

Table 4 shows that the majority (41%) of the respondents stated that they accessed the Internet from their departmental computer lab, 27% from the Library, 19% at home, 18% at the University hostel, 3% at Internet cafés, and 1% at a friend's home.

5. Training of Internet Use

Table 5: Internet Training

Training for Internet Use	Frequency	Percent
From Teacher	17	17
From Staff of Computer Lab	5	5
External Training Institutions	10	10
From Friend	22	22

Self Learning	51	51

Table 5 shows that the respondents were asked how they were trained for using the Internet. The majority (51%) of reported that they learned how to use the Internet by themselves, 22% from friend, 17% from their teacher, 10% from external training institutions, and 5% from staff of computer labs.

6. Experience of Internet Use

Table 6: Experience of Internet Use

Internet Experience	**Frequency**	**Percent**
0-1	46	46
2-3	38	38
4-5	11	11
6+	4	4
-	1	1
Total	100	100

Table 6 shows that most of the respondents (46%) were beginner of Internet use. 38% had used Internet for 2-3 years, 11% for 4-5 years, and 4% for more than six years. One respondent has not indicated his or her Internet use experience.

7. Frequency of Internet Use

Table 7: Frequency of Internet Use

Internet Usage	**Frequency**	**Percent**
Daily	31	31
Twice a week	26	26
Weekly	24	24
Monthly	19	19

Table 7 shows that 31% of the respondents stated that they used the Internet daily, 26% twice a week, 24% weekly, and 19% monthly.

8. Daily Internet Usage

Table 8: Daily Internet Usage

Time	Frequency	Percent
1 hour a day	57	57
2 hours a day	24	24
3 hours a day	10	10
4+ hours a day	3	3

Table 8 shows that most of the respondents (57%) spent one hour daily on Internet, 24% two hours, 10% three hours, and 3% more than four hours a day.

9. Use of HEC Databases

Table 9: Use of HEC Databases

Responses	Frequency	Percent
Yes	49	49
No	45	45
Missing Value	6	6
Total	100	100

Table 9 shows that almost half of the population (49%) used the HEC databases. On the other hand, 45% were unaware of those resources.

10. Satisfaction with Internet Service

Table 10: Satisfaction with Internet Service

Satisfaction	Frequency	Percent
Yes	40	40
No	54	54
Missing Value	6	6
Total	100	100

Table 10 shows that the majority (54%) of the respondents was found dissatisfied with the Internet facilities provided by their university. However, forty percent of the respondents were satisfied.

11. Purpose of Internet Use

Table 11: Purpose of Internet Use

Purpose of Internet Use	Frequency	Percent
Study	64	64
Literature search	14	14
Writing research articles	9	9
Sending e-mail	18	18
Preparing presentations	21	21
Preparing assignments	28	28
Searching for jobs	8	8
Searching/Applying for scholarships	5	5
Reading newspapers	11	11
Reading sports information	6	6
Playing games	5	5
Downloading songs/movies	14	14
Chatting with friend	11	11
Buying products online	3	3

Table 11 shows that the majority (64%) of the respondents used the Internet for their study. 28% used it to prepare for assignments and 21% for presentations, 18% to send e-mail, 14% to do literature search, another 14% to download songs or movies, 11% for chatting with friends, another 11% for reading newspapers, 9% or writing research articles, 6% for sports information, 5% for playing games, and 3% for buying products online.

12. Attitude towards Internet

Table 12: Attitude towards Internet

Attitude	Mean	St. Dev.
Internet provides ease in study.	4.40	.702
Internet accelerates searching process.	4.07	.643
I cannot study without Internet.	2.83	1.130
Internet improves my GPA.	3.27	.964
I prefer to get information from Internet rather than library.	4.52	7.322
Internet is the fastest way for acquiring accurate information.	4.30	.713
Internet service should be provided 24 hrs a day.	4.10	1.048
Internet is a best communication device.	4.19	.799
I prefer online learning.	3.41	1.001

Internet is important for students in their study.	4.24	.805
Every student should have access to Internet.	4.08	.969
Free access to Internet provides additional resources.	3.86	.967

Note: 5=Strongly Agree, 4=Agree, 3=No opinion, 2=Disagree, 1=Strongly Disagree

Table 12 shows that the respondents had a very positive attitude towards using the Internet for their study. They were found agreed that "Internet provides ease in study" (mean=4.40), "Internet accelerate searching process" (mean=4.07), "I prefer to get information from Internet rather than library" (mean=4.52), "Internet is the fastest way for acquiring accurate information" (mean=4.30), "Internet service should be provided 24 hours a day" (mean=4.10), "Internet is a best communication device" (mean=4.19), "Internet is important for students in their study" (mean=4.24), "Every student should have access to Internet" (mean=4.08), and "Free access to Internet provides additional resources" (mean=3.86). On the other hand, respondents did not provide any opinion regarding "I cannot study without Internet" (mean=2.83), "Internet improves my GPA" (mean=3.27), or "I prefer online learning" (mean=3.41).

13. Search Engine Preference

Table 13: Search Engine Preference

Search Engines	**Percentage**
Google	83
Yahoo	25
MSN	9
AltaVista	5
HotBot	4
Netscape	3
Excite	1
Lycos	1
InfoSeek	1

Table 13 shows that Google was the search engine used most by the respondents (83%). Yahoo, was used by 25% of the respondents, MSN 9%, AltaVista 5%, HotBot 4%, and Netscape 3%. Infoseek, Lycos and Excite was used by only 1% of the respondents.

14. Databases Preference

Table 14: Database Preference

Databases	Percentage
ScienceDirect	25
EBSCO	17
Springerlink	13
JSTOR	11
Emerald	7
Cambridge	5

Table 14 shows that ScienceDirect was the database used most by the respondents (25%). EBSCO was used by 17% of the respondents, Springerlink 13%, JSTOR 11%, Emerald 7% and 5 Cambridge Journal 5%.

15. Internet Sources of Information

Table 15: *Internet Sources of Information*

Internet Sources of Information	Mean	St. Dev.
Online dictionaries	3.91	.958
Online encyclopedias	3.57	.984
Online courses	3.55	1.060
Online databases	3.51	.995
Listserve/wikis/boards	3.22	.963
Online bibliographic service	3.37	1.011
Online abstracting & indexing	3.34	1.046

Note: 5=Strongly Agree, 4=Agree, 3=No opinion, 2=Disagree, 1=Strongly Disagree

Table 15 shows the mean frequency of online resources used by the respondents

16. Internet Training Need

Table 16: *Internet Training Need*

Responses	Frequency	Percent
Yes	66	66
No	26	26
Missing Value	8	8
Total	100	100

Table 16 shows that the majority (66%) of the respondents needs training for Internet use and searching skills while 26% does not need training to use the Internet.

17. Problems Faced by the Respondents

Table 17: Problems Faced by the Respondents

Problems	Mean	St. Dev.
Difficulty in finding relevant information	4.40	4.125
Lack of knowledge about advance searching	3.65	1.109
Inadequate computers in Lab	3.93	.885
Overload of information on the Internet	3.90	.902
Problems in formulating a search query	3.87	.835
How to use electronic books	3.76	1.006
How to use electronic databases.	3.69	.976
Lack of information retrieval skills	3.78	.949
Slow speed of Internet	4.34	.885

Note: 5=Strongly Agree, 4=Agree, 3=No opinion, 2=Disagree, 1=Strongly Disagree

An attempt was made to explore the problems faced by the respondents in Internet search. Table 17 shows that the respondents had the following problems: "Difficulty in finding relevant information" (mean=4.40), "Lack of knowledge about advance searching" (mean=3.65), "Inadequate computers in Lab" (mean=3.93), "Overload of information on the Internet" (mean=3.90), "Problems in formulating a search query" (mean=3.87), "How to use electronic books" (mean=3.76), "How to use electronic databases" (mean=3.69), "Lack of information retrieval skills" (mean=3.78), and "Slow speed of Internet" (mean=3.78).

18. Suggestions from Respondents

Table 18: Suggestions from Respondents

Suggestions	Frequency
Good Internet speed with high bandwidth should be provided.	24
More computers should be provided in computer labs.	5
Internet service should be provided 24 hours a day.	5
Internet and computer training should be provided to general public.	2
Restrictions on downloading movies/songs should be removed.	2
Internet should be used positively.	1
Useless websites should be blocked by the University.	1

Table 18 shows that in response to an open ended question in the questionnaire, 24 respondents suggested that good Internet speed with high bandwidth should be provided. Five respondents suggested that the number of computers should be increased. Another 5 suggestions were that the Internet service should be provided 24 hours a day. Two respondents suggested that the Internet and computer training should be provided to the general public. Two respondents suggested that the restrictions on downloading movies or songs should be removed at the University. One suggested that the Internet should be used positively. Another suggestion was that the useless websites should be blocked.

VI. Conclusion

The majority of the respondents indicated that they did not get any proper training for Internet use and they learnt it by themselves or with the help from their friends. Even though they were new users of the Internet, they had a very positive attitude towards learning through the Internet. This finding is in agreement with that from the study conducted by Hong, Ridzuan and Kuek in 2003. They used the Internet mainly for study purpose such as online databases, dictionaries, encyclopedias and online courses. Google was the most popular search engine for retrieving information on the Internet.

However, the use of free database services provided by the Higher Education Commission (HEC) of Pakistan was not satisfactory. The respondents were also dissatisfied with the Internet service provision, slow speed of the Internet connection and insufficient computers in the computer labs at the University.

The revelations of the study may be useful for the university and library authorities regarding the provision of better Internet facilities for a more efficient use of information sources and services on the Internet for their students.

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