



IMPACT OF E-RESOURCES ON ACADEMIC ACHIEVEMENT OF PRE-UNIVERSITY COLLEGE STUDENTS

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Abstract:

The main aim of this article is to study impact of E-Resources on Academic Achievement of Pre-University College students. For the survey design, the researcher selected stratified random sample of 200 students studying in Pre university college students, giving representation to sex, type of management, type of family and size of family, out of 200 students 100 boys and 100 girls are taken from Pre-university colleges in Raichur. Mass-Media Scale (MMS) developed by Dr. M. Narayanaswamy and Dr.Haseen Taj was used for measuring level of Mass-Media tools were used. Academic Achievement (Scores) of students were collected from office records. The results reveals that There is significant difference in academic achievement of Pre university college students used more and less e-Resources. The more e-Resources used students secure more percentage than that of less media used students. From this we can conclude that e-Resources impact on academic achievement of Pre university college students.

Keywords: Impact, E-Resources, Academic Achievement, Pre-University College students

1. Introduction:

An e-resource or electronic resource is defined as the resource that require computer accession or any electronic product that delivers a collection of data, be it text referring to full text bases, e-journals or other multimedia products and numerical, graphical or time based, as a commercially available title that has been published with an aim of being marketed. These may be delivered on pen drives, on tape, through internet and so on. Over the past few years, a numbers of techniques and related standards have been developed and used that allow documents to be created and distributed in electronic form. Hence to

cope with the present situation, librarians are shifting towards new ideas, namely electronic resources for their collection developments so that the need of users is better fulfilled

Education is slightly regarded as the key to national prosperity and welfare and it is one of the most important forms of National investment. The skill that it generates is not only highly valued by the society but is indispensable for various occupations. Faced with the problem of limited resources it is essential that whatever is available for education should be fully utilized.

If the student fails or is unable to achieve adequate grades it means that the meager resources of the country have been wasted. Failure in education is costly. Therefore an effort to unravel and understand the factors that underlie the success or failure of students in education does not simply amount to an academic exercise. It has its practical bearing in the sense of that it makes possible the proper utilization. A measure, which would ensure maximum academic achievement, is needed for the large number.

It is a well accepted fact now that academic achievement is a complex behaviour and a resultant of a host of factors different kinds intellectual and non intellectual, psychologists have been engaged in researches exploring all such factors, because in the present era special premium is placed on talent and brain power, and scholastic performance lagging behind of intellectual ability of a student's represents a serious loss to society in terms of his potential contributions.

A classroom is a heterogeneous group in the sense that it is made up of students with different backgrounds and with varied abilities. They come from different cultural backgrounds different ethnic groups and having different mental intellectual capacities. The scholastic achievement is affected by these factors of individual difference.

It is very logical to assume that high academic achievement is not possible in the absence of intellectual abilities. The more favorable such characteristics are the higher could be the academic achievement, in the words of Stern, Stein and Bloom (1956) once the question of minimal intellectual competence had been resolved, critical importance could then be attached to such matters as the manner in which a student could get along with his classmates the extent to which he was accepted or rejected and the significance with which he attaches to such responses from others.

Every child when it is admitted to the Pre university college is expected to achieve to the normal standards of the grade. The children through various experiences learn to adjust to its peer group teacher and to the Pre university college situation. Academic achievement is closely related to the child's ability to make up with in the Pre university college where a number of learning experiences are provided. Academic achievement denotes the way in which the child is able to adjust and achieve in Pre university college situation in terms of various activities that are provided in the Pre university college to a normal degree of expectations. It is the resultant of need its satisfaction which is measured through various learning experiences including curricular and co-curricular activities. Achievement in the Pre university college subjects is a way for adult to maintain their personal worth; there must be a strong drive for achievement, Academic achievement can also perform the willingness to achieve skill and ability of the students with the help of E-Resources.

2. **Meaning of Academic Achievement:**

Academic achievement depends upon the background of the student. It is said that the type of home, type of teaching and the learning aspects for the learner will play a very important role in the achievement. Students with high as intelligence obtain higher achievement studies reveal that intelligence is the product of heredity. Heredity factors and social environment will play very important role in the individual's achievement.

Academic achievement has been operationally defined as the sum total of achievement made in all subjects. This is obtained by adding the achievement scores obtained by the students in all subjects in the final examination.

The term academic achievement is closely related to the type of adjustment the child is able to make up with, in the Pre university college where a number of learning experiences are provided, A. Achievement denotes the way in which the child is able to adjust and achieve in Pre university college situation in term of various activities that are provided in the Pre university college to a normal degree of expectation. It is the resultant of need satisfaction, which is measured through various learning experiences including curricular and co-curricular activities. Achievement in the Pre university college subjects is away for adults to maintain their personal worth. There must be a strong drive for Achievement dare to resist them pressure "provocative" and "bolshie" where he feels strong enough to resist the requirements to achieve.

3. **Factors Affects Academic Achievement:**

Academic achievement is helps the all round development of skills through co-curricular activities. It affects some factors viz.

1. Effective Teaching,
2. e-Resources,
3. Socioeconomic Status,
4. Intelligence,
5. Aptitude,
6. Pre-university college.

4. **Objectives of the Study:**

The present study was undertaken with the following major objectives:

- To find out the relationship between academic achievement and impact of e-Resources on secondary Pre university college students.
- To find out whether there is any significant effect of background variables of students such as sex, type of management, type of family, size of family, and level of impact of ICT of Pre university college students.

5. Hypotheses:

1. H_{01} : There is no significant difference between the academic achievement of Pre university college male students used more and less e-Resources.
2. H_{02} : There is no significant difference between the academic achievement of Pre university college female students used more and less e-Resources.
3. H_{03} : There is no significant difference between the academic achievement of Pre university college urban students used more and less e-Resources.
4. H_{04} : There is no significant difference between the academic achievement of rural Pre university college students used more and less e-Resources.
5. H_{05} : There is no significant difference between the academic achievement of Govt. Pre university college students used more and less e-Resources.
6. H_{06} : There is no significant difference between the academic achievement of private Pre-university college students used more and less e-Resources.
7. H_{07} : There is no significant difference between the academic achievement of all Pre university college students used more and less e-Resources.

6. Variables of the Study:

The variables of this study are classified under three types which are as follows:

1. Dependent Variables:

Academic Achievement

2. Independent Variables:

e-Resources

3. Background Variables

- a. Sex (Male\Female)
- b. Type of Pre university college Management (Government\ Private Aided\Private Unaided)

7. Review of Literature

As an emerging field, Information technology has facilitated by providing electronic and internet resources for fulfilling the day to day academic and research requirements of the teachers (Manoj Kumar, Gauri, and Bimal, 2011). A number of literature studies have been made on use of e- resources by lecturers, research scholars and students world-wide. Ali (2005) found out that 83% of students survey felt that using this source saved them time, and found it relatively easy to use. Ojo and Akande (2005) in a survey of 350 respondents examined students' access, usage and awareness of electronic information resources at the University College Hospital (UCH) Ibadan, Nigeria. The study revealed that the level of usage of the electronic information resources is not high. According to Thanuskodi (2012), the majority of users are aware about the availability of e-resources. The result reveals that 47.78 % of respondents wanted to access only electronic version whereas only 32.78% users wanted to read the printed journals

but 19.44% respondents wanted to use both electronic and printed version. Majority of the respondents 76.66% used e-resources for writing papers. The analysis reveals that many of the respondents searched e-resources through linking facility available on the library website. Moreover, many of the respondents are unaware and have not used On-line thesis/dissertations, abstracts/indexes, OPAC, on-line databases, which are very relevant for their study and research.

Bashorun (2011) revealed by research that frequency of use of electronic resources by academic staff of the University of Ilorin was low. Reasons were lack of time. Because of the time required to focus on teaching; lack of awareness to electronic resources provided by the library; power outage, ineffective communication channels, slow network and inadequate searching skills.

Rehman and Ramzy (2004) investigated the awareness and use of electronic information resources among health academics. Results show that libraries are extensively used for research needs, preparation of lectures, and for obtaining current knowledge. There are several studies made across the world to identify numerous factors which measure performance.

Velnampy (2008) identified ten factors which determine the performance of an employee such as completion of work within stipulated time, independent work, creativity, innovation, initiative skill, discipline, turn over, absenteeism, competition and training. Further, he found the factors influencing performance of academicians of University of Jaffna such as demonstrated academic ability, academic potential, creativity, oral expression, initiative skill, perseverance, ability to work independently, and professional ability. These factors were ranked based on mean value. Some studies on the use of electronic information and academic performance (Day and Bartle, 1998) reveal that the academic community has accepted that electronic information sources have an impact on their work. So, there is a relationship between electronic information sources and academic work. On the other hand, William Allan Prescott and others (2012) concluded that usage of e-device was not associated with academic performance ($p = 0.70$), when second and third year pharmacy students were combined. Academic performance was not impacted among third year pharmacy students ($p = 0.86$), but second year students performed better academically if they refrained from using e-devices during class (mean grade = 88.5% vs. 83.3%; $p=0.019$). Self-efficacy and use of electronic information jointly predict and contribute significantly to academic performance of students (Adeyinka Tella, Ayeni, and Omoba, 2007).

McFarlin (2008), for educational technology to be effective, student learning and outcomes must be the focus of its implementation and use. The provision of low-cost and easy-to-create online resources quantitatively enhanced students' academic performance: students who accessed the online resources achieved greater academic success (Andrea Crampton, Angela, and Heather, 2012).

Ekundayo and Alonge (2012) studied that human and material resource availability does not influence students' academic performance both in public and private secondary schools. Studies have also been carried out on the use of electronic resources by teachers, students, and research scholars of universities and research organizations. Seventy-eight percent (78%) of the respondents feel that the use of e-journals has created high dependency value on their research work and they needed current article alert services and electronic document supply services (Madhusudhan, 2008).

8. Design of the study:

8.1. Sample for the Study:

For the survey design, the researcher selected stratified random sample of 200 students studying in Pre university college students, giving representation to sex, type of management, type of family and size of family, out of 200 students 100 boys and 100 girls are taken from Pre-university colleges in Raichur.

8.2. Tools of the study:

According to Best (1963), like the tools in a carpenter's Box, each research tool is appropriate in a given situation to accomplish a particular purpose. The selection of suitable instruments or tools is of vital importance for any successful research in the light of this, the following tools were used for the collection of data.

- Mass-Media Scale (MMS) developed by Dr. M.Narayanaswamy and Dr.Haseen Taj was used for measuring level of Mass-Media.
- Academic Achievement (Scores) of students were collected from office records.

8.3. Collection of Data:

The researcher himself administered the various tools used in the present study on Pre university college students of Districts of Kalyana Karnataka. Before administering the tools, a good rapport was established with the students. Adequate care was taken for the seating arrangement and proper supervision was done so that no copying took place during the testing sessions, students were instructed to follow the instructions that were given on each questionnaire before answering them.

8.4. Statistical Techniques used for Data Analysis:

Statistical Techniques plays a very important role in any research because they are the means to analyze, interpret and draw inferences. The statistical techniques mean, Standard Deviation and 't' test ratio were used to analyze the data was used to find out the significant difference in academic achievement of individuals exposed to different e-Resources.

9. Objective wise Analysis of the data:

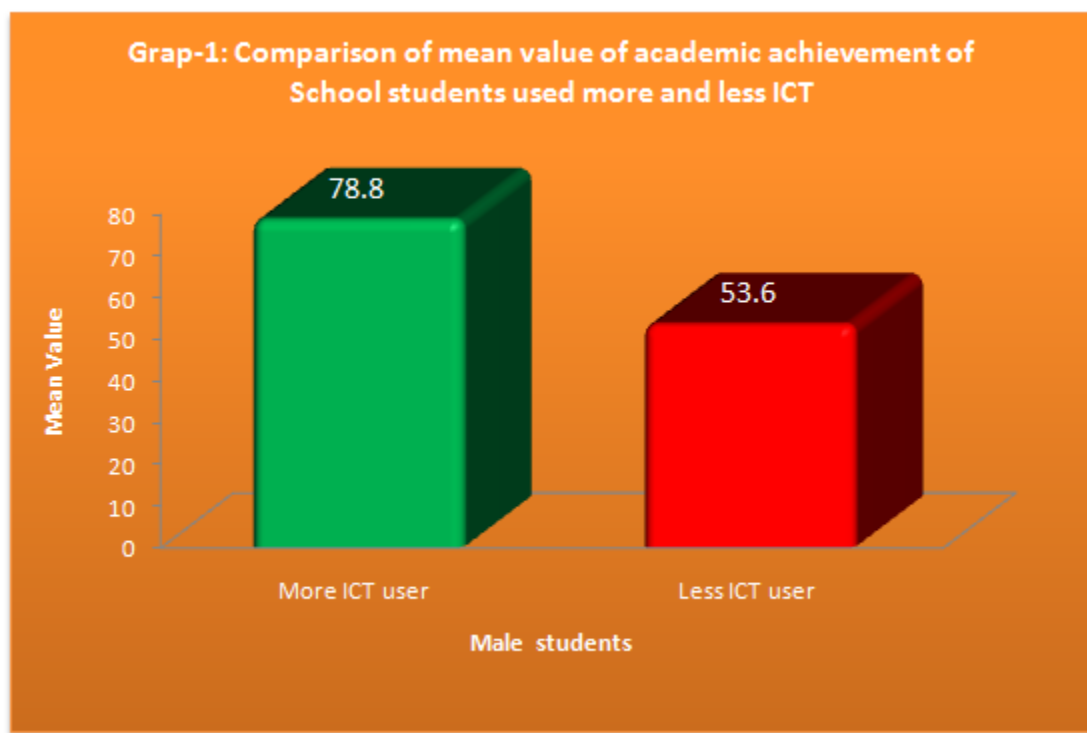
Objective-1: To find out whether there is any significant impact of e-Resources on achievement of Pre university college male students.

Table-1: Comparison of mean, standard deviation and 't'-test value of academic achievement of Pre university college students used more and less e-Resources.

Variable		N	Mean	S.D.	't' value
Male Pre university college students	More e-Resources user	50	78.8	6.98	18.53
	Less e-Resources user	50	53.6	8.81	

From the Table-1, it can be seen that the obtained 't' value of 18.53 is greater than the table value of 1.97 and 2.576 at 0.05 and 0.01 level. Hence, the null hypothesis-1 "there is no significant difference between

the academic achievement of Pre university college male students used more and less e-Resources”was rejected and alternative hypothesis is accepted. There is significant difference in academic achievement of Pre-university College students used more and less e-Resources.The more e-Resources used male students secure more percentage than that of less media used male students. From this we can conclude that e-Resources impact on academic achievement of Pre university college students.

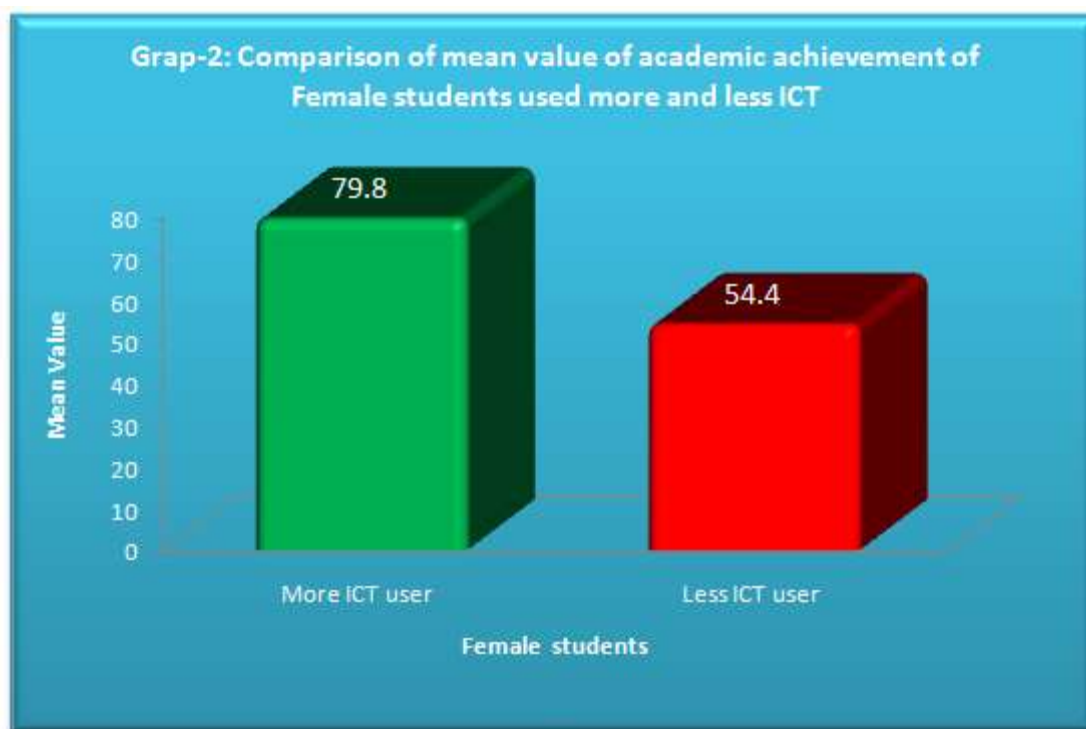


Objective-2: To find out whether there is any significant impact of e-Resources on achievement of Pre university college female students.

Table-2: Comparison of mean, standard deviation and ‘t’-test value of percentage of academic achievement of Pre university college students used more and less e-Resources.

Variable		N	Mean	S.D.	‘t’ value
Female Pre university collegestudents	More e-Resources user	50	79.8	4.83	27.55
	Less e-Resources user	50	54.4	6.88	

From the Table-2, it can be seen that the obtained ‘t’ value of 27.55 is greater than the table value of 1.97 and 2.576 at 0.05 and 0.01 level. Hence, the null hypothesis-2,i.e. there is no significant difference between the academic achievement of Pre university college female students used more and less e-Resources is rejected and alternative hypothesis is accepted. There is significant difference in academic achievement of Pre university college female students used more and less e-Resources. The more e-Resources used male students secure more percentage than that of less media used female students. From this we can conclude that e-Resources impact on academic achievement of Pre university collegefemale students.

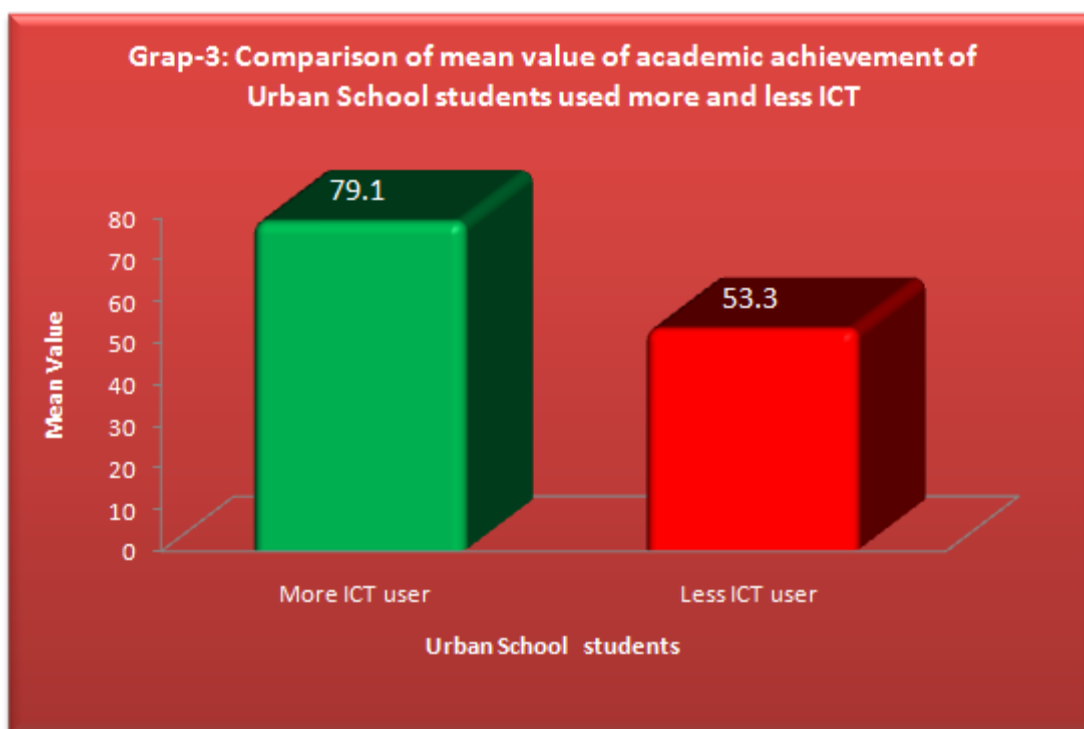


Objective-3: To find out whether there is any significant impact of e-Resources on achievement of Pre university college urban students.

Table-3: Comparison of mean, standard deviation and 't'-test value of percentage of academic achievement of urban Pre university college students used more and less e-Resources.

Variable		N	Mean	S.D.	't' value
Urban Pre university college students	More e-Resources user	50	79.1	6.76	21.68
	Less e-Resources user	50	53.3	7.76	

From the Table-3, it can be seen that the obtained 't' value of 21.68 is greater than the table value of 1.97 and 2.576 at 0.05 and 0.01 level. Hence, the null hypothesis-3i.e. "there is no significant difference between the academic achievement of urban Pre university college students used more and less e-Resources" is rejected and alternative hypothesis is accepted. There is significant difference in academic achievement of urban Pre university college students used more and less e-Resources. The more e-Resources used students' secure more urban percentage than that of less media used female students. From this we can conclude that e-Resources impact on academic achievement of urban Pre university college students.

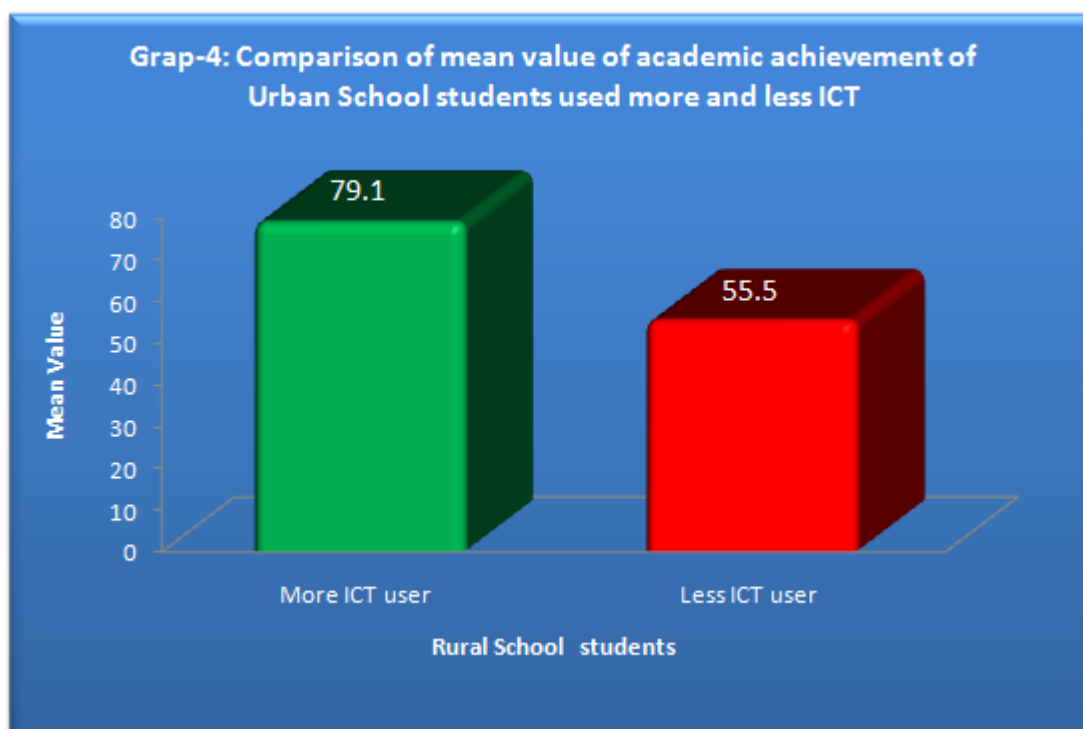


Objective-4: To find out whether there is any significant impact of e-Resources on achievement of Pre university college rural students.

Table-4: Comparison of mean, standard deviation and 't'-test value of percentage of academic achievement of rural Pre university college students used more and less e-Resources.

Variable		N	Mean	S.D.	't' value
Rural Pre university college students	More e-Resources user	50	79.1	5.04	25.60
	Less e-Resources user	50	55.5	6.09	

From the Table-4, it can be seen that the obtained 't' value of 25.60 is greater than the table value of 1.97 and 2.576 at 0.05 and 0.01 level. Hence, the null hypothesis-4i.e. "there is no significant difference between the academic achievement of RuralPre university college students used more and less e-Resources' is rejected and alternative hypothesis is accepted. There is significant difference in academic achievement of Rural Pre-university college students used more and less e-Resources. The more e-Resources used students secure more rural percentage than that of less media used female students. From this we can conclude that e-Resources impact on academic achievement of rural Pre-university college students.

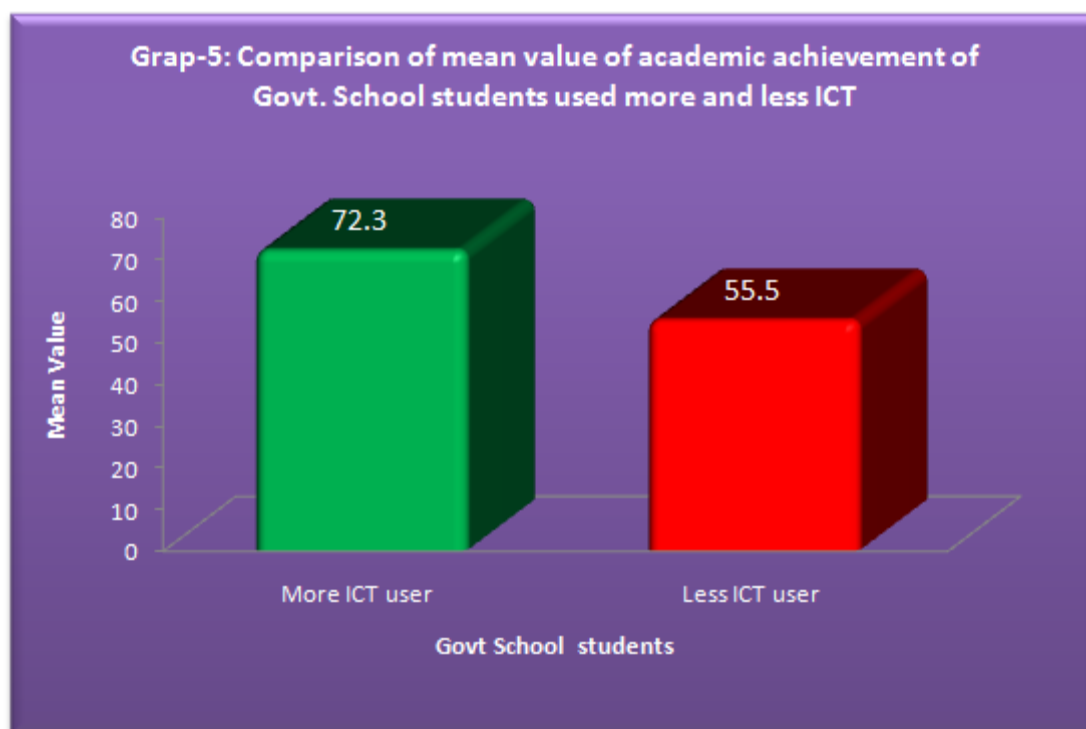


Objective-5: To find out whether there is any significant impact of e-Resources on achievement of Govt. Pre university college students.

Table-5: Comparison of mean, standard deviation and 't'-test value of percentage of academic achievement of Govt. Pre university college students used more and less e-Resources

Variable		N	Mean	S.D.	't' value
Govt. Pre university college students	More e-Resources user	50	72.3	14.66	9.76
	Less e-Resources user	50	55.5	6.09	

From the Table-5, it can be seen that the obtained 't' value of 9.76 is greater than the table value of 1.97 and 2.576 at 0.05 and 0.01 level. Hence, the null hypothesis-5, i.e. "there is no significant difference between the academic achievement of Govt. Pre university college students used more and less e-Resources" is rejected and alternative hypothesis is accepted. There is significant difference in academic achievement of Govt. Pre university college students used more and less e-Resources. The more e-Resources used students secure more percentage than that of less media used female students. From this we can conclude that e-Resources impact on academic achievement of Govt. Pre-university college students.

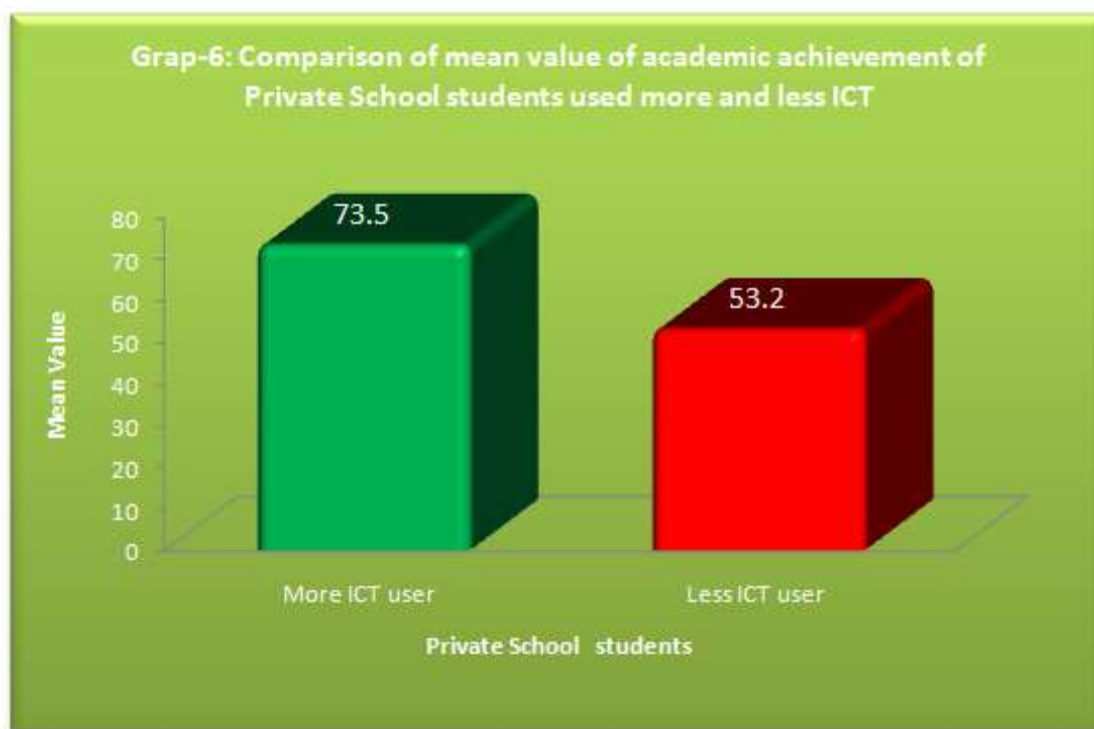


Objective-6: To find out whether there is any significant impact of e-Resources on achievement of Private Pre-university college students.

Table-6: Comparison of mean, standard deviation and 't'-test value of percentage of academic achievement of Private Pre-university college students used more and less e-Resources

Variable		N	Mean	S.D.	't' value
Private Pre university college students	More e-Resources user	50	73.5	13.77	8.85
	Less Mass media user	50	53.2	7.01	

From the Table-6, it can be seen that the obtained 't' value of 8.85 is greater than the table value of 1.97 and 2.576 at 0.05 and 0.01 level. Hence, the null hypothesis-6 i.e. "there is no significant difference between the academic achievement of private Pre-university college students used more and less e-Resources" is rejected and alternative hypothesis is accepted. There is significant difference in academic achievement of private Pre-university college students used more and less e-Resources. The more e-Resources used students' secure more private percentage than that of less e-Resources used female students. From this we can conclude that e-Resources impact on academic achievement of private Pre-university college students.

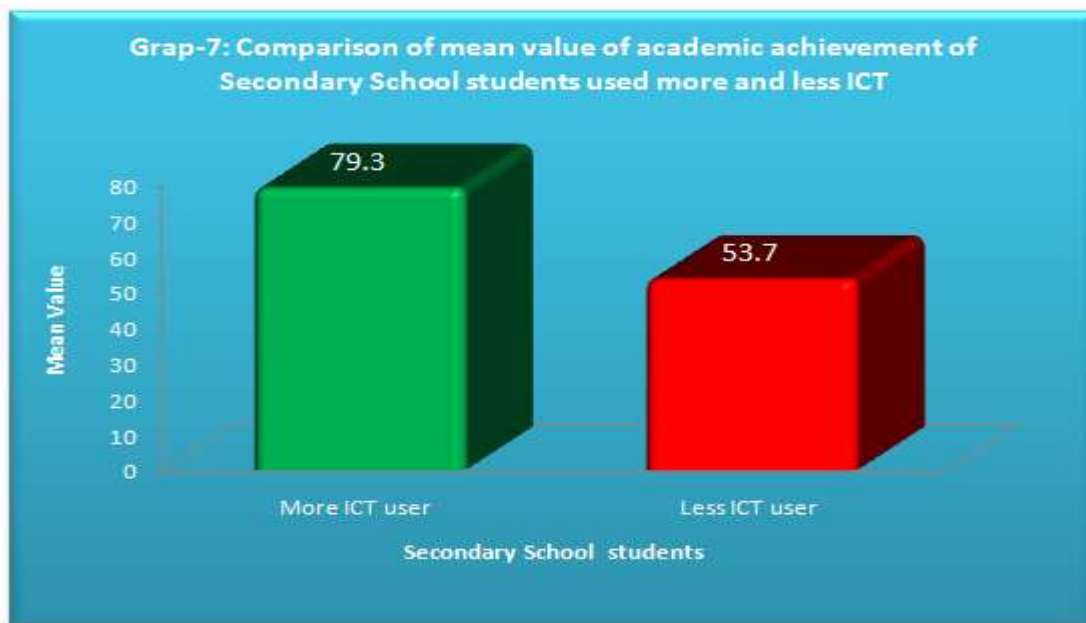


Objective-7: To find out whether there is any significant impact of e-Resources on achievement of all students.

Table-7: Comparison of mean, standard deviation and 't'-test value of percentage of academic achievement of all students used more and less e-Resources.

Variable		N	Mean	S.D.	't' value
All students	More e-Resources user	100	79.3	6.00	34.11
	Less Mass media user	100	53.7	7.48	

From the Table-7, it can be seen that the obtained 't' value of 34.11 is greater than the table value of 1.97 and 2.576 at 0.05 and 0.01 level. Hence, the null hypothesis-7, i.e. there is no significant difference between the academic achievement of Pre university college students used more and less e-Resources is rejected and alternative hypothesis is accepted. There is significant difference in academic achievement of Pre university college students used more and less e-Resources. The more e-Resources used students secure more percentage than that of less media used students. From this we can conclude that e-Resources impact on academic achievement of Pre university college students.



10. Educational Implications:

There is no significant difference in the academic achievement of boys and girls; there is a slight difference in the mean value of academic achievement of girls. They are having a little higher mean value. Hence Parents and teachers have to understand need and interests and provide conducive environment for children specially girls in enhancing their academic achievement.

The academic achievement of students studying in government, private aided and private unaided Pre university colleges there was a difference, but the students studying in private unaided Pre university colleges have higher mean value than the students studying in private aided Pre university colleges. Hence the private aided Pre university college managements should give attention, and must provide favorable environment to the student to reach their accomplishment through enhancing the academic achievement.

The student from low and high level of e-Resources shows a mean difference in their academic achievements. Students with low e-Resources level have less mean value when compared to the students from high level e-Resources. So, there is a need for students from low level e-Resources to have conducive e-Resources for their high academic achievement. Parents and other family members are accepted to provide favorable impact of e-Resources for their children to have high academic achievement. It depends on the type of interaction they have with their children.

In conclusion the academic achievement of all the Pre university college students studying in different of types of management with different e-Resources level depends upon the role played by the Pre university college management and impact of e-Resources in shaping the personality of the students as it determines the level of academic achievement.

Many psychologists are the opinion that the family environment, parent performances, behavioral and child varying practices are closely related to a number of factors such as their socioeconomic status etc. All these factors have a bearing on the academic achievement of the child in the family.

E-resources like television, radio, newspaper and motion e-resources users must be used to educate the pupil to understand the forces of nature as a whole and their participation in the process.

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