

Awareness of Open Educational Resources among Research Scholars

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ABSTRACT

The study indicates an awareness of open education resources among research scholars in Tamil Nadu. The researcher has taken research scholars in Tamil Nadu as a population for the present study. The researcher has utilized simple random sampling techniques for collecting the data from the samples. The researcher has collected 606 samples from 23 universities and deemed universities. Based on the data analysis and interpretation, the researcher found that research scholars have an average awareness of OER, and that there are no significant differences in awareness based on gender, residency and parents education.

Keywords: Awareness, Open Educational Resources, Research Scholars, Gender, Residency and Parents Education

INTRODUCTION

According to Clements and Pawlowski (2012), awareness directly affects educators' willingness to adopt and integrate OER into their teaching practices. When teachers understand the concept of open licensing and the academic freedom it provides, they are more likely to reuse, remix, and redistribute resources to meet diverse learner needs.

Open Educational Resources (OER) are freely accessible, openly licensed materials that are used for teaching, learning, and research. The concept of OER is grounded in the idea of removing barriers to education by allowing anyone to access, use, modify, and share educational content.

The United Nations Educational, Scientific and Cultural Organization (UNESCO) defines OER as: learning, teaching and research materials in any format and medium that reside in the public domain or are under copyright that has been released under an open license, permitting no-cost access, reuse, re-purpose, adaptation and redistribution by others (UNESCO, 2019).

The Open Education Movement was inspired by open education and aims to provide access to knowledge for learners through the use of free and accessible resources. The origins of Open Educational Resources can be traced back to the 2000s, when MOOCs gained popularity. The introduction of open textbooks on the internet sparked a global movement towards open education.

Lynch, C. (2003) described Open repositories provide long-term preservation and free public access to digital research outputs, supporting the principles of open science.

Open educational resources (OER) are teaching, learning, and research materials that are in the public domain or published under an open license, allowing for free access, use, adaptation, and redistribution with few restrictions. OER encompasses "Open Solutions," "Free and Open-Source Software," "Open Access," "Open Data," and "Crowdsourcing Platforms." Hewlett prefers the Creative Commons Attribution (CC BY) license, which allows for reuse and repurposing of copyrighted educational resources while acknowledging the author's creative work. Creative Commons has the authority to offer license solutions for free use and reuse.

Textbooks, tests, videos, photos, lesson plans, modules, whole courses, and curricula are all examples of Open Educational Materials. It also includes software platforms for designing, developing, distributing, and using materials, as well as any tools or materials necessary to support the goal of open content access. In general, consumers prefer OERs in short parts (such as animations, courses, podcasts, and other materials). Because they are simple to create or reuse, they are also easier to search from the plethora of information available in the extensive resources, and they may be embedded as links for easy search. The usage of an open license, such as the Creative Commons license, is a key aspect of OER. The permissions granted to users are solely determined by the author's license and ownership of the original work.

Atkins, Brown, & Hammond, (2007) explained the OER is increased access to quality educational materials. it helps to remove the financial barriers by providing free learning resources to students and educators worldwide, particularly in developing countries where access to textbooks and digital materials is limited. It promotes inclusivity and equal opportunities for all learners.

REVIEW OF RELATED LITERATURE

Ojha and Surana (2023) investigated OER awareness and usage among stakeholders of teacher education and found significant differences based on program level, academic stream, gender, and locality. Similarly, Dsouza (2021) reported that while most respondents were aware of OER platforms such as SWAYAM, NPTEL, and Coursera, limited experience, difficulties in accessing relevant resources, and lack of understanding of copyright and licensing laws were major barriers to effective use.

Nagaiah, M. Thanuskodi.(2023) study aims to examine the awareness, availability and use of ICT tools and open educational resources (OER) by students of 12 colleges located in Pudukottai district of Tamil Nadu, India for academic purposes. The researchers collected data from a stratified random sample of 600 students from rural areas, drawn from the colleges, using questionnaires. 537 responses were received, which were analysed using SPSS 26th version. The survey results show that 60% regularly use the internet on campus. The remaining 40% do not regularly use the internet on campus. Moderately aware of open courseware (37.2%), institutional repositories (35.4%), online tutorials (32%), and NDL website (28.7%). Most of the respondents reported that they face challenges in accessing OER due to lack of training (27.9%) and lack of technical knowledge (30.5%). Additionally, many students reported that the lack of a personal computer hinders their free access (27.4%), and they waste a lot of time while browsing due to poor network (24.4%).

METHOD OF THE STUDY

The present study focused on open educational resources awareness among research scholars. It is providing a detailed explanation of OER awareness, among research scholars in Tamil Nadu state. In the present study to discover the existing level OER awareness of research scholars, to identify the level of OER knowledge of research scholars. Now, the researcher has utilized quantitative method for the present study and survey method to collect the data from the sample using structured awareness questionnaires.

Sample Of the Study

The researcher selected the arts and science research scholars as a population for the current research study. From the population the researcher has selected the sample size is 606 research scholars in Tamil Nadu. The researcher justified the appropriateness of the sample selected based on **Krejcie and Morgan (1990)** criteria and they have published a standard table that is widely used for determining the appropriate size of the sample for research studies. This table suggests that a sample size of 278 is recommended for a population of 1000.

Tools Used in the Study

The researcher is using three variables namely Awareness, Knowledge and Attitude for the present study. All research studies, the research tool is very significant role for fulfilling the research activities so the researcher

and research supervisor has searched standardised Awareness of OER tool. Finally, the researcher has got a standardised research tool on awareness of OER constructed and standardised by **Namita Ojha and Ajay Surana (2023)**. The scale includes 10 Dimensions and each Dimensions includes some statements. Finally, 64 items are included in the research tool. The range of scoring started from 1 to 5 "Not at All" to "Extremely Aware". No Negative statements. The scale allows for a maximum score of 320 and a minimum score of 64. The current research tool is valid based on face validity and content validity.

Hence, the researcher has utilized test and retest method to identify the reliable of the present research tool.

Objectives Of the Study

1. To study the level of Awareness of Open Educational Resources of research scholars.
2. To find out whether there is any significant difference in Awareness of Open Educational Resources of research scholars with respect to their:
 - Gender (Male/Female)
 - Residents of the Scholars (Rural/Urban)
 - Parents Education (Illiterate / School Edu. / Higher Edu.)

Hypotheses Of The Study

There is no significant difference among the research scholars Awareness of Open Educational Resources with respect to their:

- Gender (Male/Female)
- Residents of the Scholars (Rural/Urban)
- Parents Education (Illiterate / School Edu. / Higher Edu.)

Data Analysis and Interpretations

Descriptive Analysis – OER Awareness of Research Scholars'

Table: .1 The Mean and Standard Deviation of OER Awareness of Research Scholars'

Sl. No.	Demographic Variables	Sample	N	Mean	S. D
1	Gender	Male	324	172.18	73.98
		Female	282	174.85	73.40
2	Marital Status	Married	328	174.61	72.60
		Unmarried	278	172.02	75.00
3	Residents of the Scholars'	Rural	371	174.59	76.90
		Urban	235	171.58	68.35
4	Internet Availability	Availability	432	173.09	72.86
		Unavailability	174	174.23	75.82
5	Educational Stream	Arts	408	170.99	73.77
		Science	198	178.42	73.36
6	Mode of Studies	Full Time	196	177.33	75.87
		Part Time	410	171.55	72.60
7	Types of	Government	456	176.33	75.37

	Universities	Private	150	164.56	67.67
8	Parents' Education	Illiterate	140	164.19	73.43
		School Education	295	178.82	73.15
		Higher Education	171	171.67	74.32
9	Parents' Occupation	Daily Wages	118	157.58	74.40
		Govt.	77	176.19	68.49
		Private	271	183.34	75.19
		Business	140	166.05	70.33
10	Parents' Income	Below Rs. 10000	118	156.55	71.81
		Rs.10001 to Rs.50000	234	174.87	74.13
		Rs.50001 and Above	251	180.23	73.42
				173.42	73.66

Table: 2 - Level of OER Awareness

Variable	Score range	Category
OER Awareness	Above 190	High
	122 – 189	Average
	Below 121	Low

The OER Awareness scale is consisting 66 items. The Maximum score for this scale is 330 and minimum score of the scale is 66.

As can be seen from the table above, the calculated mean and standard deviation of the research scholars' OER awareness scores for the entire sample are 173.42 and 73.66 respectively, with the mean value falling between 157.58 and 183.64. Therefore, the research study concluded that the null hypothesis, which states that "Research scholars' Open Educational Resources Awareness is average".

Differential Analysis

a. There is no significant difference between male and female research scholars' of OER Awareness.

Table: 3 OER Awareness - Gender – "t" Value

Demographic Variable	Sample	N	Mean	S.D	't' Value	Remarks
Gender	Male	324	172.18	73.98	0.44	Not Significant

	Female	282	174.85	73.40		at 0.05 level
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It is observed from the above table 3 that the calculated t-value 0.44 is less than the table value 1.96 at 0.05 level of significance. It shows that there is no significant difference between male and female research scholars' of OER awareness. Hence, the null hypothesis is accepted. The mean value shows that female research scholars' is better than male research scholars' OER awareness. Similar result founded by Subhashree Das (2024) studies identified that the male and female scholar having same idea an awareness and knowledge about OER.

b. There is no significant difference between rural and urban research scholars' of OER awareness.

Table: 4 OER Awareness - Residents of the Scholars' – "t" Value

Demographic Variable	Sample	N	Mean	S. D	't' Value	Remarks
Residents of the Scholars'	Rural	371	174.59	76.90	0.50	Not Significant at 0.05 level
	Urban	235	171.58	68.35		

It is observed from the above table 4 that the calculated t-value 0.50 is less than the table value 1.96 at 0.05 level of significance. There is no significant difference between rural and urban research scholars' of OER awareness. Hence, the null hypothesis is accepted. The mean value shows that rural residents of the research scholars' OER awareness is better than urban research scholars' of OER awareness. Singh, Sukhbir; Sulekha; and Ram, Mange (2022) study supporting for the present study results.

c. There is no significant difference among the parents' education (illiterate/school education/higher education) of research scholars' OER awareness.

Table: 5 OER Awareness – Parents' Education - ANOVA

Demographic Variable	Sample	Source of Variation	Sum of Squares	df	Mean Squares	'F' Ratio	Remarks
Parents' Education	Illiterate/ School edu. /	Between Groups	279.63	2	139.81	0.026	NS at 0.05 level
		Within Groups	3282742.52	603	5444.01		
	Higher edu.	Total	3283022.15	605			

It is observed from the above table 4.12 that the calculated f-value 0.026 is less than the table value 3.08 at 0.05 level of significance. It shows that there is no significant difference among the parents' education (Illiterate/School education/Higher education) of research scholars' OER awareness. Hence, the null hypothesis is accepted. HK Sahu (2025) found the same result that no significant difference in OER awareness among research scholars' based on parents' education levels, indicating similar awareness across illiterate, school-educated, and higher-educated parents.

RESULTS AND DISCUSSIONS

Ogunbodede, K. F., & Atique, M. (2023) found that the study demonstrates the students used OER with a high level of awareness but the present study results indicating the OER awareness of research scholars are average and Mausumi Dutta, Snehasis Mohanty, Pranabkanti Dutta (2025) studies supported in the present research report. Further, they reported from their research findings OER was very usable and that the biggest obstacle to actual OER adoption was a lack of digital proficiency. Lastly, the study demonstrates a strong correlation between student awareness and the use of OER. In the present study found that there is no significant difference between internet availability and unavailability in the campus of research scholars OER awareness but there is significant relationship between OER awareness and OER knowledge of research scholars. Further, Ibrahim, S.S., Mohd Zaid, N.A., Zoolkefli, Z., Musa, A.H., & Baharuddin, F.N. (2021) studies identified that an awareness is significantly influence the acceptance level toward the establishment of OER with a value of R² (61.7%) at more than moderate level that explained the dependent variable. Midha, M., & Kumar, J. (2021) have found is well aware of open educational resources. The present study indicates OER awareness are average among research scholars.

Educational Implications

High awareness of OER among research scholars is correlated with greater use and integration into academic practices. For instance, the present study found that awareness of OER among research scholars are average. Awareness usually leads to initial engagement, but real knowledge such as familiarity with sources, platforms, and applications is necessary for meaningful adoption and the creation of a sharing based academic culture.

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