A Study On Attitude of Students Towards E-Learning

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Abstract: Education is a process of the development of individuals and society. The process of education varies with reference to time and space. Now, technology is playing an important roleand electronicresource-based instruction and learning has created many changes in the education system. The present study is an effort toknow the attitude of Rajiv Gandhi University students towards e-learning. Researchers have employed survey-cum-descriptive method and a stratified random sampling technique was used for the selection of the sample.The result of the study showedthat there wasa significant difference between the attitude of male and female students towards e-learning and no difference was found based on Tribal status, Settlement and Subject background. The study also offers a relevant discussion based on the findings of the study.

Keywords: Adult learning, Cooperative/collaborative learning, Distance education and online learning, Learning communities, Teaching/learning strategies.

1. INTRODUCTION

In the present age, Information and Communication Technology (ICT) plays an indispensable role in every aspect of our lifeand bring forthvast opportunities and challenges for everyone. It is considered an important tool for learning and instruction, and most of the educational system of the world considersICTinitiative in education as an innovative practice. Hence, teaching and learning strategies are getting revised to provide better services to the learner through the use of an electronic application such asa Laptop, projector, mobile phone etc. in classrooms. The use of different educational media in the educational field enhances the quality of the teaching and learning process.Information Technology has developed a need to modify the students learning plan by using e-Learning resources. E-learning is an interlink between students and learning objectives and it gives different ways to acquire the learning goals. Generally,e-Learning can be explored by using a web browser over the internet.

E-learning is the delivery of instructing, teaching and learning with the help of a combination of electronic media. It is a combination of the different units working together in a system. According to Aixia and Wang (2011), e-learning application systems are portal systems, Virtual Classroom Systems, Learning Management systems, Resource Management systems, Multi-Media Recording systems, Bulletin Board systems and Teaching Evaluation

systems. Here portal system means e-learning portal, which not only providesa unified access point for all application systems, but also the information platform; Virtual Classroom System works as simultaneously recording class content that can be automatically changed into courseware for students to download; Learning Management System includes curriculum resources management, curriculum training, curriculum collaboration; Resource Management System allows teachers to achieve issuing and collating of teaching resources by accumulating, sorting and sharing of curriculum resources; Multi-Media Recording System means recording of classrooms, conference rooms and lecture halls which can be easily embedded in the web pages and courseware; Bulletin Board System platform has a campus community feature by which department managers can not only issue notices and manage information resources, but also design a home page with faculty /department's features. The teaching Evaluation System includes the teaching assessment subsystem, student learning assessment subsystem and teaching management evaluation subsystem. The purpose is to evaluate the performance of teachers, students and administrators in the integrated digital learning platform.

e-Learning is a system of learning based on electronic resources, where teaching is not limited within the four walls of the classroom or institution. The purpose of e-Learning is to empowera student to obtain a degree, certificate without physically attending the School or University. Considering the importance of e-resources,the Government of India has introduced different radio and television channels for providing education. The SWAYAM PRABHA is a group of DTH channels devoted to telecasting high-quality educational programmers on 24x7 bases using the GSAT-15satellite. Similarly, DIKSHA, NROER, NISHTHA, e-Pathshala, YouTube Channels, INFLIBNET and many other e-platforms are available to everyone. Theseresources are uplinked by NPTEL, IITs, UGC, CEC, IGNOU, NCERT and NIOS. The UGC, NCERT, NCTE and other agencies and institutions are very keen on developing e-learning by sanctioning grants for the development of e-learning infrastructure and excellence in the institutions of learning. The different mode of e-learning has highly enhanced the quality of higher education.Different countries are promoting e-resource based learning to their citizens. Recently, United Nations has also launched different e-learning programmes such as United Nations Climate Change Learning Partnership, Capacity development through e-learning, UN SDG: learn, and several initiatives during Covid-19 lock-down.

e-Learning has opened new opportunities for the teachers as well as learners as it reduces the geographical distance between teacher and learners. e- Resources are very helpful in the completion of a project, clearing of doubt and further knowledge seeking. Nowadays, a large number of students access the internet on their mobiles, laptops in their homes.Although e-resources are very useful for learning it has many negative aspects also, such as e-learning is not useful for people who live in poor network zone, it focuses on theoretical knowledge rather than practical, face to face communication is missing whichcan lead to social isolation. Hence the question arises, what do students think about e-learning? With the development of electric resources in education, a suitable attitude has been developing among the students (Thakkar &Joshi 2017; Behera, Sao & Mohamed,2016; Kar, Saha& Mondal,2014; Mamattah, 2016). Attitude towards e-learning depends on academic levels, locality (Periasamy, 2019; Jan &Mattoo, 2018), gender, stream (Basumatary, 2018, Akimanimpaye, 2012), subject specialization, parents' educational qualifications, parents' monthly income and school management (Bhuvaneswari&Padmanaban 2012). However, in some studies,no difference was found in the attitude of students towards e-learning based on gender (Dhas, 2017) and settlement (Konwar, 2017).

Rajiv Gandhi University (RGU) is the lone central University of Arunachal Pradesh established in 1984. The university hasthe provision of different e-learning resources for the

students such as e-books, e-journals, smart classes, a computer centre, and internet facilities. Hence, the students of RGU would have an attitude towards e-learning. Based on a review of related literature it was found that several studies have been conducted to examine the stakeholders' attitude towards e-learning in India and abroad, but no study has been conducted so far on the attitude of RGU students towards e-learning. Therefore, the researcher thought to take up the present topic for the study. In the present study,an attitude refers to the tendency of an individual to favour or not favouran object or situation. It means the degree of the positive and negative effect associated with some psychological objects such as ideas, symbols, institutions towards which people can differ with respect to negative and positive effects. e-learning refers to learning utilizing electronic technologies to access educational curricula outside of a traditional classroom.

2. OBJECTIVES OF THE STUDY

1. To study the attitude of RGU students towards e-learning.
2. To compare the attitude of RGU students towards e-learning in relation to their gender.
3. To compare the attitude of RGU students towards e-learning in relation to residential status (Hostler and Day scholar).
4. To compare the attitude of RGU students towards e-learning in relation to their tribal status.
5. To compare the attitude of RGU students towards e-learning in relation to their subject background.

3. THE HYPOTHESIS OF THE STUDY

H^{01}There is no significant difference between the attitudes of RGU students towards e-learning in relation to their gender (Female and Male).

H^{02} There is no significant difference between the attitudes of RGU students towards e-learning in relation to residential status (Holsters and day scholars)

H^{03} There is no significant difference between the attitudes of RGU students towards e-learning in relation to Tribal Status (Tribal and Non-tribal)

H^{04} There is no significant difference between the attitude of RGU students towards e-learning in relation to their subject background (other subjects and science subjects)

4. METHOD OF THE STUDY

Descriptive-cum-survey method was used to assess the attitude of RGU students towards e-learning. The researchers surveyed and attempted to collect the data from all the selected departments of the university.

4.1 Population and Sample

The population for the present study was consisting of all post-graduate students of Rajiv Gandhi University.A stratified random sampling technique was used for the study.The sample for the present study was 220 (two hundred twenty) students who were doing their post-graduate in RGU. The details of a sample have been given in table-1.

Table 1: Distribution of Sample in Relation to SelectedVariables

Group		N		Percentage
Gender	Male	110	220	50%

	Female	110		50%
Residential Status	Hosteller	122	220	61%
	Day scholar	98		44.5%
Subjects Background	Science	88	220	40%
	Others	132		60%
Tribal Status	Tribal	122	220	61%
	Non-Tribal	98		44.5%
Total=220				

4.2 Data Collection Management and Analysis Procedure

To collect the requisite data for the present study the investigators used an attitude scale towards e-learning developed by Dimpal Rani. This scale contains 65 statements (both positive and negative type). Out of sixty-five items,thirty-eight were positive and twenty-seven were negative items.The scale has four major areas, viz., 1. e-Learning interest, 2. Usefulness, 3. Ease of e-Learning and 4.e-learning confidence. The researcher surveyed by administering the attitude scale for the collection of data from a selected sample of various selected departments of RGU towards e-learning.After the completion of the scoring procedure, the researchers have organized the raw scores and then logically tabulated themfor easy understanding, analysis and interpretation. Researchers have applied statistical techniques such as Mean (M), Standard Deviation (SD), Standard Error Deviation (SE_D) and't' test for data analysis by using Microsoft excel.

5. RESULT AND DISCUSSION OF THE STUDY

The present study was an attempt to examine the attitude of Rajiv Gandhi University students towards e-Learning in relation to their gender, residential Status, subject background and tribal status.The result of the study has been presented in sequential order according to the objectives of the study.

5.1 The Attitude ofRGUStudents Towards E-Learning

Table 2: StatisticalResults

Sl.No	Sample	N	Mean	SD
1	Present Study	220	232.24	21.10
2	Tools Norm Value	200	233.50	29.11

Table 2 shows that the mean score of attitudes of RGU students comes under the average category and is similar to the tool norm value. The standard deviation value of the present study is much lower than the normal value. This shows that there arefewer variations in the

attitude of RGU students in comparison to tool norm value. The possible reason behind this could be a similar type of exposure and facilities of e-learning to the students of the university.

Table 3: Classification of Students On Level of E-Learning Based On Percentile Norm

Level of e-learning	Z-Score	Attitude Score	No. of students	Percentage of students
Extremely high	+2.01 and above	291 and above	4	1.81%
High	+1.26 to+2.00	271 to 290	8	3.63%
Above Average	+0.51 to +1.25	249 to 270	78	35.45%
Average	-0.50 to +0.51	219 to 248	98	44.54%
Below average	1.25 to -0.51	197 to 218	20	9.09%
Low	-2.00 to – 1.26	176 to 196	12	5.45%
Extremely Low	-2.01 and below	175and below	0	0
	N=220			

Table3 shows that the status of an attitude of RGU students towards e-learning according to scale norms i.e.extremely high, high, above average, average, below average low and extremely low. Most of the respondent (98) falls under the average level,78 respondentscome in the above-average category, 20 under below average category. Similarly,4 students are under the extremely high group but none students come under the extremely low category. It indicates that most RGUstudents'attitude is positive towards e-learning, but still, some students' attitude is below the average level. This could be because Arunachal Pradesh is still an underdeveloped state.

5.1.1 Comparison of Attitude Based on Gender

Table 4: Comparisonof Students' Attitude Towards E-Learning in Relation to Their Gender

Group	Number	Mean	SD	Difference	SE_D	df	t-value	Remarks
Male	110	233.2	22.43	2	0.86	218	2.32	Significant
Female	110	231.2	19.49					

Table 4 shows that computed t-value 2.32 with df 218, is greater than critical t-value 1.97 at 0.05 level of significance. Hence the formulated null hypothesis (Ho_1) "There is no significant difference between the attitudes of RGU students towards e-learning in relation to their gender"gets rejected. From this, it is clear that the attitude of male students is higher

than the attitude of female students. The reason behind this could be that male students have more curiosity to use the electronic device as compared to female students. A further reason could be that since childhood days' parents allow the male child to play with electronic gadgets like remote cars, video games etc. In this way, their curiosity level increased to use electronic learning, which in the case of female child parents don't give them full freedom to play with the gadget. A female child is always a force to help in household activities. Therefore, female is not as active as compare to male in using any electronic appliances. This findingis similar to the findings ofZargar, Ahalawat and Kumar (2016),Akimanimpaye (2012) and Yacob(2012), but opposite to the findings of Konwar (2017) and Dash (2017).

5.1.2 Comparison of Attitude Based on Residence

Table 5: Comparisonof Students' Attitude Towards E-Learning in Relation Their Residence

Group	Number	Mean	SD	Difference	SE_D	df	t-value	Remarks
Hosteller	122	230.20	20.65	2.49	2.79	218	0.89	Not Significant
Day Scholar	98	232.69	20.56					

Table5 shows that computed t-value 0.89 with df 218 is less than critical t-value 1.97 at 0.05 level of significance. Hence the formulated null hypothesis (Ho$_2$) ''There is no significant difference between the attitudes of RGU students towards e-learning in relation to residential status''gets accepted. From this, it is clear that there is no significant difference between the attitude of hosteller and day scholar students of RGU towards e-learning. The reason behind this could be that both hostellers and day scholars of RGU have equally aware of online learning or electronic learning, get equal facilities on campus and get the same guidance from teachers.

5.1.3 Comparison of Attitude Based on Tribal Status

Table6: Comparison of Students' Attitude Towards E-Learning in Relation to Their Tribes

Group	Number	Mean	SD	Difference	SE_D	df	t-value	Remarks
Tribal	123	232.22	22.31	0.88	3.05	218	0.28	Not significant
Non-Tribal	97	231.34	22.73					

Table6 shows that the computed t-value 0.28 with df 218 is less than the critical t-value 1.97 at a 0.05 level of significance.Hence the formulated hypothesis (Ho$_3$) ''There is no significant difference between the attitudes of RGU students towards e-learning in relation to Tribal Status'' gets accepted. From this, it is clear that there is no significant difference between the attitude of tribal and non-tribal students of RGU towards e-learning.The reason

behind this could be that both tribal and non-tribal students have got same opportunities and facilitieson the university campus and outside the campus.

5.1.4 Comparison of Attitude Based on Subject

Table 7: Comparison of Students' Attitude Towards E-Learning in Relation to Their Subjects

Group	Number	Mean	SD	Difference	SE_D	df	t-value	Remarks
Science	88	231.65	20.59	1.40	2.83	218	1.00	Not significant
Others subject	132	233.05	20.64					

Table7shows that the computed t-value 1.0 with df 218 is less than the critical t-value 1.97 at a 0.05 level of significance. Hence the formulated hypothesis (Ho₄) "There is no significant difference between the attitudes of RGU students towards e-learning in relation to their subject background" gets accepted. From this, it is clear that there is no significant difference between the attitude of science subject students and other subject students of RGU towards e-learning.The reason behind this could be that now a dayboth science and other subject students have gotsimilar opportunities and exposure to e-learning. This finding is opposite to the finding of Bhuvaneswari& Padmanaban (2012).

5.2 Educational Implications of the Study
The present study focused on the attitude of Rajiv Gandhi University students towards e-learning in relation to their gender, residential, tribe and subject. Based on the findings of the study the researchers have come up with the following educational implications:
1. The study will help other scholars, researchers to know the present research status so far done in the field of e-learning.
2. Workshop, training programmes for university students should be organized for developing their attitude towards e-learning.
3. The study will help to create awareness among society about e-learning.
4. The study would be helpful to understand the importance of e-learning in the education system.
5. The findings and discussions of the study will be helpful from policy perspectives at the national, state and university level.

6. CONCLUSION
In this digital era, e-learning plays an important role in the field of education. By using electronic applications, we can promote education at a global level. e-learning enhances the quality of higher education by providing various learning platforms. e-learning is an innovative technique that also provides learning experiences to the students through online mode. The present study aimed to study the attitude of RGU students towards e-learning in terms of gender, residential, tribe and subject. The mean score of attitudes of RGU students comes under average level. The result shows that attitude that the attitude of male students is higher than the attitude of female students towards e-learning. There is no significant difference exist in the attitude of RGU students towards e-learning in relation to residential, tribe and subject.

Delimitation of the Study

The present study is delimited to the attitude of post graduates' students of RGU towards e-learning. It is also delimited to independent variables i.e., Gender(Male-Female), Tribal status (Tribal,Non-tribal),Residence (Hosteller-Day scholar), and Subject (science and other subjects).

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