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Article:	Use of ICT by the University Students: Exploring difference between Book, Noticeboard and ICT for knowledge and Information Seeking
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Abstract:

The study investigates Universities' students use of Information and Communication Technology (ICT) for leaning and a comparison between book and ICT in obtaining knowledge. The study highlights public and private universities students banking on ICT for seeking knowledge and information. Besides, the study focuses on the facilitation and acquiring gratification from ICT in terms of entertainment, socialization, and scholastic achievement. The results show that student seek greater knowledge from ICT than the book. Similarly, they get quick information from ICT than the noticeboard. The use of ICT also gratifies them for entertainment, socialization, and scholastic achievement. Moreover, the study does not find significant difference among the students of public and private universities for seeking knowledge from ICT.

Key Words: Use of ICT, Differences of Book, Noticeboard and ICT, ICT and Gratification.

Introduction

In the age of enrichment in Information communication technology (ICT), people all over the world have greater opportunities to get maximum benefit from these new communication technologies in the form of fast and easy information and communication system, but the lack of access, scarceness of resources, and the expensive nature of ICTs increase the difference of information among members of society.

Education is one of the growing sectors in Pakistani Society with number of opportunities for the people of both upper and lower class. Public sector universities based on the funding of government therefore their charges are nominal as compare to private sector universities. People with the lower socioeconomic status encourage their children to attain good grades to secure admission in public sector university where as people with high socioeconomic status prefer to admit their children in private sector universities due to the lavish culture and infrastructure as compare to public sector universities. One of the reasons for selecting students from both sectors is to give representation to both types of classes which are one of the major factors in defining the concept of have and have not. In this study, public sector university students represent to the lower- or middle-class people and private sector university students represents to the upper class whereas the second reason is the excessive use of ICTs with internet access among the students. Keeping in view the importance of ICTs, efforts have been made to integrate ICTs in education sector to enhance the information flow as well as learning opportunities especially for university students. The usage of ICTs not only provide opportunities for students to use effectively in education along with different segments of life but also give air to the concept of have and have not in terms of information. Okafor & Amuche (2011) tried to explore the potential of knowledge gap hypothesis in the perspective of Nigeria. Results of the survey showed that there

was a gap regarding the access of internet between well-educated and less educated and this gap was widened in the years 1997 to 2000 instead of narrowing down. Study also highlighted that well-educated people use internet for the purpose of information whereas less educated people use internet for the sake of entertainment. Pakistan is a developing state where ICTs were just one step ahead from the infancy stage which drives the attention of researcher to explore the current perspective of Uses and Gratification Theory among public and private university students of Pakistan in terms of their reliance on communication technology and how much ICTs are gratifying the social needs along with the effect of internet exposure on scholastic achievement of students.

Theoretical Framework

The study used Katz, Blumler and Gurevitch (1974) theory of Uses and Gratification. Basic assumption of the theory is explained as below:

(1) The social and psychological origins of (2) needs, which generate (3) expectations of (4) the mass media or other sources. Which lead to (5) differential patterns of media exposure (or engagement in other activities), resulting in (6) need gratification and (7) other consequences, perhaps mostly unintended ones. (p.20) (Cited in Bryant & Zillmann, 1994, p.419)

After the initial tents of uses and gratification some contemporary assumptions have been formulated which are as follows:

Selection and choosing of media are selective and goal orientated. People are active participant not passive participants. People take initiative to select media to gratify their interest or needs. Communication behavior was mediated by social and psychological factors.

To gratify the need of people media, compete with other media to select content according to the desire. People are influential then media but not always because media patterns and consequences are mediated by one's initiative.

2.2.1 Uses & Gratification and Communication Technology

Revolution in Information Communication Technology gave a new dimension to this approach. According to Ruggiero (2000), the use of computer-mediated communication has revived the significance of uses and gratifications. It has been noted that there are many criticisms of this theory, but some believe it "has always provided a cutting-edge theoretical approach in the initial stages of each new mass communications medium: newspapers, radio and television, and now the Internet" (Ruggiero 2000, p. 27). Contemporary study based on the major objectives of uses and gratification that people use media to gratify their needs especially when internet and other communication technologies are on rise.

Theoretical grounds set for this study are extended in two dimensions. First one is the reliance of Public and Private University students on ICTs by doing comparison between the use of ICTs and other book and notice board for the sake of information, along with the difference in reliance of Public and Private Sector University students. Second one is highlighting the concept of Uses and Gratification to know the gratification students get from ICTs in terms of entertainment, maintaining social relations and achieving scholastic achievement.

Research Questions & Hypothesis

1. To what extent public and private universities students rely on ICTs than books?
 - H.1. Public and private universities students rely more on ICTs than books and notice board information.
2. Is there any difference in reliance of public and private universities students on using ICTs?
 - H.2. Public and Private Universities students equally rely on ICTs.
3. How far the use of ICTs gratifies students for Social and psychological needs?

H.3. Greater the use of ICTs leads to greater needs gratification.

4. How far the use of ICTs leads student to achieve scholastic achievement?

H.4. More the use of ICTs leads to greater scholastic achievement.

Methodology

To study the “Use of ICT by the University Students: Exploring difference between Book, Noticeboard and ICT for knowledge and information Seeking.” the researcher has used Survey research method and questionnaire as tool for data collection. Questionnaire was consisting of total 32 questions and data was collected by employing five-point Likert Scale.

4.1 Universe and Sample of the Study

The universe of present study is the students of Public and Private sector Universities of Lahore.

The sample of the present study is the students of the following three public and three private sector Universities of Lahore:

Public Universities are:

- 1) Punjab University (PU)
- 2) Lahore College for Women University (LCWU)
- 3) University of Education

Private Universities are:

- 1) University of Management and Technology (UMT)
- 2) University of Central Punjab (UCP)
- 3) Superior University

Researcher has selected these universities by using purposive sampling technique which is a type of non-probability sampling, whereas students were selected by employing simple random sampling which is a type of probability sampling. 400 respondents were the sample size with 200 students from each Public and Private Sector Universities. Collected Data was analyzed according to the method used in the study. Statistical analysis were used for the survey method by drawing out frequency table of all the statements

according to their variables and validity of the data was checked by applying a statistical tests knows as Two sample t-test (Mann Whitney Test), K-sample t-test (Kruskal-Wallis Test) and correlation to check the relationship between variables .

Findings and Interpretations

5.1 Characteristics of the Sample

The sample of the study belongs to the Public and Private Universities of the Lahore, with an equal number of respondents from both types of Universities, out of total 400 questionnaire 380 questionnaires were included due to incomplete filling.

Table 1. Frequency Table of Reliance

Variable	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
ICT require for Education	17 (4.5%)	7 (1.8%)	38 (10%)	162 (42.6%)	156 (41.1%)	380 (100%)
ICT enhance information	16 (4.2%)	11 (2.9%)	33 (8.7%)	163 (42.9%)	157 (41.3%)	380 (100%)
Prefer ICT for study material than library	8 (2.1%)	16 (4.2%)	47 (12.4%)	178 (46.8%)	131 (34.5%)	380 (100%)
Prefer ICT in making Assignments	14 (3.7%)	16 (4.2%)	34 (8.9%)	147 (38.7%)	169 (44.5%)	380 (100%)
ICT is answer of every Problem	13 (3.4%)	46 (12.1%)	55 (14.5%)	169 (44.5%)	97 (25.5%)	380 (100%)

When respondents were asked about the requirement of ICT in today's education it was found that 4.5% strongly disagree, 1.8% disagree, 42.6% agree with the view and 41.1% strongly agree with the statement that ICT required in today's education. Results of the study shows that 4.2% students strongly disagree with the view that ICT enhance their information, 2.9%

disagree, 8.7% remains neutral, 42.9% are agree with the view while 41.3% strongly agree that ICT increase their information. When students were asked about their preference to seek help from ICT then books for study material its was found that 2.1% strongly disagree, 4.2% disagree, 46.8% agree with the view and 34.5% strongly agree with the view that they prefer to seek help from ICT then books for study material. When respondents were asked about their reliance on ICT for making assignment, 3.7% strongly disagree with the statement that they rely on ICT for making assignment, 4.2% disagree, 38.7% agree with the view and 44.5% respondents strongly agree that they rely on ICT for making assignments. On a question to students that ICT is answer of your every problem, 3.4% strongly disagree, 12.1% disagree, 44.5% agree and 25.5% strongly agree with the statement that ICT is the answer of every problem.

Table 2. Frequency Table of Needs Gratification

Variable	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
ICT Fulfills Academic Needs	19 (5%)	19 (5%)	72 (18.9%)	196 (51.6%)	74 (19.5%)	380 (100%)
Increase Socialization	9 (2.4%)	13 (3.4%)	45 (11.8%)	209 (55%)	104 (27.4%)	380 (100%)
ICT Gratifies Social Needs	5 (1.3%)	31 (8.2%)	90 (23.7%)	158 (41.6%)	96 (25.3%)	380 (100%)
ICT gratifies Social Identity	7 (1.8%)	34 (8.9%)	101 (26.6%)	167 (43.9%)	71 (18.7%)	380 (100%)
ICT Fulfilling Surveillance	8 (2.1%)	23 (6.1%)	106 (27.9%)	183 (48.2%)	60 (15.8%)	380 (100%)
ICT Fulfilling Entertainment	8 (2.1%)	14 (3.7%)	38 (10%)	177 (46.6%)	143 (37.6%)	380 (100%)

Result shows that 5% strongly disagree with the statement that ICT is fulfilling their academic need, 5% disagree, 51.6% agree and 19.5% strongly agree with the statement. When respondents were asked that the use of ICT is gratifying their need of maintaining social relations, 2.4% strongly disagree with the statement, 3.4% disagree, 55% agree and 27.4% strongly agree with the statement. Results reveal that 1.3% respondents strongly disagree with the view that ICTs fulfilling their social needs, 8.2% disagree, 41.6% agree and 25.3% strongly agree with the statement. Result shows that 1.8% respondents strongly disagree with the statement that the use of ICT is increasing their need of social identity, 8.9% disagree, 43.9% agree and 18.7% strongly agree with the statement. On a question that use of ICT fulfills student's needs of surveillance, 2.1% strongly disagree with the statement, 6.1% disagree, 48.2% agree and 15.8% strongly agree with the statement that use of ICT is fulfilling their need of surveillance. When students were asked that use of ICT is fulfilling their entertainment need it was found that 2.1% respondents strongly disagree, 3.7% disagree, 46.6% agree and 37.6% strongly agree with the view that use of ICT is fulfilling their entertainment needs.

Table 3. Frequency Table of Scholastic Achievement

Variable	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
ICT help in Exams	17 (4.5%)	28 (7.4%)	55 (14.5%)	190 (50%)	90 (23.7%)	380 (100%)
ICT help in Grade	12 (3.2%)	33 (8.7%)	72 (18.9%)	192 (50.5%)	71 (18.7%)	380 (100%)
ICT help in Projects	10 (2.6%)	15 (3.9%)	50 (13.2%)	188 (49.5)	117 (30.8%)	380 (100%)
ICT help in Understanding	10 (2.6%)	25 (6.6%)	68 (17.9%)	165 (43.4%)	112 (29.5%)	380 (100%)
ICT Help General Knowledge	9 (2.4%)	10 (2.6%)	34 (8.9%)	150 (39.5%)	177 (46.6%)	380 (100%)

According to the collected data it was found that 4.5% respondents strongly disagree with the statement that the use of ICT help in better preparation of exams, 7.4% disagree with the statement, 50% respondents were agree and 23.7% strongly agree with the statement. On a question to students that the use of ICT help you in improving your academic grade, 3.2% respondents strongly disagree with the statement, 8.7% disagree, 50.5% respondents were agree and 18.7% respondents strongly agree with statement. Result shows that 2.6% respondents strongly disagree with the statement that ICT help them in making course related projects, 3.9% disagree with the statement, 49.5% respondents agree and 30.8% respondents strongly agree with the statement. Results also shows that 2.6% respondents strongly disagree with the statement that use of ICT helps in better understanding of subject area, 6.6% disagree with the view, 43.4% respondents were agree and 29.5% were strongly agree with the statement. When students were asked that use of ICT helps in increasing general knowledge 2.4% respondents strongly disagree with the statement, 2.6% disagree, 39.5% respondents are agree and 46.6% strongly agree with the statement.

RQ.1. To what extent public and private universities students rely on ICTs than books?

H.1. Public and private universities students rely more on ICTs then books and notice board information.

It is evident from table 4: Kruskal-Wallis Test for Reliance on ICTs than Books and Notice board Information, that the reliance of students on ICTs have significant difference with the use of books and other notice board information; that is, Prefer ICTs for general information than notice board information ($P=.000$), Prefer ICTs for study material then library ($P=.000$) and Prefer ICTs for assignment making than books ($P=.000$), thus the hypothesis, Public and private universities students rely more on ICTs then books and notice board information has supported.

Table 4. Kruskal-Wallis Test for Reliance on ICTs than Books and Notice Board Information

				Reliance on ICTs than	N	Mean Rank
				Books		
Prefer ICT for General information then notice board information ¹	strongly disagree				18	12.25
	Disagree				45	64.83
	Neutral				89	132.09
	Agree				153	227.75
	strongly agree				75	302.00
	Total				380	
Prefer ICTs for study material then Library ²	strongly disagree				18	11.17
	Disagree				45	71.30
	Neutral				89	136.48
	Agree				153	217.05
	strongly agree				75	315.00
	Total				380	
Prefer ICT for Assignment Making then Books ³	strongly disagree				18	13.33
	Disagree				45	57.93
	Neutral				89	127.83
	Agree				153	235.07
	strongly agree				75	296.00
	Total				380	

Notes

¹ Asymp. Sig. (2-tailed) .000 ² Asymp. Sig. (2-tailed) .000 ³ Asymp. Sig. (2-tailed) .000

RQ.2. Is there any difference in reliance of public and private universities students on using ICTs?

H.2. Public and Private Universities students equally rely on ICTs.

It is evident from table 5, that Public university students are more agree to the statement that ICTs are require for education as compare to private university students and it is not significant at Mann-Whitney Test. Private university students are more agree to the view then public university students that they prefer to use ICTs for general information as compare to notice board information and it is not significant at Mann-Whitney Test. Private university students are more in favor of the statement that ICTs help in access of fast information as compare to public university students and it is not significant at Mann-Whitney Test. Public university students are more in favor of the view that ICTs help in access of reliable information as compare to private university students and it is not significant at Mann-Whitney Test. Private university students are more in favor that the use of ICTs makes work easy as compare to public university students and it is not significant at Mann-Whitney Test, thus the hypothesis, Public and Private Universities students are equally rely on ICTs has supported as the difference between public and private university students regarding reliance on ICTs is not significant at any level.

Table 5. Mann-Whitney Test for Reliance of Public and Private University Students on ICT

	Nature of Universities	of N	Mean Rank	Sum of Ranks
ICT Usage require for education ¹	Public	190	193.23	36714.50
	Private	190	187.77	35675.50
	Total	380		
Prefer ICT for General Information then Notice board ²	Public	190	182.91	34753.00
	Private	190	198.09	37637.00
	Total	380		

ICT is answer of every Public	190	197.71	37565.00
problem ³	Private	190	183.29
	Total	380	
ICT Helps in access of Public	190	184.04	34968.50
Fast Information ⁴	Private	190	196.96
	Total	380	
ICT Helps in access of Public	190	196.64	37362.50
Reliable Information ⁵	Private	190	184.36
	Total	380	
ICT Make Work Easy ⁶	Public	190	186.67
	Private	190	194.33
	Total	380	

Notes:

¹ Asymp. Sig. (2-tailed) .599 ³ Asymp. Sig. (2-tailed) .175 ⁵ Asymp. Sig. (2-tailed) .231

² Asymp. Sig. (2-tailed) .144 ⁴ Asymp. Sig. (2-tailed) .210 ⁶ Asymp. Sig. (2-tailed) .455

RQ.5. How far the use of ICTs gratifies students for Social and psychological needs?**H.5. Greater the use of ICTs leads to greater needs gratification.**

On the basis of data shown in table 6, that the use of ICTs with internet access has significant correlation with all the dependent variables of needs gratification; that is, ICTs are fulfilling academic needs (0.888 P= .000), ICTs are fulfilling the need of socialization (0.865 P= .000), ICTs are gratifying social relations need (0.861 P= .000), ICTs are gratifying social needs (0.890 P= .000), ICT increase need of social identity (0.902 P= .000), ICTs are fulfilling the surveillance needs (0.895 P= .000), ICTs are fulfilling entertainment needs (0.874 P= .000), Thus the hypothesis, Greater the use of ICTs leads to greater needs gratification has been supported.

Table 6. Correlation between Use of ICTs and Need Gratifications

Independent Variable		Exchange of ICT Information Gratify Social Increase Relation Socializat Needs ion						
		Academic Needs	of ICT Information	Gratify Social	ICT Gratify Social Needs	ICT increase need Social Identity	ICT Fulfilling ofSurveilla nce Needs	ICT Fulfilling Entertain ment Needs
Frequent Use of ICTs with Internet	Pearson Correlation	.888**	.865**	.861**	.890**	.902**	.895**	.874**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	380	380	380	380	380	380	380

** . Correlation is significant at the 0.01 level (2-tailed).

RQ.6. How far the use of ICTs leads student to achieve scholastic achievement?

H.6. More the use of ICTs leads to greater scholastic achievement.

It is evident from the table 7, that the use of ICTs with internet access has significant correlation with all the dependent variables of scholastic Achievement; that is, ICTs help in better preparation of exams (0.891 P= .000), ICTs help in improving academic grades (0.893 P= .000), ICTs help in making course related projects (0.883 P= .000), ICTs help in better understanding of subject area (0.887 P= .000), ICTs help in increasing general knowledge (0.882 P= .000). Thus, the hypothesis, **more the use of ICTs leads to greater scholastic achievement** has been supported.

Table 7. Correlation between Use of ICTs and Scholastic Achievement

Independent Variable		ICT helps	inICT helps	ICT helps	inICT helps	inICT	Helps
		Exams	in Grade	Projects	Subject	Knowledge	
Frequent Use of Internet	Pearson Correlation	.891**	.893**	.883**	.887**	.882**	
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	380	380	380	380	380	

** . Correlation is significant at the 0.01 level (2-tailed).

Discussion and Analysis

Information Communication Technologies (ICTs) are largely used in the field of education. Students have great reliance on ICTs as indicated by large number of studies done on the role of ICTs in education and dependency of students on ICTs and internet. Mikre (2011) discussed on the role of ICTs in education and challenges faced in the implementation of ICTs in education. Riffe, Lacy and Varouhakis (2008) found that people depend on the internet for in-depth information related to business, health, science and also give value to internet source information then books and magazines which shows a high percentage of people dependent upon internet and other communication technology for information. In the present research study researcher explored the reliance of public and private universities' students on ICTs as compare to books and other notice board information, On the basis of data (See table 1) it was found that public and private universities' students rely on ICT for information and other academic purpose then using books or notice board information. Reliance of students on ICTs have significant difference with the use of books and other notice board information can be seen in the table 4. Number of previous studies have shown that dependency on communication technology affect the society in the form of information gap between members of a society. It was believed that people with higher socioeconomic status can have access to new communication technology as

compare to the people with low socioeconomic status due to the cost of new communication technologies which results into further widening of gap. However, the present study found no significance difference between public and private university students (See table 5), which means both type of university students equally relies on ICTs for information, and knowledge seeking. To them ICT is the answer of their educational and every day information.

ICTs subsumes all the function of Interpersonal Communication and Mass Communication which leaves an impression in society that ICTs fulfills all the requirement of human beings from recreational activities to education and in professional life. Chen (2010) worked on the use of twitter and how it gratifies the need of users. He noted that more a person used twitter more it gratifies his/her need of social interaction with other people. Due to the diverse function of ICT researchers started to explore the needs gratification of human being. table 6 of this study shows that the use of ICTs with access to internet has significant correlation with all the dependent variables of needs gratification. Such as Education, Social Relation, Social Identity, Entertainment, and Surveillance, which give support to basic assumption of Uses and Gratification perspective.

Besides facilitations, the study found that ICT is playing substantial role in the education of Pakistani students at universities specifically in enhancing the scholastic achievement of the students. This can be evident from Table 7 of this study that the use of ICTs with internet access has significant correlation with all the dependent variables of scholastic Achievement. Numerous studies have been conducted to examine the impact of ICTs on educational achievement of students. Noor-ul-Amin (n.d.) noted that ICTs have positive impact on teaching and learning process and made improvement in academic grades of the students. In another study by Spiezia (2011) examined the impact of ICTs on academic performance had shown positive impact on

students' academic achievements. Keeping in view the impact of ICTs on educational achievements. Above discussion reveals that use of ICT contributes in the scholastic achievement of students in the form of improving academic grades, better understanding of subject area and course related projects and helps increase general knowledge.

Conclusion

Development in the field of Communication Technology not only revolutionized the professional spheres but personal life and education aspects of users as well. Advent of ICTs have fancy the chances of using multiple ways for seeking information and knowledge among university students. Results of the study shown that university students are relying more on ICTs as compare to books and notice board for seeking information and knowledge but the difference of reliance on ICTs is not significant among both public and private sector university students. They are equally relying on ICTs for getting information and knowledge.

The use of ICTs among university student has brought fanciful changes in facilitating the students to gratifying various needs; they used ICTs to gratify their need of maintaining social relations, social identity, entertainment, socialization and for the sake of surveillance. Results also shown that ICTs played handy role in the scholastic achievement of students. They used to get help form ICTs in the preparation of exams, better understanding of subject area, making course related assignments that ultimately help them in improving their academic grades. Keeping in view the results of the contemporary study; it can be said that findings of the study has provided support to the major assumptions of Uses and Gratification theory that people use and choose media to gratify their needs, user are active audience not passive.

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