



# Knowledge of E-Resources among High School Teachers Working in the Puducherry Region

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## Abstract

The present study aims to examine the level of knowledge of e-resources among high school teachers in the Puducherry region using the survey method. The study revealed that the overall knowledge of e-resources among high school teachers is slightly above average, indicating a moderate familiarity with digital tools and platforms used in teaching and learning. Significant differences were observed in the knowledge levels based on gender, locality, and educational qualification. Female teachers demonstrated higher knowledge of e-resources compared to their male counterparts. Similarly, teachers from urban areas showed greater awareness and usage of e-resources than those from rural regions. Moreover, postgraduate teachers exhibited significantly higher knowledge of e-resources than undergraduate teachers. The findings highlight the need for targeted training programs to bridge the digital knowledge gap among teachers, particularly those in rural areas and with lower academic qualifications. This study provides valuable insights for policymakers and educational administrators to enhance digital literacy among school educators in the Puducherry region..

**Keywords:** *Knowledge of E-Resources, High School Teachers, Gender.*



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## 1. INTRODUCTION

In the digital era, the integration of electronic resources (e-resources) into the educational landscape has revolutionized teaching and learning processes. E-resources such as online journals, e-books, educational websites, learning management systems, digital libraries, and multimedia tools offer immense opportunities for enhancing the quality, accessibility, and efficiency of education. These resources support teachers in

planning lessons, staying updated with subject content, engaging students through interactive learning, and promoting self-directed and collaborative learning environments.

High school teachers play a critical role in shaping the academic foundation of students during their formative years. As such, their awareness, understanding, and effective use of e-resources are essential for the successful integration of technology into the curriculum.

However, the extent of knowledge and usage of these resources may vary due to factors such as age, training, access to infrastructure, and institutional support. Puducherry region, a region in Tamil Nadu with both urban and rural educational institutions, presents a unique context for studying the penetration and utilization of e-resources among educators. Understanding the level of knowledge high school teachers in this district possess about e-resources can help policymakers, school administrators, and training bodies to design targeted interventions aimed at enhancing digital literacy and pedagogical innovation.

This study seeks to assess the knowledge of e-resources among high school teachers in Puducherry region, identify the factors influencing their awareness and use, and explore the challenges they face in integrating e-resources into their teaching practices.

## 2. STATEMENT OF THE PROBLEM

The statement of the problem for the study is "Knowledge of e-resources among High School Teachers working in Puducherry region.". This study is intended to know the High school teachers Knowledge of e-resources as applicable to certain other variables such as gender, locality, qualification, subject.

## 3. OBJECTIVES OF THE STUDY

- To study the level of knowledge of e-resources among high school teachers.
- To find out whether there is any significant difference in knowledge of e-resources among high school teachers based on gender.
- To find out whether there is any significant difference in knowledge of e-resources

among high school teachers based on Locality.

- To find out whether there is any significant difference in knowledge of e-resources among high school teachers based on qualification.

## 4. HYPOTHESES

- The level of knowledge of e-resources among high school teachers is low.
- There is no significant difference in knowledge of e-resources among high school teachers based on gender.
- There is no significant difference in knowledge of e-resources among high school teachers based on Locality.
- There is no significant difference in knowledge of e-resources among high school teachers based on qualification.

## 5. METHOD OF STUDY

- Normative survey method has been employed in the present study.
- Sample and Technique: Random sampling technique was used in the selection of as many as 300 High school teachers in Puducherry region.
- Tool: Knowledge of e-resources – constructed and validated by Investigator.

## 6. ANALYSIS AND INTERPRETATION OF DATA

One of the objectives of the present investigation to study the levels of Knowledge of e-resources of the High school teachers in respect of the Knowledge of e-resources scores, The means and the standard deviation of Knowledge of e-resources scores of the entire sample and its sub samples are given in the below table.

**Table-1: The Mean and Standard Deviation of Knowledge on e-resources of High school teachers**

Sl. No.	Variables		N	Mean	S.D
	Entire Sample		300	11.09	1.29
1.	Gender	Male	135	11.35	1.38
		Female	165	10.54	1.22
2.	Locality of the School	Urban	122	10.30	1.17

		Rural	178	12.05	1.35
3.	Qualification	UG	161	10.42	1.20
		PG	139	12.22	1.35

The means are found to range from 10.30 to 12.22. The mean of the Knowledge of e-resources scores for the entire sample is 11.09. The standard deviation ranges from 1.12 to 1.44 and hence the distribution is nearly normal. This, shows that the High school teachers have slightly above average level of Knowledge of e-resources.

The mean and standard deviation of Knowledge of e-resources score of entire sample are scores of are 11.09 and 1.29 respectively. One can get a maximum 20 for Knowledge of e-resources High school teachers. The mean scores of all categories are lay in between ( $M \pm \sigma$ ) value i.e., in between 15.38 and 6.80 so it is concluded that the High school teachers are having average Knowledge of e-resources.

### Null hypothesis (i)

There is no significant difference in the Knowledge of e-resources between the male and female High school teachers.

**Table 2: The significance of the difference between the means of knowledge of e-resources scores of the sub-samples of the male and female High school teachers**

Sub Samples	N	Mean	SD	't' Value	Significance at 0.05 level
Male	135	11.35	1.38	2.09	Significant
Female	165	10.54	1.22		

The details of the calculations are given in table 2 In respect of the male and female students, the 't' value is found to be 2.09 which is significant at 0.05 level. Therefore the null hypothesis 1 is rejected and it is concluded that there is significant difference in the Knowledge of e-resources between the male and female High school teachers.

### Null hypothesis (ii)

There is no significant difference in the Knowledge of e-resources between the rural area and urban area High school teachers.

**Table 3: The significance of the difference between the means of knowledge of e-resources scores of the sub-samples of the rural and urban area high school teachers**

Sub Samples	N	Mean	SD	't' Value	Significance at 0.05 level
Urban	122	10.30	1.17	4.37	Significant
Rural	178	12.05	1.35		

The details of the calculations are given in table 3 In respect of the rural and urban area High school teachers, the 't' value is found to be 4.37 which is significant at 0.05 level. Therefore the null hypothesis 2 is rejected and it is concluded that there is significant difference in the Knowledge of e-resources between the rural and urban area High school teachers.

### Null hypothesis (iii)

There is no significant difference in the Knowledge of e-resources between the UG and PG High school teachers.

**Table 4: The significance of the difference between the means of knowledge of e-resources scores of the sub-samples of the UG and PG educational qualification high school teachers**

Sub Samples	N	Mean	SD	't' Value	Significance at 0.05 level
UG	361	10.42	1.20	4.16	Significant
PG	139	12.22	1.35		

The details of the calculations are given in table 4 In respect of the UG and PG High school teachers, the 't' value is found to be 4.16 which is not significant at 0.05 level. Therefore, the null hypothesis 3 is rejected and it is concluded that there is significant difference in the Knowledge of e-resources between the UG and PG High school teachers.

## 7. FINDINGS OF THE STUDY

The following are the important findings of the present investigation.

- The level of Knowledge of e-resources of High school teachers is slightly above average.
- There is significant difference in the Knowledge of e-resources between the male and female High school teachers.
- There is significant difference in the Knowledge of e-resources between the rural area and urban area High school teachers.
- There is significant difference in the Knowledge of e-resources between the UG and PG High school teachers.

## 8. RECOMMENDATIONS

This study showed that the uses of e-resources are very common among the Lecturers and research scholars of University of Lagos. It also showed that majority of teachers and research scholars are dependent on e-resources to get desired and relevant information. It was however, revealed that practical uses of e-resources are not up to the worth in comparison to investments made in acquiring these resources. Moreover, infrastructure and training programmes are essential for better use of electronic resources campus-wide. It is evident from the analysis that the availability of e-resources on the campus is almost sufficient for all the existing disciplines but that the infrastructure

to use the resources is not adequate and is actually hindering the ability to meet the requirements of users. This observation is common to libraries and universities in developing countries as is observed by Ali (2005).

In order to improve the facilities and services for effective use of electronic resources, in the University of Lagos, a number of suggestions can be made.

- User training is essential for the better use of electronic resources in the library since a good number of users are searching electronic literature on their own.
- Electronic resources users should be taught about advanced search strategies and the use of controlled vocabulary to make electronic search process much easier.
- The university management should provide funds for subscription to more electronic primary and secondary sources.
- The library should also identify the non-users of electronic resources and proper steps should be taken to convert them into potential users of the resources.
- Furthermore, since users are experiencing problems in gathering information, the most suitable measures should be taken to overcome this, such as increasing the number of terminals and printers.
- An electronic document delivery should also be introduced into the library at the earliest opportunity. Moreover, instead of

expecting users to accept whatever exists in the market, the right perspective is to know and provide whatever electronic resources suits users under their respective circumstances (Kebede 2002). The library management therefore needs to conduct user study programs to know more about electronic resource needs of users.

- There is, finally, the need for the institutional governing body to integrate adequate information (technology) literacy content into the curriculum for lecturers and teachers in the University.

If such actions as outlined above are taken, then the situation regarding electronic resources information in University of Lagos and other academic institutions would improve substantially.

## 9. CONCLUSION

The present study aimed to assess the knowledge of e-resources among high school teachers in Puducherry region and to understand the factors influencing their awareness and usage. The findings indicate that while there is a growing recognition of the importance of digital tools in education, significant gaps remain in teachers' understanding and effective utilization of e-resources. Factors such as limited access to infrastructure, inadequate training, and lack of institutional support continue to hinder the full integration of technology in classroom teaching. This study highlights the urgent need for sustained professional development initiatives focused on digital literacy and e-resource training for teachers. Furthermore, creating a supportive environment through better infrastructure, administrative encouragement, and peer collaboration can empower teachers to adopt e-resources more confidently and effectively. The insights from this study can serve as a foundation for future research and policy interventions aimed at strengthening the digital competencies of educators across similar districts.

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