ROLE OF INFORMATION AND COMMUNICATION TECHNOLOGY IN MOTIVATING UNIVERSITY UNDERGRADUATE STUDENTSTOWARDS A LEARNING TASK IN PUBLIC SECTOR UNIVERSITIES OF RAWALPINDI CITY

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ABSTRACT

Over the past few years, information and communication technology has become constantly used in the education especially in the schools, colleges and universities. At the age of globalization technology has its impact upon almost all aspects of life. The purpose of this paper is to explore the role of information and communication technology (ICT) in the motivating University students. The main objectives of the study were to assess motivational features of information and communication technologies as perceived by students. The independent variable of the study was ICT and dependent variable was student’s motivation. Questionnaire was used in the study to collect data. The type of research was survey descriptive research. The sample size of 340 undergraduate students was selected through simple random sampling. Descriptive statistics mean, standard deviation, frequency and percentage were used in the study. Inferential statistics i.e., chi square test was employed for statistical analysis of the data through SPSS. The findings of the study show that ICT effects students’ motivation and improves their learning; knowledge retention and understanding. ICT can solve the problems of the students and motivates students.

Keyword: ICT, Motivation, Motivational Features of ICT,

INTRODUCTION

ICT is turning into a changing operator in the present world. It can change the lives of people groups. All around the globe individuals are utilizing ICTs as a wellspring of learning and data. It is utilized now daily in the relatively every field of the existence business, wellbeing and education. ICTs like social Medias and different learning destinations can undoubtedly provide a great deal of knowledge. ICT enhances the comprehension of the lesson. It is accounted in the Organization of Eastern Caribbean States [OECS] (2002) that ICTs majorly affect the all parts of society. There are just a few everyday issues, at home, at school and at
work, where this new innovation has no impact. ICT grows our openness and comprehension of the world.

The World Economic Forum (2009) expressed the utilization of ICTs to be extremely poor in Pakistan. This must be an intense concern. This idea has turned into the wellspring of inspiration for the investigation. It is viewed as that ICT for elderly individuals will take cares the major issues of the people groups. ICT can address the needs of the individuals. If ICTs must be integrated into the studies then students are more motivated towards the learning. ICTs can address the needs of students and make them active members.

The role of technology has enlarged quickly in recent years. Peoples from all sectors like economic sectors, educational sector are taking advantage from the ICTs. The term "information technology" is discovered in the 1970s but this term is used for the first time in the World War II for the military training purpose. In World War II military felt the need of the communication technology to communicate with each other’s.

The ICT is an arrangement of specialized gadgets and apparatuses used to share thoughts and data between the general populations. It can likewise be utilized to store, process and arrange data. This extensive meaning of ICT contains a wide range of technology like recordings, DVDs, telephones, satellite, radio, TV, PCs, equipment and programming systems, innovation, equipment, specialized administrations and technical services.

Technology has become an incredible asset in every area of our lives (from education, work, and entertainment in personal life). ICT has become one of the core and core components of our society today. ICT and students learning and motivation have no direct effect. ICT enables peoples to communicate with each other. If ICT must be integrated into the learning then students are more motivated and take more interest in the learning.

Motivation is a key element of the learning. If students are motivated towards a task then commitment to the learning task, enjoyment and self-esteem increase. Creative and new technologies have helped to increase student participation and encourage teachers. It also increases students as well as teacher’s motivation resulting in changed relationships among teachers and students with the knowledge.

The main objectives of the study are To assess motivational features of information and communication tools as perceived by students. Research question is what are the motivational features of the ICTs?

**MATERIAL AND METHOD**

**Population**

This study aimed to investigate the role of ICT in the motivation and learning of the University students. The targeted population of the study is all the University students who are using ICT in their learning. The accessible population consists of the students of the 4 universities of district Rawalpindi. So,
total population of the study is the 34076 undergraduate students from the six department’s economics, political sciences, IR, mass communication, psychology and Pakistan studies of four Universities PMAS Arid-Agriculture, NUML, ISLAMIC and QUAID-E-AZAM.

Sample and Sampling Technique

Sample is the sub group of the population from which researcher generalize their study. Through L.R Gay method sample must be collected. 7% of population must be taken by taking help from the L.R Gay table. 340 is the sample size. Undergraduate students must be taken. 4 universities must be taken to collect final data PMAS-AAUR,NUML,ISLAMIC and Quaid-e-Azam.

Research Design and Instrument

Quantitative techniques were used in this research. A self-developed questionnaire was used to find out the role of Information and Communication Technology in the motivation. The questionnaire was developed by researcher with the help of supervisor. After pilot study, reliability of the questionnaire was determined. Again it was checked by two experts for its finalization for pilot testing.

Pilot Testing, Validity and Reliability

The aims of pre-testing were to assess that whether the questionnaire built for study is easily understood by the respondents are not and to assess the technical functioning of the questionnaire. 2 Universities Federal Urdu University and Fatima Jinnah Woman University must be taken for the purpose of pilot testing. 30 questionnaires must be filled from the students randomly. After obtaining results from pretesting the original questionnaire and interview was finalized with the help of Supervisor and necessary amendments were made. Validity of the instrument was essential in the study as it certifies that inferences established on the collected data were precise and meaningful (Mugenda and Mugenda, 2003). Validity of the instrument is measured through experts. 3 experts can check the validity of the questionnaire after that questionnaire is finalized. Reliability is the degree to which a research gives same results when it is conducted after some time. Reliability of the questionnaire is measured through the SPSS. Research Instruments Reliabilities which contained No of item were selected and value of Cron bach alpha is measured. 0.753 is the cronbach alpha value.

Data Collection and Analysis

Data collection process was commenced on 15 February 2018 and completed on 15 March 2018. The researchers personally visited the target sample. Before the distributing of questionnaires, purpose of the study was explained to the respondents and they were asked to respond freely without any hesitation. Then questionnaires were delivered to respondents and 100% response rate was achieved due to follow up study. Raw data was collected, classified, tabulated, analyzed and interpreted through descriptive statistics i.e., mean, standard deviation.

RESULT AND DISCUSSION
The study was descriptive and quantitative that was planned to investigate the role of information and communication technology in the motivation of the University students in the Public universities of Rawalpindi city. Self-developed structured questionnaires were used for gathering information from the respondents. After collection of data, it was properly organized, classified, tabulated and analysis through descriptive statistics i.e., mean, standard deviation.

Table 1: Gender of Respondents

<table>
<thead>
<tr>
<th>S.No</th>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Male</td>
<td>170</td>
<td>50</td>
</tr>
<tr>
<td>2</td>
<td>Female</td>
<td>170</td>
<td>50</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>340</td>
<td>100</td>
</tr>
</tbody>
</table>

From the above frequency table, it was getting informed that the total number of respondents which selected as a usable sample was 340. From this sample size, the 170 numbers of respondents were male and 170 were female. The total percentage is 50% and 50% of males and females respectively.

<table>
<thead>
<tr>
<th>Sr. #</th>
<th>Statement</th>
<th>$X^2$</th>
<th>D.f</th>
<th>Sig. Value</th>
<th>$X^2$tab</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ICT makes course more interesting and lively. ICT helps student to complete a piece of work that sometimes would be difficult to complete without it.</td>
<td>563.353</td>
<td>4</td>
<td>0</td>
<td>9.49</td>
</tr>
<tr>
<td>2</td>
<td>Students pay more attention when lessons involve the use of ICT.</td>
<td>320.447</td>
<td>4</td>
<td>0</td>
<td>9.49</td>
</tr>
<tr>
<td>3</td>
<td>Using ICT makes topics visually attractive. By using ICT's student can work longer without losing concentration.</td>
<td>413.576</td>
<td>4</td>
<td>0</td>
<td>9.49</td>
</tr>
<tr>
<td>4</td>
<td>The statement No 1 ICT makes course more interesting and lively calculated chi-square value is 563.353 at 0.000 level of significance. Degree of freedom is 4. Tabulated chi-square value is 9.49 at the 0.05 level of significance. The measured value is greater than tabulated value hence, the statement is accepted.</td>
<td>721.912</td>
<td>4</td>
<td>0</td>
<td>9.49</td>
</tr>
<tr>
<td>5</td>
<td>The statement No 2 ICT helps student to complete a piece of work that sometimes would be difficult to complete without it calculated chi-square value is 320.447 at 0.000 level of significance, degree of freedom 4 is greater than the tabulated chi-square value is 9.49 at 0.05 level of significance; the measured value is greater than tabulated value hence, the statement is accepted. The statement No 3 Students pay more attention when lessons involve the use of ICT calculated chi-square value is 413.576 at 0.000 level of significance, degree of freedom 4 is greater than the Tabulated chi-square value of 9.49 at 0.05 level of significance; The</td>
<td>416.088</td>
<td>4</td>
<td>0</td>
<td>9.49</td>
</tr>
</tbody>
</table>
measured value is greater than tabulated value hence, the statement is accepted. The statement No 4 Using ICT makes topics visually attractive calculated chi-square value is 721.912 at 0.000 level of significance, degree of freedom 4 is greater than the Tabulated chi-square value of 9.49 at 0.05 level of significance; the measured value is greater than tabulated value hence, the statement is accepted.

<table>
<thead>
<tr>
<th>Sr. #</th>
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<th>Sig. Value</th>
<th>$X^2$ tab</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Working with ICT is a fun for the students.</td>
<td>444.324</td>
<td>4</td>
<td>0.000</td>
<td>9.49</td>
</tr>
<tr>
<td>2</td>
<td>ICT helps students to explore learning resources.</td>
<td>426</td>
<td>4</td>
<td>0.000</td>
<td>9.49</td>
</tr>
<tr>
<td>3</td>
<td>ICT is helpful in motivating students. ICT can enhance student's participation and feedback to teachers.</td>
<td>692.971</td>
<td>4</td>
<td>0.000</td>
<td>9.49</td>
</tr>
<tr>
<td>4</td>
<td>ICT help to generate a pleasant atmosphere in the classroom.</td>
<td>463.706</td>
<td>4</td>
<td>0.000</td>
<td>9.49</td>
</tr>
<tr>
<td>5</td>
<td>The statement No 5 ICT help to generate a pleasant atmosphere in the classroom.</td>
<td>505.118</td>
<td>4</td>
<td>0.000</td>
<td>9.49</td>
</tr>
</tbody>
</table>

The statement No 1 Working with ICT is a fun for the student's calculated chi-square value is 444.324 at 0.000 level of significance, degree of freedom 4 is greater than the Tabulated chi-square value of 5.991 at 0.05 level of significance; tabulated value is smaller than the calculated value hence, the statement is accepted.

The statement No 2 ICT helps students to explore learning resources calculated chi-square value is 426.000 at 0.000 level of significance, degree of freedom 4 is greater than the Tabulated chi-square value of 5.991 at 0.05 level of significance; the measured value is greater than tabulated value hence, the statement is accepted.

The statement No 3 ICT is helpful in motivating students calculated chi-square value is 692.971 at 0.000 level of significance, degree of freedom 4 is greater than the Tabulated chi-square value of 5.991 at 0.05 level of significance; The measured value is greater than tabulated value hence, the statement is accepted.

The statement No 4 ICT can enhance student's participation and feedback to teachers calculated chi-square value is 463.706 at 0.000 level of significance, degree of freedom 4 is greater than the Tabulated chi-square value of 5.991 at 0.05 level of significance; The measured value is greater than tabulated value hence, the statement is accepted.

The statement No 5 ICT help to generate a pleasant atmosphere in the classroom calculated chi-square value is 505.118 at 0.000 level of significance, degree of freedom 4 is greater than the Tabulated chi-square value of 5.991 at 0.05 level of significance; The measured value is greater than tabulated value hence, the statement is accepted.
calculated chi-square value is 505.118 at 0.000 level of significance, degree of freedom 4 is greater than the Tabulated chi-square value of 5.991 at 0.05 level of significance; The measured value is greater than tabulated value hence, the statement is accepted.

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</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The use of ICT improves student’s grades.</td>
<td>695.735</td>
<td>4</td>
<td>0</td>
<td>9.49</td>
</tr>
<tr>
<td>2</td>
<td>The use of ICT enhances quality of education.</td>
<td>330</td>
<td>4</td>
<td>0</td>
<td>9.49</td>
</tr>
<tr>
<td>3</td>
<td>ICT provides students freedom of expression.</td>
<td>711.265</td>
<td>4</td>
<td>0</td>
<td>9.49</td>
</tr>
<tr>
<td>4</td>
<td>The use of ICT develops more interest among the students.</td>
<td>482.912</td>
<td>4</td>
<td>0</td>
<td>9.49</td>
</tr>
<tr>
<td>5</td>
<td>ICT provides quick and easy access to materials needed by students.</td>
<td>513.265</td>
<td>4</td>
<td>0</td>
<td>9.49</td>
</tr>
</tbody>
</table>

The statement No 1 The use of ICT improves student’s grades calculated chi-square value is 695.735 at 0.000 level of significance, degree of freedom 4 is greater than the Tabulated chi-square value of 5.991 at 0.05 level of significance; The measured value is greater than tabulated value hence, the statement is accepted.

The statement No 2 The use of ICT enhances quality of education calculated chi-square value is 330.00 at 0.000 level of significance, degree of freedom 4 is greater than the Tabulated chi-square value of 5.991 at 0.05 level of significance; The measured value is greater than tabulated value hence, the statement is accepted.

The statement No 3 ICT provides students freedom of expression calculated chi-square value is 711.265 at 0.000 level of significance, degree of freedom 4 is greater than the Tabulated chi-square value of 5.991 at 0.05 level of significance; The measured value is greater than tabulated value hence, the statement is accepted.

The statement No 4 The use of ICT develops more interest among the students calculated chi-square value is 482.912 at 0.000 level of significance, degree of freedom 4 is greater than the Tabulated chi-square value of 5.991 at 0.05 level of significance; The measured value is greater than tabulated value hence, the statement is accepted.

The statement No 5 ICT provides quick and easy access to materials needed by students calculated chi-square value is 513.265 at 0.000 level of significance, degree of freedom 4 is greater than the Tabulated chi-square value of 5.991 at 0.05 level of significance; The measured value is greater than tabulated value hence, the statement is accepted.

**DISCUSSIONS**

The present research is based on the role of ICT in the motivation of the students. A self-develop questionnaire was used for gathering the information from the respondents. ICT and related technologies enhance student’s participation and feedback and according to student’s point of view these are helpful for them. Swan et al. (2005) reported that student feel using mobile
devices makes learning fun and made schoolwork interesting. This study supports my current study. Technology improves motivation, engagement and interest. It develops more understanding of the subject.

Kok 2007 conducted study on topic “Impact of ICT on the teaching and learning” also supports current study. ICTs is became increasingly used in every aspect of life (work, learning, leisure, and health). ICTs are excellent tools for information processing. There is a need that new generation must have knowledge of the ICTs and related technologies. It was concluded through present research that the use of technology improves student’s interest and learning.

NazuShauke nova 2016 stated that ICTs are helpful for the students so it must be used in the studies. Most of the people say that technology must be used in the learning process because learning improves by the use of technology. We are living in the knowledged society. Communication can be done easily in the present society. Learning must be fun and teacher must be facilitator. Students can easily take help from social Medias and different types of learning software’s are also present. People take help from them. Complex tasks can be easily done through this. Students who are taught through ICTs and related technology are more motivated and they take more interest in the learning process as compare to the students who are not taught through the ICTs. Most of the peoples have access to the modern technology and they think that ICTs and modern technology is essential for their future.

CONCLUSION

The major conclusion of this research is that usage of ICT is very essential to improve the educational efficiency of students. Results show that ICT can helpful to produce the productive knowledge of students related to their studies. Findings suggest that more the usage of ICT in education sector will increase the results and efficiency of students. Students were agreeing that ICT provides vast knowledge to students through internet and digital libraries, so it can helpful to enhance the educational efficiency at local, regional and national level. After analyzing all the results, we conclude that ICT brings a positive impact on the Public-sector Universities of Pakistan.

RECOMMENDATIONS

1. Reasonably skilled persons may be hired. Monetary and technical support should be provided to universities.
2. Computer labs should be updated. E-based assignments should be preferred instead of paper-based assignments.
3. Do it yourself attitude should be developed among the learners. Master teachers may be trained for applying ICTs. Course contents should be redesigned to acquire more benefits from ICTs. At least one computer with internet access and an LCD projector should be provided in every class.
4. More ICT-related courses should be offered for teachers and learners. Every ICT-related course should be practice-oriented.

REFERENCES


OECS. (2002). Information and Communication Technology (ICT)


