

A COMPARATIVE STUDY OF PUBLIC AND PRIVATE UNIVERSITY STUDENTS UTILIZATION AND SKILLS OF INFORMATION AND COMMUNICATION TECHNOLOGIES IN SOCIAL SCIENCES

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ABSTRACT

Objective of the present study was to find out the difference between utilization of Information and Communication Technology among public and private sector university students of social sciences and to find out the difference between skills of using the Information and Communication Technologies among public and private sector university students of social sciences. Present study was descriptive in nature and based on survey technique. Population of the present study includes students of social sciences departments of two public and two private sector universities of Islamabad. Proportionate stratified random sampling technique was used to gather data. Through this technique 218 students were selected. Two questionnaires were developed by researcher. Private university students were found better as compare to respondents of public university students in utilization of information and communication technologies and private university student were found better in their skills of using information and communication technologies as compare to respondents of public university students.

Keywords: ICT, Utilization, Skills,

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INTRODUCTION

Education is preparation of life which aims to give knowledge and experience to students which help them to adjust in the society at their own in future. Universities provide training to get ready students for the world to labor in various sectors. Word of ICT is coined to imitate the seamless convergence of digital processing and telecommunications. ICTs are on the whole information management apparatus, applications and services that are used to generate, store up, process, share out and exchange information. They consist of old ICTs like radio, television and telephone and the emerging ICTs like computers, satellite and wireless technology and the internet. Over time, technology has grown to be more influential and accessible, investigative learning atmosphere has been developed. Though it does not replace tutor plan it is in distinction with it. Exploratory education environment allows students to interrelate with the material and have extra power over their learning. The idea is to support authentic learning with a stress on assisting learners to collaboratively build knowledge. In order to give education to expand abilities necessary for students and teachers who will guide the 21st century it is significant to take full benefit of the features of information and communication technology, being free from time and spatial limitations, having interactivity, and enabling easy customization (Chitrasen, 2006).

At universities which are the main place for student' education and daily life the ICT utilization in education should be promoted, with teachers rewarding their duties and utilizing information and communication technology in a manner that makes the majority of its features. Such labors will encourage individualized education responding to each student's ability and personality, and mutual learning where students can teach and learn among themselves along with conventional mass education by class guidance all at once at tertiary level. The main objective of promoting ICT at tertiary level is to convert educational

institutions into knowledge powerhouses with the aptitude, capability and necessary skills not only to teach and train but also to thoroughly access, adjust, absorb and utilize such information for the progression of national progress. If information and communication technology apparatus are to get better institutional efficacy and efficiency it is understandable that their function in support of teaching and learning should be critically measured. ICT in higher education is moving towards mobile technology and virtual world. Thus higher education systems in the circumstances has to be creative and influence on the developments in technologies to express by example in using these cutting edge technologies to give more accessible, effectual, affordable and well-organized higher education systems to be spirited in creating prosperity for their respective countries (Galanouli, 2001).

Objectives of the Study

1. To find out the difference between utilization of Information and Communication Technology among public and private sector university students of social sciences.
2. To find out the difference between skills of using the Information and Communication Technologies among public and private sector university students of social sciences.

Hypotheses of the Study

1. There is no difference between utilization of Information and Communication Technology among public and private sector university students of social sciences.
2. There is no difference between skills of using the Information and Communication Technologies among public and private sector university students of social sciences.

Significance of the Study

The results of present study will be beneficial for students and teachers to understand the need of using ICT in teaching learning, lesson planning, and acquisition of related material and techniques in the classroom. The study is beneficial for educational counselors working at universities by knowing the importance and need of ICTs in student's life and can help them to interact with their clients including teachers, students and parents for providing educational, vocational and personal guidance. The study will try to catch the attention of educational administrators and planners towards the existing condition of university student's usage of ICTs and its existing functioning which will guide them in taking decisions at various stages and integrating new technologies in education sector. The study will help both public and private sector universities to know there students difference and use of ICTs.

REVIEW OF RELATED LITERATURE

Information and communication technologies are not just machines but also the programs and applications because computers are only one part of the whole. Information and communication technology is also information transmission which gave a latest element to the internet and mobile networks, after which continually flows an unbelievable amount of data, mediated communication, telecommunication and satellites. It has enriched the creative description of IT (information technology) and involves communication among computers and networks. The nature and scope of information and communication technology competence is not rigid but is open to constant technological developments. This is clear in the emergence of highly urbanized internet technology over the past few years and the momentous changes in the ways that students and teachers build knowledge and interrelate with others.

Students build up potential in using ICT for everyday jobs connected with information access and management, problem solving, decision making, information conception, presentation, communication and pragmatic reasoning. This comprise of conducting research work, analyzing data, controlling processes and devices, creating multimedia information products, scheming solutions to problems and supporting computation while working independently or in association with other individuals (Nelasco, Agrawal, & Nosike, 2009). In Sweden a survey of 15 years old in 2000 found that 90 percent of children have had approximately every day access to computers at home but only 37 percent had access at school. In nearby Latvia by contrast only 15 percent students had almost access at home and a mere 5 percent at school.

The early stages of technology production trace back to the beginning of the internet in the late 1960s and the appearance of the personal computer (PC) in the 1970s. Until the late 1990s most schools sent students to computer laboratories by classroom or in small groups to learn how to learn basic computer programs. Mr. G. Hubbard (National Council for Educational Technology) said that there were two essential conditions for the development of a technology; first, the availability of the techniques and systems is required and second, the condition of need for the contribution it could make. The techniques and systems which contributed to educational technology were present. Norman Mac Kenzie had stressed that only now, with the benefits of the investment over time we could consider the technology truly available in higher education. It was this imbalance between demands and provision that would give rise to technical and economic problems at tertiary level education which our investment in resources and facilities should contribute to solving (Batra, 2001). Reference to the practice and impact of ICT in education area a study was conducted by Wasif, Ehsan and Shafqat in 2011. Consequences illustrate that accessibility and practice of

information and communication technology get better the knowledge and education skills of students. It also indicate that availability of information and communication technology in education sector is supportive for the students to get improved their educational skills as well as most presented technologies can helpful to produce the productive knowledge of students associated to their studies. Study shows that ICTs bring an optimistic impact on education sector of Pakistan (Wasif, Ehsan, Shafqat, 2011).

Collis (2002) pointed out that changes in use and awareness regarding information and communication technology is very slow and it differ from country to country. Those countries that have clear task are using ICT skills more regularly as compared to others. In latest years educational contact with digital information and communication technology tools, networks, applications and media worldwide has grown-up clearly all over the globe in both developed and developing countries. It is a common misleading notion that information and communication technology essentially includes using the internet, interesting and important though the internet is, computers present a mass of ways and means to carry teachers and students with additional learning tasks including locating information, organizing thoughts, identifying and analyzing information, communicating and presenting information and taking actions and participation. At university level computer rights is approximately universal in richer countries. In growing countries it is far lower. Uribe and Marino (2006) surveyed 162 students at the School of Dentistry, University of Valparaiso, Chile to describe their utilization of information and communication technologies. All participants had right to use to a computer, and 96.4% used the internet.

The most important contributions of ICT in the sector of education are its easy and simple access to learning. With the assistance of ICT learners can nowadays browse throughout sample examination papers, e-books and can have

simple contact to resource persons, specific subject professionals, number of researchers, subject teachers, mentors, counselors and experts all over the globe with one click. In today's rushed time technology operates in a broad series of disciplines. A huge scale of national and international studies are provided facts that information and communication technologies are altering and civilizing educational institutes of the world by enriching the curricula, altering learning environments, adding skill trainings for teachers and students, offering opportunities for embedding evaluation with and providing shared tools which helps to bring together students, teachers and educationists locally, nationally and internationally. There is an increasing awareness that ICTs innovations inside the institutes cannot be realized if not including the help of the outside world (Kozma, 2003).

Information and communication technologies were originally proposed to serve up as a way of improving capability in the educational procedure. Furthermore, it has been discovered that the use of ICT in learning can help get improved memory retention, raise motivation and usually get deeper perceptive (Forcheri & Molfino, 2000). Information and communication technologies can get better and facilitate the learning of students in following ways step by step:

- a. Active learning: Information and communication technology improved learning mobilizes apparatus for examination, calculation and analysis of information, thus providing a point for student inquiry, analysis and building of latest information. Learners therefore learn as they do when suitable, effort on actual life troubles in depth, building learning less theoretical and extra applicable to the learner's life circumstances. In this way and in distinction to memorization base or rote learning, information and communication technology improved learning promotes enlarged learner engagement and commitment with learning.

- b. Collaborative learning: Information and communication technology supported learning support communication and collaboration among students, teachers, administrators and experts. It provides learners chance to work with people from various cultures and fields all over the world which improve learners' confidence and communicative skills as well as their worldwide consciousness.
- c. Evaluative Learning: Information and communication technology improved learning is student-directed and logical. Dissimilar to static, text or print based educational technologies, information and communication technology improved learning recognizes that there are a lot of diverse learning pathways and a lot of wide-ranging articulations of facts. Information and communication technologies permit learners to examine and discover individually rather than only to listen and remember (Scheuermann, 2009).

Salako and Tiamiyu (2007) surveyed the exercise of search engines for investigate by postgraduate students of the University of Ibadan, Nigeria. Copies of 327 questionnaires were analyzed and it was establish that most of the responding postgraduate students were conscious of, and had become known with the internet previous to the start of their postgraduate courses. According to Brown, Murphy and Nany (2003) it is debatable whether Internet users in common are able to efficiently filter through the huge quantities found to efficiently identify misleading, flawed or incorrect information. Evidently what are deficient from the present information literate student are not only simple information technology skills but solid information skills which are the essential element of information literacy. Most of students use internet but due to unavailability of direction they are unable to use advance searching techniques and facing difficulties in finding related literature. Students should be trained to

use advance searching techniques for retrieving the material of their interest. Multimedia have a positive force on students and teacher's motivation in the direction of learning such a situation can support creativity and enhance the growth of cognitive skills; such an environment can help students study design skills in addition to the content and computer knowledge. Presenting presentations and projects on multi-media need skills which students and teachers require. Many students stay away from using multimedia due to fear of unknown. Many students and teachers are ignorant of skills of using printers. Basic strategy should be provided to know how to use printers (Aloraini, 2005).

A study conducted by Yasmeeen, Alam, Mushtaq and Bukhari (2015) found a significant difference between the availability of information technology equipment's among public and private universities of Islamabad and Rawalpindi, they found that private universities have provided better information technology tools and equipment's to their students and teachers as compare to the public sector universities. Umar and Jalil (2012) found in their study that urban students were far better in their ICT skills as compare to the students of rural areas because of the unequal distribution of facilities among rural and urban educational institutes.

PROCEDURE OF THE STUDY

Comparison is done between students of public and private sector university student's use of ICT's. Present study was descriptive in nature and based on survey technique. Population of the present study includes students enrolled in social sciences departments of two public and two private sector universities of Islamabad in 2017. Population size was 1984 students, 1022 from public and 962 from private universities. Proportionate stratified random sampling technique was used to gather data. Through this technique 218(11%)

sample size was selected 112 (11%) students from public universities and 106(11%) students from private universities were selected. 218 questionnaires were distributed among public and private sector university students and from them 198 students returned questionnaires to the researcher.

Two self-developed questionnaires were used by researcher which was based on five-point Likert scale. One questionnaire consists of 28 statements and second questionnaire consists 24 statements. Reliability results of questionnaires were Cronbach's Alpha .83 and .81. The data related to the utilization of ICT was collected with the help of the questionnaire. After collecting the data from was tabulated and analyzed statistically with the help of SPSS 21st Edition. t-test was used for analysis. The hypotheses of the study were tested at 0.05 level of significance.

FINDINGS AND RESULTS

Table 1: Cronbach's Reliability of ICT Utilization Assessment Scale

Section	Items	Reliability
ICT Utilization Assessment Scale	28	.83
ICT Skills Assessment Scale	24	.81

Table 1 shows reliability of both scales. ICT utilization assessment scale reliability result was .83 and ICT skills assessment scale Cronbach Alpha reliability was .81, thus both scales were found reliable to be used for the study.

Table 2: Difference between Public and Private Students ICT Utilization and Skills

S. N	Variable	Group	N	Mean	t	df	Sig
1.	ICT Utilization	Public	103	98	6.74	196	.00
		Private	95	120			
2.	ICT Skills	Public	103	101	9.53	196	.00
		Private	95	124			

Table 2 reflects that t value (6.74) was statistically significant at 0.01 level of significance. It shows that there was significant difference found between public and private student respondents. Private university student respondents (Mean=120) were found better as compare to respondents of public university students in utilization of ICT (Mean = 98).t value (9.53) was statistically significant at 0.01 level of significance. It shows that there was significant difference found between public and private student respondents. Private university student respondents (Mean=124) were found better in their skills of using ICT as compare to respondents of public university students (Mean = 101). Overall results revealed that as compare to the students of public sector universities, students of private sector universities were found better in their utilization of ICT and in their skills of using and dealing with ICT.

CONCLUSIONS

1. From the results of the study it was concluded that a significant difference was found between public and private university students. Private university student respondents were found better as compare to respondents of public university students in utilization of information and communication technologies.
2. Keeping in view the findings of study it is concluded that a significant difference was found between public and private student respondents regarding their skills of using information and communication technologies. Private university student respondents were found better in their skills of using information and communication technologies as compare to respondents of public university students.

DISCUSSION

A significant difference is found between public and private student respondents regarding their utilization of Information and Communication Technologies in their university. Private university students are utilizing more ICT facilities available in their universities as compare to the students of public sector universities. These findings are may be because public sector universities faces issues related with lack of resources due to financial constraints so there students have less opportunities of interacting with Information Communication Technologies. Sana and Marium (2013) identified some reasons which are hindering the use of ICT among students in Pakistan which includes limited internet access, lack of university resources and unavailability of multimedia in classrooms. Malero, Ismail, Manyilizu (2015) revealed in their study that private educational institutes are far better than public educational institutes in utilization of information communication technologies. Results of present study are in contradiction with the study conducted by Yasmeen, Alam, Mushtaq and Bukhari

(2015) in which they found no significant difference among public and private university students regarding their use of information technologies.

A significant difference is found between public and private student respondents regarding the skills of using Information and Communication Technologies. Private university students were found better in their skills of using ICT as compare to the students of public universities. These results are may be because of the unavailability of different information and communication technologies facilities to public sector students as due to lack of facilities they have less opportunities to lay their hand on advanced technologies and their use to improve their ICT skills.

RECOMMENDATIONS

1. It is recommended that concerned agencies like government may increase allotment of fund for public sector universities so that they may provide better information communication technologies to students.
2. Universities may conduct Information Communication Technologies training sessions for students to improve their skills.
3. Collaboration between public and private universities may be beneficial for the students to strengthen their skills and knowledge related with information communication technologies.

REFERENCES

- Aloraini, S. (2005). *The Impact of Using Multimedia on Students Academic Achievement in the College of Education at King Saud University*, Alretha Press, Dammam Saudi Arabia. pp. 55.
- Batra. B. B (2001). *Information Technology Opportunities and Challenges*. Kalpaz Publications Delhi India. pp: 3.
- Brown, C., T.J. Murphy, and M. Nanny (2003). *Turning techno-savvy into info-savvy: Authentically integrating information literacy into the college curriculum*. *Journal of Academic Librarianship* 29(6): 386-98.
- Chitrasen (2006). *Role of Science & Technology in Higher Education*. Alfa Publications New Delhi India.
- Collis, B. W., Marijk van der (2002). *Models of Technology and Change in Higher Education* (pp.85): Center for Higher Education for Policy Studies.
- Forcheri, P. and Molfino, M.T. (2000) *ICT as a tool for learning to learn*. In
- Galanouli, D.& McNair, V. (2001). *Students' perceptions of ICT-related support in teaching placements*. *Journal of Computer Assisted Learning*, 17(4), 396-408.
- Kozma, R. (2003). *Technology, innovation, and educational change: a global perspective*. Eugene, OR: International Society for Technology in Education.
- Malero, A. Ismail, A. & Manyilizu, M. (2015). ICT Usage Readiness for Private and Public Secondary Schools in Tanzania, a Case of Dodoma Municipality. *International Journal of Computer Applications*, 129(3), 29-32.
- Nelasco, S., Agrawal, M. & Nosike, N. A. (2009). *Issues of Information Communication Technology (ICT) in Education*. Kanishka Publishers New Delhi. pp:42, 198.

- Salako, O.A., & Tiamiju, M.A. (2007). Use of search engines for research by postgraduate students of the University of Ibadan, Nigeria. *African Journal of Library, Achieves and Information Science* 7(2), 103-115.
- Sana, A. & Marium, H. (2013). Use of Information and Communication Technologies in E Learning System of Pakistan-a comparison study. *International Journal of Computer Science and Electronics Engineering*, 1(4), 528-533.
- Scheuermann. F., & Pedro. F. (2009). *Assessing the effects of ICT in education*. Luxembourg publication European Union.
- Uribe, S., & Marino, R. J. (2006). *Internet and Information technology use by dental students in Chile*. *European Journal of Dental Education*, 10 (3), 162-168.
- Umar, N. I. & Jalil, A. N. (2012). ICT Skills, Practices and Barriers of its Use Among Secondary School Students. *Procedia-Social and Behavioral Sciences*, 46, 5672-5676.
- Wasif, M., Ehsan, U. & Shafqat, A. (2011). *'Usage and Impact of ICT in Education Sector; A Study of Pakistan'*. Department of Computer science Comsats Institute of Information and Technology Wah Cantt, Pakistan.
- Watson, D. M. and Downes, T. (Eds) *Communications and Networking in Education*. Bostan, MA: Kluwer Academic. pp 175 – 184.
- Yasmeen, S., Alam, T. M., Mushtaq, M. & Bukhari, A. M. (2015). Comparative study of the Availability and Use of Information Technology in the Subject of Education in Public and Private Universities of Islamabad and Rawalpindi. *SAGE Open*, DOI:10.1177/2158244015608228.1-7.