Attitudes towards Information and Communication Technology (ICT) with reference to Gender

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Abstract
This paper aimed to know the attitude towards Information and Communication Technology among graduate level students with reference to gender in Lucknow. Arts, Science and Commerce 1st year students were taken and filled the attitude scale. Total 253 students selected from four degree colleges of University of Lucknow. Purposive sampling technique used for this purpose. This study was carried in 2011 on different stream students with reference to gender. Self-made tool was used for data collection on ICT. The results showed that gender had played no role in developing the attitude among students. Use of ICT in different stream students was approximately same. It helped in understanding the content and application part.

Keywords: Attitude, ICT, Graduate level students

Introduction
The use of information and communication technologies in higher education is surrounded by contradictory, yet interrelated themes that suggest that education is either experiencing a revolution or approaching its own demise. Undoubtedly, technologies are becoming embedded in academic life but patterns of adoption are more complex and nuanced than polarized themes suggest. Despite the constant and seamless interaction with a wide array of electronic communication devices at their disposal (email, social networking) many students continue to value face-to-face interaction with their professors and colleagues. The extreme polarity of a ‘promises and fears’ spectrum is unable to fully account for why this is the case; neither can it be explained by economics, demographics, or the technology. As António de Figueiredo (2005) points out, education and learning happen in wide variety of contexts determined by a very wide range of cultural, economic, individual, discipline and other variables. Unless we consider academic culture we cannot fully capture the relationship of technologies to education. The arguments made about the use of technologies in higher education on the extreme sides of the spectrum are unlikely to materialize and the question that needs to be asked is how are academics themselves negotiating the implementation of the technologies in their everyday work, specifically in teaching and learning? What are their practices with and perceptions of the technologies?

In the answers to these questions various links to academic culture are posited. The incorporation of computer technologies into higher education has led to the development of a variety of formats for education where practices of teaching and learning have been expanding to include the use of the latest technologies. Under the general rubric of integration of information and communication technologies (the so called ICTs) in teaching and learning several classifications of these new forms of education have been suggested in research and emerged in discourse, from e-learning to virtual educational.

Need of the Study:-Present problem has great importance with new teaching learning situation. Students want to do more and more in less time. They want to learn more through the use of new emerging technology. It brings desired improvement in teaching learning process by making it effective. It develops to the maximum the cognitive, affective and psychomotor aspect of the pupils. We can achieve behavioral objectives of teaching by different way. Teacher plans to achieve some certain objectives before going in the class-
room. Planning is must to achieve our goal and after planning implementation is must. Plans are formed with the help of action verbs in the form of statement. Writing this statement is nothing but writing instructional objectives in behavioral terms specifying the instructional objectives in behaviour term directs the teacher for action. It helps in knowing what actually is to do i.e. what actually is to teach. Before writing instructional objectives formulation of the plan is to be done. Plans are formed for achieving the goal and to achieve the behavioral objectives which are pre-determined. The specification of action is done while we write teaching objectives in behaviour terms.

**Objectives of the Study**
1) To study about attitude towards ICT among Graduate students with reference to gender.
2) To study about attitude towards ICT among Graduate students in stream in relation to gender.

**Hypotheses of the study**
1) There is no significant difference between Male and Female graduate level students towards ICT.
2) There is no significant different between Male and Female graduate level students towards ICT in Arts group.
3) There is no significant different between Male and Female graduate level students towards ICT in Science group.
4) There is no significant different between Male and Female graduate level students towards ICT in Commerce group.

**Inoue (2007)** [2] studied 174 male and female students of the School of Education at University of Guam. It was found that students’ attitudes toward information technology were highly positive. There were no differences in students’ perceptions of computer technology experiences between females and males as well as among various academic status groups.

**Deeksha Krishna and H. K. Sachan (2014)** [5] conducted a study on Attitudes towards Information Communication Technology (ICT) among CAFF students in Fiji. The research was conducted with two main purposes; Firstly to examine the gender and age differences in ICT use and its possible relationship between students’ use of ICT and secondly, to investigate students’ familiarity and attitude towards ICT. The results revealed that students have a positive attitude towards ICT and use them to facilitate learning, although female students are more inclined towards ICT usage and likely to find that ICT help them at their studies.

**Methodology of the Study**-The study was survey type research. In this study researcher wanted to know the attitude towards ICT among Graduate level students with reference to gender. Both Male and female students were taken for this study.

**Population:** - In this study, all the students of graduate level (Arts, Science, and Commerce 1st Year) were taken. Those students were related to the University of Lucknow. Pace of teaching was also a matter of concern. ICT can able to teach students with their own pace and interest.

**Sampling**
There are so many college situated in Lucknow city. Researcher selected only four degree colleges for study. The names of the colleges were Amiruddaula Islamia Degree College Lucknow, Jai Narayan. P.G. College Charbagh Lucknow (K.K.C), B.S.N.V. P.G. College Charbagh Lucknow (K.K.V), Karamat Husain Muslim Girls P.G. College Lucknow. Researcher selected only 253 B.A, B.Sc and B.Com 1st Year students of Lucknow city. The students belong to Male and females both. Researcher selected the sample by purposive technique.

**Tool**
Researcher used self-made tool on attitude towards ICT. The present tool measures the attitude scale towards ICT among graduate level students. It was a Likert type summated rating scale. The items were constructed at five point rating scale. There are twenty positive and sixteen negative statements. Five point scale options were strongly Agree, Agree, Undecided, Disagree, Strongly Disagree. For positive statements, score 5 was given to “strongly agree”, 4 to “Agree”, 3 to “Undecided”, 2 to “Disagree”, and 1 to “Strongly disagree” and for Negative statement the order of score given reversed so that “Strongly Agree” receives 1 and “Strongly Disagree” receives 5.

**Analysis and Interpretation of Data**
Hypothesis- There is no significant difference between Male and Female students on ICT.

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
<th>t-value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>191</td>
<td>142.18</td>
<td>18.43</td>
<td>2.18</td>
<td>Significant at .05</td>
</tr>
<tr>
<td>Female</td>
<td>62</td>
<td>137.11</td>
<td>14.99</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The table shows that the total number of male students is 191, the mean score on ICT is 142.18 and S.D. is 18.43.The female students is 62, mean score on ICT is 137.11 and S.D. is 14.99.The t-value between male and female is 2.18 at 251 degree of freedom. The C.R. value is 1.97 at .05 level of significance. Here calculated value is greater than table value. So the hypothesis is rejected at 0.05 level. It means significant difference observed in male and female students on ICT.

![Difference of Means on ICT](image)

**Hypothesis**- There is no significant difference between Male and Female students on ICT in Arts stream.

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
<th>t-value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>58</td>
<td>139.21</td>
<td>18.25</td>
<td>0.238</td>
<td>Not Significant at .05</td>
</tr>
<tr>
<td>Female</td>
<td>18</td>
<td>140.11</td>
<td>12.49</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The table reveals that in the Arts stream, total number of male students is 58, the mean score on ICT is 139.21 and S.D. is 18.25. The female students is 18, mean score on ICT is 140.11 and S.D. is 12.49. The t-value between male and female is 0.238 at 74 degree of freedom. The C.R. value is 1.97 at .05 level of significance. Here calculated value is less than table value. So the hypothesis is accepted at 0.05 level. It means no significant difference observed in male and female students of Arts stream on ICT.

Hypothesis- There is no significant difference between Male and Female students on ICT in Science stream.

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
<th>t-value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>86</td>
<td>143.69</td>
<td>18.72</td>
<td>2.332</td>
<td>Significant at .05 level</td>
</tr>
<tr>
<td>Female</td>
<td>36</td>
<td>135.94</td>
<td>15.81</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It reveals that in the Science stream, total number of male students is 86, the mean score on ICT is 143.69 and S.D. is 18.72. The female students is 36, mean score on ICT is 135.94 and S.D. is 15.81. The t-value between male and female is 2.332 at 120 degree of freedom. Here calculated value is greater than table value. So the hypothesis is rejected at 0.05 level. It means significant difference observed in male and female students of Science stream on ICT.

Hypothesis- There is no significant difference between Male and Female students on ICT in Commerce stream.

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
<th>t-value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>47</td>
<td>143.11</td>
<td>18.06</td>
<td>1.26</td>
<td>Not Significant at .05 level</td>
</tr>
<tr>
<td>Female</td>
<td>08</td>
<td>135.63</td>
<td>17.25</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The table reveals that in the Commerce stream, total number of male students is 47, the mean score on ICT is 143.11 and S.D. is 18.06. The female students is 08, mean score on ICT is 135.63 and S.D. is 17.25. The t-value between male and female is 1.26 at 53 degree of freedom. The C.R. value is 1.97 at .05 level of significance. Here calculated value is less than table value. So the hypothesis is accepted at 0.05 level.

It means no significant difference observed in male and female students of Commerce stream on ICT.

Findings and Results

Male and female graduate level students had significant difference on attitude towards information and Communication Technology. Significant difference was not found in Arts stream in relation to gender. In science stream, the significant difference was seen with reference to gender. Commerce stream students had no significant difference on attitude towards ICT in relation to gender.

Educational Implications of the Study

All of us know well that ICT plays very important role in the field of education. Principal and Manager should be planned to educate the students through ICT. Students can develop their knowledge through ICT. Government should facilitate ICT to all Govt. and private colleges. Student’s attitude towards ICT is increasing day by day. Parents, Teachers and other related to teaching learning can be benefited with the proper use of ICT indifferent ways.

References