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K.Sathish Kumar

Alagappa University, edusathish@gmail.com

M. Mahendraprabu

Alagappa University, eduprabu2011@gmail.com

G. Kalaiyaran

Alagappa University

R. R.Ramnath

Alagappa University

N.Sasi Kumar

Alagappa University

See next page for additional authors

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Authors

K.Sathish Kumar, M. Mahendraprabu, G. Kalaiyaran, R. R.Ramnath, N.Sasi Kumar, and Mani Mookkiah

Social Media as an Open Educational Practice Tools and Challenges

K.Sathish Kumar^{1*}, M.Mahendraprabu², G.Kalaiyarasan³, R.Ramnath², N.Sasi Kumar²,
M.Mani¹

¹Research Scholar, ²Assistant Professor, ³Professor
^{1,2,3}Alagappa University, Karaikudi -630 003, India
* Corresponding Author edusathish@gmail.com
ORCID: 0000-0002-6036-7395

Abstract

More than traditional learning methodology, the present generation focuses on smart learning technology. We can use social media for many purposes but, communication and learning should be the primary purpose. Many open educational resources are already available in social media in different formats like audio, visual, Text, etc. This research aims to characterize the researcher's essential quality; how the use of open educational resources and the challenges faced through social/digital media have influenced their future research. The 350 research scholars from the state universities of Tamil Nadu have participated in this study, and they have been practice OER. The respondents said that they had a solution to their problems in everyday life on social media. Researchers have been promoting that social networking sites are better than causal websites for collecting resources. Researchers have pointed out that the quality of audio and video of open educational resources on the social network is better than websites. Practicing OER has little impact on my learning outcome. For this research, a quantitative survey method used, and SPSS software used for analysis. The results have been calculated and analyzed by frequency, percentage, and descriptive analysis tabulation. Experimental studies will be upcoming studies by establishing open educational practices in social media platforms.

Keywords: *Open Educational Resources; Open Educational Practices; Social Media; Information and Communications Technology; Challenges.*

Introduction

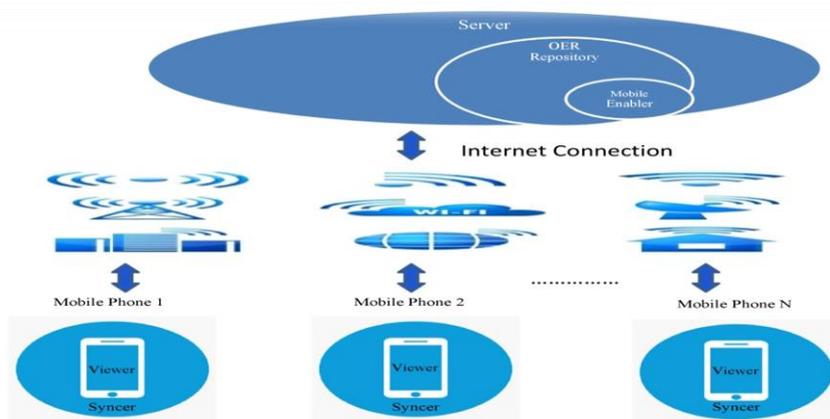
The term Open Educational Resources mainly (OER) offers freely available educational resources with copyright(Grimaldi et al., 2019; Hawkrige et al., 2010; Sabitha et al., 2016). OER contents based on Information and Communications Technology (ICT) (Chamani Gunasekera et al., 2020). OER has many advantages over a few disadvantages; overall, OER is useful in terms of usefulness. Recently, many educational institutions have begun to develop and utilize OER for students (Joshua Appiah et al.,2020). In recent times, OER became an open research problem in developing the education technology cum process (Mahmud et al.,2020). Due to the rapid spread of technology in the last few years, OER has achieved unprecedented growth (Rashid Ali et al.,2020). In the present time, OER is widely using in institutions for upgrading the era of pen-book to digital study for making the availability of education resources anywhere, anytime, any person (Devi, Rajita and Keshava,2020).

The word "Open Educational Resources (OER)" mainly defines the availability of instructional materials, tools, and media free from copyright restrictions or are free licensed for the educational process (M.Mahendraprabu et al., 2021; ANKITA SALOI, 2021). In OER, two things matter most: the availability of content and the issue of copyright in terms of its use. In the context

of education or knowledge, OER provides a platform to explore and exploit the freely available content cum material (P, GANESH et al.,2021). Five pillars of OER are Retain, Reuse, Revise, Remix and, Redistribute. UNESCO first use the term Open Educational Resources in 2002. They promote this concept worldwide for a social cause to make education free and useful to all the parts of social areas from low to rich. In this era, Education and Knowledge newly define through Information and communication technologies (ICT). After ICT came into the education domain scenario (N Mahalakshmi et al., 2020), it helps the learner and a teacher in their respective jobs (B, Kumara and Sampath Kumar, 2020). ICT mainly allows us to see the education domain from a different perspective apart from the orthodox cum traditional aspect of education. After UNESCO starts the OER movement, It is based on three fundamental tenets and is a federation of intuitions shared by a large number of academics: costless and Openness of knowledge as well as reuse of it; easier collaboration; contributors should gain their credit (Anna Kaushik, 2020). OER provides opportunities like bringing back the people into education, decreasing the cost of education materials, reducing the period of preparing educational materials for students, and globalization of education. OER makes the education domain powerful and empowers the World Wide Web (WWW). It is a powerful tool for web development. Through the World Wide Web, OER reaches every corner of the globe from town to the village, east to west (Isaac E. Anyira et al.,2020). For the development of OER in WWW, the Internet has become one of the essential needs (Burhansab et al., 2020).

Social media are playing an emerging role in the current scenario (Petros PN Dlamini et al.,2020). It helps to communicate the different peoples worldwide and get fun videos, news, educational resources, etc. It's promoting the distance mode/online mode of the teaching-learning process (Peris W. Kiilu et al.,2020). The learners get open educational resources through mobile phones, then Figure .1 shown how the users get resources on different devices (Ogedengbe et al., 2020). Social media platforms are motivating self-learning (Saheed Abiola Hamzat, Dumebi Otulugbu,2020).

Figure. 1 Server to User getting OERs



The phenomenal development of Information Technology and its impact has brought about significant changes in education. OERs stimulated lifelong learning and self-learning development (Kumar et al.,2020). Open education resources play a unique role in the educational development of learners. It is also available in free text, audio, and video formats to understand and further

emphasize education development (G, Stephen and U, Pramanathan,2020). Most of the learners use social networking sites to enhance their education and entertainment (Obed S.O. Dadzie et al., 2020). Open educational resources are available through social websites. It's available in a way that stimulates and motivates learners. The growth of social media over the internet enables the user to start. Pick the shared knowledge on a large number of distributed resources (Mohd Shoaib Ansari et al.,2020). The social media platform focuses on open textbook resources in different formats (audio, visual, text, etc.) and targets creating a portable teaching atmosphere (Dr.K.Ramasamy et al., 2020). The Innovative Advanced Education to Knowledge Acquisition, the electronic textbooks have been designed with an entirely different format that provides huge online classes with animations, graphics, audio recordings, and multimedia images (Abubakar et al., 2021). Innovations are essential towards learning as regards the transfer with a community of both scholarly including channel provides (JAYANT KUMAR SETHY et al., 2021; Mani Mookkiah et al., 2021). Social media are function as a collaborative educational tool through OERs (Bello et al.,2020).

Social media can be uses as an open educational practice tool for the teaching-learning process (Dr. Shakeel Ahmad Khan 2020). In the present time, the education system focuses on OER and OEP. The open educational resources are available in electronic material formats (Mishra et al.,2020). In the 21st century, learners like social media platforms for entertainment as well as for self-learning (Scholastica A.J. Chukwu et al., 2020). Electronic resources cum study materials are freely available in social media also (Akporhonor et al.,2020; Bomman et al.,2020; Tamizhchelvan et al.,2021). Social media are enriching the self-learning process(B, SHYLENDRA KUMAR et al.,2020). The social media learning platforms are showing in Figure. 2 (Facebook, Twitter, Instagram, YouTube, WhatsApp, Telegram, etc.).

Figure.2 Social Medias as an Open Educational Practice tool



Related Literature Review

Table 1. Related Literature Review

Author & Year	Aim/Objective	Methodology		Result/ Findings & Future Research
		Sample/ Respondent	Design/Tools	

(Lee & Sing, 2013)	This research work analyzes the effectiveness of utilizing social media network as part of the teaching-learning platform.	The School of Arts and Social Sciences at SIM University for adult learners.	Using Delphi Technique, two parts of the survey questionnaire were collected from last year adult learners.	They have found the usefulness of digital media as informal teaching-learning platforms for adult learners. The learners have more interest through informal learning. In future, we can analyze the effectiveness of utilizing social media network in all level learners
(Chen & Burns Gilchrist, 2013)	This study analyses the utilizing and producing the teaching-learning videos on YouTubeEDU. The aim of the YouTubeEDU project is to given international open access to higher educational teaching-learning videos.	YouTubeEDU shows the most-watched videos as a default. On the first day of every month, the top 50 most-viewed videos were selected from each of the thirteen disciplines.	All the selected videos are compared. Overall, 40% of the videos were academically-oriented; English is the major language for those videos. Even some videos provided by other language speaking higher education institutions.	Future collaboration with the YouTubeEDU project is necessary to collect comprehensive data regarding international viewer traffic and higher education video contributions. The analysis from a library science perspective is important to further development of YouTubeEDU.
(SumiH Onori et al., 2015)	To find the Learner Autonomy through the Adoption of OERs Utilizing Social media Services and Multi-media E-books.	The study included 1,279 respondents from 71 nations, including the United States, Mexico, Colombia, Malaysia, Australia, Thailand and Vietnam. Class1: 440 respondents, and Class2: 839 respondents.	E-book enables online assessments and learning analytics. Using indirect assessment tools, such as grade books and tracking past results, or test scores.	The future study, it does not yet allow learners to share their learning experiences with others. Many people asked questions about how to view the e-books or complained about the posts on the Face book group pages. This statement indicates that Google Play and

				iTunes are not open access in some nations or places and that not all learners are familiar with utilizing e-books.
(Hempe l et al., 2016)	We wanted to evaluate the utility of the e-learning approach defined as a pre-course and a post-course e-learning activity using Facebook.	A total of 62 medical students were recruited for this study and random sampling technique assigned to one of the four groups.	All groups received identical hands-on training and achieved several tests during the study period. The hands-on training was performed in groups of five students per instructor with the students scanning each other. Group 1 had access to pre-course e-learning, but not to post-course e-learning. Instead of pre-course e-learning, group 2 listened to presentations at the classroom teaching and had access to the post-course learning activity using Facebook.	After 6 weeks, group 3 achieved comparable results when compared to group 2 (82.2 % + -8.2 vs. 84.3 + -8.02) (p = 0.3). Students who participated in the post-course activity were more satisfied with the overall course than students without post-course learning.
(Bicen, 2017)	This study aims to determine how often the learners how the utilize of MOOCs program via social media cause a positive effect for future learners.	The 248 MOOC learners who participated in this study.	The questionnaire used in the study was consists of 15 positive expressions related to the use of MOOC with social media. Cronbach's alpha number of the questionnaire. Which was prepared according to 5 point Likert scale type? The research is quantitative and the data analysis was done by SPSS program. The data were analysed and	According to the findings of the study; the participants mentioned that they could find solutions for many difficulties they faced in their real life and also in videos, visual and written materials uploaded on social media. In future studies; experimental studies will be held by creating a MOOCs page/group on

			interpreted through tabulating the frequency, percentage and descriptive analyses.	social media.
(Smith, 2017)	This research aims to the core categories and characteristics of the social media technologies that undergraduate students choose to use in their learning, outside of the formal curriculum.	Survey responses from (N= 679) undergraduates' learners	A mixed-method research methodology, this inquiry employed 30 semi-structured interviews and an online survey to explore why and how undergraduates across disciplines view social media technologies (SMTs) to be a meaningful part of their university learning.	While no differences were found for general social media use, there is a significant relationship between particular ways of making meaning and use of specific SMTs, indicating the importance of learning context and social media affordances.
(Purvis et al., 2020)	The research focuses on the use of social media in learning and teaching. Experiences, perceptions, influence the use of social media, implications for Higher Education, academic practice and the support of the development of digital competencies.	A qualitative study was conducted by staff members at a UK post. In 92 University.	A qualitative study conducted at a large UK post-92 university. Two focus groups were used for this research to allow structured conversation and debate that would elicit natural and detailed responses to a set of key open questions.	A strong influence on the use of social media for learning is the personal use of social media. Hurdles to an individual staff member's use of social media are difficult to overcome solely by understanding the potential advantages of using social media with learners. In the new current context of COVID-19 and the rapid acceleration of the necessity of the use of digital technology in learning and teaching, there are likely to be further changes in perceptions and uses of social media

				for learning in higher education.
(Anksor us & Bradley , 2020)	Intentional learning activities utilizing social media platforms were developed to enhance learner's growth in self-efficacy of empathy and to assess how the incorporation of social media impacts pharmacy students' empathy and self-efficacy through self-reflection.	Data were analysed for 138 learners in the fall semester of study first year and 111 students in the fall semester of study second year.	The questionnaire used in the study was developed by the researcher and consists of learners in the fall semester of 1 st year and 2 nd year.	Although challenging to develop and assess empathy, social media can be an avenue for empathy skill development. This approach can easily be adapted by other schools of pharmacy and health professional programs to further develop self-efficacy regarding empathy.
(Ige, 2020)	This research examines the ethical issues in social media usage among secondary school learners in a developing context.	In this research 130 school children that participated.	The questionnaire allowed the participants to write their responses to the interview questions freely. Mixed methods such as constant comparative techniques and descriptive statistical methods were used to analyses data.	The results indicated that Facebook is the most operated social networking website by the selected school learners.
(Kim, 2020)	A study based on gamification Mobile social learning platform Challenge, Relationship, and Usability.	In this research 293, south Korea users have participated.	A survey result of 293 users from South Korea was used for the advanced mediation model analysis.	The result showed that Challenge, Relationship, and Usability had affected Flow and Continuous usage intention. This paper argues that the user's usage intention will have a positive effect on self-learning.
(Lai & Tai, 2021)	This research analysis of how different social media activities impacted language learning motivation	Survey responses from 565 secondary school Asian learners at south and southeast in	They conducted an online survey study.	The findings confirm the value of both types of social media activities and suggest capitalizing on the motivational

	through analysing.	Hong Kong.		impact of everyday social media activities for language learning.
(Arulogun et al., 2020)	This study aims to assess their readiness to accept and use alternative social media platforms and emerging technologies for online facilitation.	Survey responses from 900 Open and Distance Learning students of LAUTECH	The data article also includes a questionnaire instrument administered via Google form, 900 responses received in spreadsheet formats, chats generated from the responses, the SPSS file, the descriptive and reliability statistics for all the variables.	Authors believe that the dataset will guide policymakers on the choice of social media and emerging technologies to be adopted as a facilitation tool for ODL students. It will also reveal the challenges that could militate against the willingness to use these supplementary modes of learning from learners' perspectives.
(Shang & Sun, 2020)	This study aims to explain why people use enterprise social media.	We conducted a pre-test with part-time MBA students. Approximately 2,100 invitations were sent; 519 complete responses were received during ten days.	We conducted an online survey to test our hypotheses. Exploration and exploitation were measured using items that questioned the subjects regarding the extents of exploratory and exploitative activities in their current work. The psychometric properties of the variables were assessed using exploratory factor analysis.	The results partially confirm our fit model and demonstrate the importance of the social environment in determining enterprise social media usage.
(Araka et al., 2020)	This study aims at how to support learners grow their self-regulated learning skills on both face-to-face and e-learning	After reviewing the abstracts of the 158 papers, we identified 42 papers and finally selected 30 studies that	However, there is a little systematic review on the literature on the techniques and tools used to measure SRL on e-learning	The findings from this study are concurrent with existing empirical evidence that traditional methods designed for

	environments.	were reviewed.	Platforms.	classroom supports are being used for measuring SRL on e-learning environments. Few studies have used learner analytics and educational data mining (EDM) techniques to measure and promote SRL strategies for learners. This review sought to outline recent advances and the trends in this area to make it more efficient for researchers to establish empirical studies and research patterns among different studies in the field of SRL.
(Alobaid, 2020)	This research analysed the potential role and impact smart of the learning environment of ICT tools like YouTube on learners' fluency of language use and expression.	Survey responses from 14 co-education learners were randomly selected.	The data analysis included both quantitative and qualitative methods. This research is a longitudinal study investigated patterns within time-series data. The performance of a single group of participants was measured both before and after the experimental treatment.	YouTube can be more effective and thus strongly recommended equally for language learners and teachers where optimization of writing fluency is the target of learning. This paper is a work-in-progress that investigates the role and impact of the smart learning environment of ICT multi-media on English language learners' fluency and accuracy of use and expression in

				speaking and writing.
(Shaheen et al., 2020)	This study aimed to ascertain physical therapy students' attitudes towards using social media for learning purposes, assess the differences in attitudes between genders, and assess the benefits of using social media in the learning process.	In this descriptive cross-sectional study, data were collected from 158 undergraduate PT students at King Saud University (KSU) in Riyadh using a custom self-reported questionnaire.	In this descriptive cross-sectional study, 158 undergraduate PT students were recruited randomly from the PT program, Department of Rehabilitation Health Sciences, College of Applied Medical Sciences (CAMS), King Saud University (KSU), Riyadh, and SA from March to August 2019. Out of 260 students enrolled in the bachelor degree of PT program at both male and female campus, 158 students were recruited using stratified random sampling method based on to their academic level.	Results indicate that, in general, PT students have positive attitudes towards using social media platforms for learning purposes. YouTube, Wikis, WhatsApp and Twitter have been utilized for learning purposes by 82.9%, 44.3%, 30.4%, and 27.4% of the students, respectively. Furthermore, students favourably reported that social media platforms are better than traditional teaching methods. These platforms facilitate finding educational resources, develop writing, listening and social skills, share knowledge, enhance self-independent learning, increase collaborations, and develop creativity.
(Shaheen et al., 2020)	This study analysis the application and usefulness of social media and mobile devices in transferring the resources and interaction with academicians in higher education institutions.	This empirical study is based on a survey of 360 learners of a university in eastern India.	Data were collected both offline and online survey administered to learners. The proposed model of the study was measured and evaluated using variance-based structured equation model a latent multi	The study revealed that online social media used for collaborative learning had a significant impact on interactivity with peers, teachers and online knowledge sharing behaviors.

			variance technique which provides the concurrent estimation of structural and measurement model that does not meet parametric assumption.	
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According to this related literature reviews, the researcher finds the current research gap is open educational practices then particularly open educational practices for research scholars is a minimum number of articles only available. The related literature review can be seen in Table 1. Then the researcher chooses the current research gap is “Clustering the Effect of Social Media as an Open Educational Practice Tools & Challenges”.

Methodology

This analysis would how often the research scholars gain from their social media accounts for self-learning and also to determine how the practices and challenges of OER program via social media cause a positive effect for the future research. The target group was a research scholar in state universities of Tamil Nadu. State universities of Tamil Nadu research scholar were selected as the random sampling technique. UGC (university grant commission) was categorised certain universities are under the state universities of Tamil Nadu in India. Presently, 22 universities are listed under the state universities of Tamil Nadu in India. In, the state universities of Tamil Nadu approximately 12,000 research scholars in the present academic year. As used random sampling technique and choose a total of 350 research scholars were randomly selected from the state universities of Tamil Nadu to complete a survey between September 15 and October 15, 2020.

In this survey study was contacted in a three-part of the questionnaire was framed. The respondents are responded that OER in this survey study focused on the state universities of Tamilnadu research scholars. Part one of the survey study questionnaire has nine items with statistical data collected about the characteristics of the population (demographic data). This part can analyze the practices of OER in the state universities of Tamilnadu with the following statements: OER practicing experience, channels to get to know OER, the purpose of OER practice, frequency of OER practice and frequently practiced OER content. Part two of the survey study questionnaire used in the study was developed by the researcher and consists of 15 positive expressions related to the use of open educational resources with social media. The Cronbach’s alpha number of the questionnaire was prepared according to 5 points Likert scale type(1 means “strongly disagree” 2 means “disagree” 3 means “neutral” 4 mean “agree” while 5 means “strongly agree”). It has been found as 0.849. Part three of the survey study questionnaire has a classified four factors and 17 items for arising challenges to practice OER from the State Universities of Tamil Nadu research scholars, India. Rogers’ (2003) model of the innovation-decision process was adopted for this study so that framed the questionnaire with help of this model. This part can analyze the challenges of OER in the state universities of Tamilnadu research scholars with the following statements: Research scholar-related factor, Content-related factor, Interface-related factor and Environment-related factor then each statement have four statements related to the challenges. A 5-point Likert scale (1 = strongly disagree; 5 = strongly agree) was utilized (see appendix for the survey items). To finalize the content and validity of this questionnaire with help of the expert associate professor and professors of my field. A pilot study was conducted with 40 randomly selected research scholars from the Alagappa University, social science departments at

the Tamilnadu, India. Finally, I can make the quality questionnaire with the help of the expert suggestion and revision.

The 350 research scholars participated in this study who takes Education, History, Management, Physics, Chemistry and Mathematics departments through distant learning method on the Model system of the State Universities of Tamil Nadu. This study was held in 2019 – 2020 pandemic situation of COVID-19. This study was contacted through an online mode through online questionnaire make in Google forms. The questionnaire was prepared with three parts. First part is research scholars’ personal information and utilization of social media. The second part is the opinions related to the social media/applications as open educational practices tool. The third part is Research scholar’ perception related to the social media challenges in OER practices. According to 5-point Likert scale type(1 means “strongly disagree” 2 means “disagree” 3 means “neutral” 4 mean “agree” while 5 means “strongly agree”). The questionnaire was distributed via Gmail, WhatsApp group and text messages with link of the survey questionnaire.

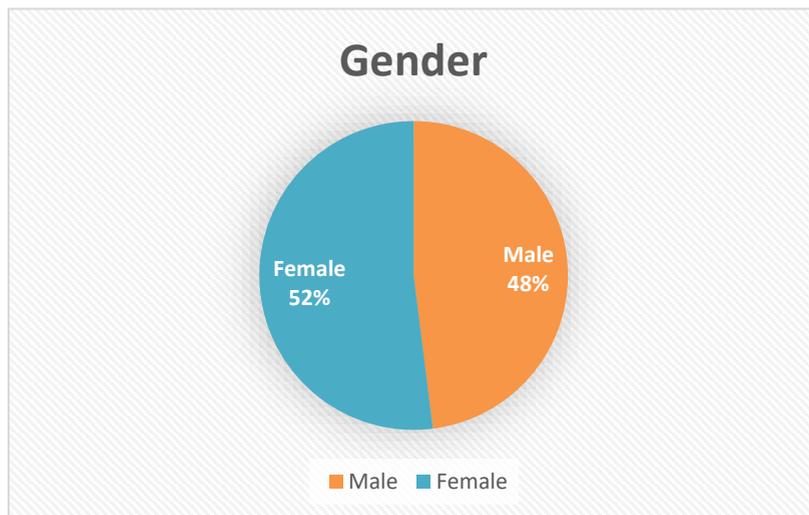
Results and Discussion

The collected online research data were analyzed by IBM SPSS Statistics Version 26 program and they were tabulated and interpreted as frequency, percentage and average. There are only 350 respondents who filled the questionnaire: 52% female and 48% male.

i. Gender

The gender distribution of research scholars can be seen on Figure 3. As it can be seen, 48% (f=168) of the state universities of Tamilnadu research scholars are male while 52% (f=182) of them are female.

Figure 3. Gender Distribution



ii. Age

The age distribution of research scholars can be seen in Table 2. As can be seen; 14% (f=48) of state universities of Tamilnadu research scholars are Below 25 years old, 32% (f=112) of them are 25 to 30 years old, 34% (f=120) of them are 30 to 35 years old and 20% (f=70) of them are Above 35 years old.

Table 2. Age Distribution

Age	f	%
Below 25	48	14

25-30	112	32
30-35	120	34
Above	70	20
35		
Total	350	100

iii. Departments

The department's distribution of state universities of Tamilnadu research scholars can be seen in Table 3. As can be seen; 18% (f=63) of research scholars from Department of Education, 18% (f=63) of them from Department of Mathematics, 16% (f=56) of them from Department of Management, 16% (f=56) of them from Department of History, 16% (f=56) of them from Department of Physics and 16% (f=56) from Department of Chemistry.

Table 3. Department Distribution

Departments	F	%
Department of Education	63	18
Department of Mathematics	63	18
Department of Management	56	16
Department of History	56	16
Department of Physics	56	16
Department of Chemistry	56	16
Total	350	100

iv. Social Media Used hours/day

The social media used hours/day distribution of state university of Tamilnadu research scholars can be seen in Table 4. As can be seen; 5% (f=17) of research scholars are used social media less than 1 hour, 8% (f=29) of them used social media 1-2 hour daily, 20% (f=71) of them are used social media 2-3 hours daily, 27% (f=94) of them are used social media 3-4 hours daily and 40% (139) research scholars are used social media more than 4 hours daily.

Table 4. Social Media Used Distribution

Hours	F	%
Less Than 1 Hour	17	5
1-2 Hour	29	8
2-3 Hours	71	20
3-4 Hours	94	27
More Than 4	139	40
Total	350	100

v. Smartphone Used hours/day

The smartphone used hours/day distribution of state university of Tamilnadu research scholars can be seen in Table 5. As can be seen; 1% (f=4) of research scholars are used smartphone less than 1 hour, 5% (f=18) of them used smartphone 1-2 hour daily, 15% (f=52) of them are used smartphone 2-3 hours daily, 38% (f=134) of them are used smartphone 3-4 hours daily and 41% (f=142) research scholars are used smartphone more than 4 hours daily.

Table 5. Smartphone Used Distribution

Hours	F	%
Less Than 1 Hour	4	1

1-2 Hour	18	5
2-3 Hours	52	15
3-4 Hours	134	38
More Than 4 Hours	142	41
Total	350	100

vi. Preferred Social Media Application

Preferred social media application of state universities of Tamilnadu research scholars can be seen in Table 6. As can be seen; 98% (f=342) of research scholars are preferred Face book, 95% (f=334) of research scholars are preferred YouTube, 77% (f=271) of research scholars are preferred Instagram, 72% (f=253) of research scholars are preferred Twitter, 56% (f=197) of research scholars are preferred LinkedIn, 100% (f=350) of research scholars are preferred WhatsApp and 32% (f=113) of research scholars are preferred Telegram.

Table 6. Preferred Social Media Application Distribution (Multiple Choice)

Social Media Application	F	%
Facebook	342	98
YouTube	334	95
Instagram	271	77
Twitter	253	72
LinkedIn	197	56
WhatsApp	350	100
Telegram	113	32

vii. Channel to get to know OER

Channel to get to know OER of state universities of Tamilnadu research scholars can be seen in Table 7. As can be seen; 49% (f=172) of research scholars are get to know OER through other research scholars, 14% (f=48) of research scholars are getting to know OER through faculty members, 7% (f=26) of research scholars are get to know OER through University or scholars Affairs, 69% (f=242) of research scholars are getting to know OER through a search engine, 98% (f=342) of research scholars are get to know OER through social media platforms and 5% (f=16) of research scholars are getting to know OER through other channels.

Table 7. Channel to get to know OER Distribution(Multiple Choice)

Channel to get to know OER through social media	F	%
Other Research Scholars	172	49
Faculty members	48	14
University or scholars Affairs	26	7
Search engine	242	69
Social Media Platforms	342	98

viii. Purpose of practicing OER through social media

Purpose of practicing OER through social media of state university of Tamilnadu research scholars can be seen in Table 8. As can be seen; 67% (f=234) of research scholars are the purpose of practicing OER to assist self-learning, 47% (f=166) of research scholars are the purpose of practicing OER to get to know content in areas outside one's major, 35% (f=124) of research scholars are the purpose of practicing OER to view worldwide prestigious scholars' presentation, 34% (f=118) of research scholars are the purpose of practicing OER to view worldwide prestigious scholars' presentation and 5% (f=18) of research scholars are the purpose of practicing OER to other purposes.

Table 8. Purpose of practicing OER through social media (Multiple Choice)

Purpose of practicing OER	F	%
To assist self-learning	234	67
To get to know the content in areas outside one's major	166	47
To view worldwide prestigious scholars' presentation	124	35
To view Indian prestigious scholars' presentation	118	34
Other purposes	18	5

ix. Most regularly practiced resource through social media

Most regularly practiced resources through social media of state university of Tamilnadu research scholars can be seen in Table 9. As can be seen; 100% (f=350) of research scholars are most regularly practiced resources in Text, 50% (f=176) of research scholars are most regularly practiced resources in Audio, 100% (f=350) of research scholars are most regularly practiced resources in Video, 86% (f=303) of research scholars are most regularly practiced resources in Online chatting and discussions and 21% (f=74) of research scholars are most regularly practiced resources in other resources.

Table 9. Most regularly practiced resource through social media (Multiple Choice)

Most regularly practiced	F	%
Text	350	100
Audio	176	50
Video	350	100
Online chatting and discussions	302	86
Others	74	21

x. Opinions Related to the utilization of Social Media as a MOOC Tool

In this section, the average values of opinions about how the open educational practices create a positive effect on social media to offer an insight to the future studies, and how frequently the individuals gaining from their social media will account for their self-learning. There are average and standard deviation results of the use of social media as an open educational practices tool in this section.

Table 10. The opinions related to the social media/applications as open educational practices tool

S.No	Items	Mean	SD
1	I follow the open educational resource groups/pages on social media for my self-learning.	4.43	0.87
2	is very simple to follow the open educational resource groups/pages on social media.	4.56	0.47
3	Accessing open educational videos for my day to day life through digital media is effective.	4.46	0.74
4	The Data on social media platforms info graphics is much more stable.	4.49	0.74
5	I learn the open sources of text format that I'm interested in accessing on social media platforms.	4.29	0.87
6	I would like to suggest social media posts.	4.55	0.62
7	I recommend gathering information from pages/group/posts on my Social Media Platform instead of just being a part of pages about Online learning courses.	4.48	0.74
8	It is good at finding remedies to the challenges I face in my regular life on social media platforms.	4.37	0.62
9	I'd like to engage via social media in certificate courses.	4.53	0.85
10	I use different types of devices (mobile phone, computer, laptop, etc.) to connect my social media accounts.	4.38	1.05
11	The social media perform like a tool for gathering and sharing personal data.	4.10	1.01
12	The duration of the video content I view on social media is essential.	4.50	0.68
13	The performance of a clip I watch on social media is permanent and effective.	4.39	0.84
14	I developed my ability to comment with help of social media.	4.33	0.73
15	I would like to access open educational resources through social media.	4.51	0.74

As can be seen in Table 10; the research scholars answered all the expressions as “completely agree”. With regards to this the research scholars have indicated that, they follow the educational

groups/pages on social media for their self-learning (M=4.43, SD=0.87), It is very simple to follow the open educational resource groups/pages on social media (M=4.56, SD=0.47), Accessing open educational videos for their day to day life through digital media is effective (M=4.46, SD=0.74), The Data on social media platforms info graphics is much more stable for them (M=4.49, SD=0.74), They learn the open sources of text format then interested in accessing on social media platforms (M=4.29, SD=0.87), They like to a give suggestion for the social media posts (M=4.55,SD=0.62), They recommend gathering information from pages/group/posts on my Social Media Platform instead of just being a part of pages about Online learning courses (M=4.48, SD=0.74), It is good at finding remedies to the challenges they face in their regular life on social media platforms (M=4.37, SD=0.62), They I'd like to engage via social media in certification courses (M=4.53, SD=0.85), They use different types of devices (mobile phone, computer, laptop and etc..) for connect my social media accounts (M=4.38, SD=1.05), The social media perform like a tool for gathering and sharing personal data for them (M=4.10, SD=1.01), The duration of the video content they view on social media is essential (M=4.50 , SD= 0.68), The performance of a clip they watch on social media is permanent and effective (M=4.39, SD=0.84), They developed their ability of commenting with help of the social media (M=4.33, SD=0.73), They like to access the open educational resources through social media (M=4.51,SD=0.74).

xi. Opinions related challenges to open educational practices tool

In this section, the average values of opinions about how open educational practices create challenges on social media to offer insight into future studies. There are average and standard deviation results of the challenges to open educational practices tool in this section.

Table 11. The opinions related to the challenges to open educational practices tool

S.No	Items	Mean	SD
1	I do not have enough time to practice OER.	4.31	0.85
2	I don't have an interest in practicing the online method.	4.45	0.57
3	I am not practiced to learning online.	4.58	0.49
4	Practicing OER has little impact on my learning outcome.	4.48	0.76
5	OER covers particular subjects and departments.	4.51	0.76
6	OER repository has bounded materials that I am interested in.	4.21	0.39
7	Contents of OER repository are not standard quality.	4.27	0.34
8	OER repository is not revised regularly.	4.20	0.36
9	OER repository is not easily operated and time-consuming.	4.19	0.34
10	It is a time-consuming process to download (audio, video, pdf files, word files, etc..) OER resources.	4.35	0.57
11	It is complicated to access Websites of OER.	4.38	1.05
12	There is no suitable platform for two-way communication on the websites of OER.	4.13	1.02
13	No staff members introduced OER to me.	4.22	0.30
14	No staff members encouraged me to use OER.	4.21	0.56
15	There is no OER-related announcement on my university website.	4.35	0.45
16	There are no OER-related sources accessible on our university website.	4.33	0.46

As can be seen in Table 11; the research scholars answered all the expressions as

“completely agree”. With regards to this the research scholars have indicated that, they don't have a enough time to practices OER (M=4.31, SD=0.85), they don't have an interest to practicing the online method (M=4.45, SD=0.57), they are not practiced to learning online (M=4.58, SD=0.49), Practicing OER has little impact on their learning outcome (M=4.48, SD=0.76), they said that, OER covers particular subjects and departments (M=4.51, SD=0.76), OER repository has bounded materials so that they are interested (M=4.21, SD=0.39), they said that, Contents of OER repository are not standard quality (M=4.27, SD=0.34), they said that, OER repository is not revised regularly (M=4.20, SD=0.36), they said that, OER repository is not easily operated and time-consuming (M=4.19, SD=0.34), they said that, it is a time-consuming process to download (audio, video, PDF files, word files, etc..) OER resources (M=4.35, SD=0.57), they said that, It is complicated to access Websites of OER (M=4.38, SD=1.05), they said that, There is no suitable platform for two-way communication on the websites of OER (M=4.13, SD=1.02), No staff members introduced OER to them (M=4.22, SD=0.30), No staff members encouraged them to use OER (M=4.21, SD=0.56), There is no OER-related announcement on their university website (M=4.35, SD=0.45), There are no OER-related sources accessible on their university website (M=4.33, SD=0.46).

Conclusion and Future Studies

The overall study finds the result that the university is a necessary part for research scholars getting research ideas from open educational resources with free of cost. Most of the research scholars are very much interest to use open educational resources. An open educational resource is the major part of the researcher getting knowledge but it is not a traditional and formal method in India. After COVID-19 pandemic situations, peoples realize the importance of open educational resources. The universities are concentrating to introduce open educational programs in their university official website home page itself. The developed countries are already using open educational resources in effectively. Now, the developing countries also introduce open educational resources but they are struggling to get enough infrastructures and network facility.

According to the findings of the study; the participants find the solution for the challenges they faced in their different resources uploading in the social media. Most of the learners practised OER for self-learning. They put suggestions and comments for the open educational posts. They have interested to do the certificate courses. They use a mobile phone, computer, laptop, etc., for getting OER through social media. The learners practised the resources depending on the quality and duration of the video. The learner said that open educational practices are easily accessible. OER repository has bounded materials and Contents of OER repository are not standard quality. In the future studies; the experimental studies will be held by developing an OER on social media.

The state universities of Tamilnadu research scholars are mostly utilized more than three hours to practice OER through social media. They are like to utilize smartphones for more than three hours. Maximum of the state universities of Tamilnadu research scholars are have an account

like Facebook, YouTube, Instagram, Twitter, WhatsApp, Telegram, etc. In particular, all the state universities of Tamilnadu research scholars have a WhatsApp account for OER practices and then mostly practised through Facebook and YouTube(Dr Sivasubramanian G et al., 2020). Then they get OER resources through the search engine, social media platforms and other research scholar suggestions. To assist the self-learning is the major purpose of practising OER. All the research scholars are regularly practised text and video type of resources.

Over the past few years, OER has grown exponentially to meet its needs. This development in educational technology is an essential need of the twenty-first century. In the improvement of education quality, OER brings to make the education digitalized with the help of modern-day technology. In the present time, OER widely used in institutions for upgrading the era of pen-book era to digital study era in the context of making the availability of education cum resources anytime, anywhere, to any person. Education should be free and OER mainly supports as well as promote that thought. OER is helping to adopt for study in all situations. Open educational resources (OER) and open educational practices (OEP) are a sustainable and easy education system in the future. These free and easily available open education resources give students confidence and freedom of learning.

Abbreviations

- OER: Open Educational Resources
- OEP: Open Educational Practices
- ICT: Information and Communications Technology
- MOOCs: Massive Open Online Courses
- WWW: World Wide Web

Appendix: Survey instrument

Part one: research scholars' personal information and utilization of social media

- 1) Your Gender
 - A. Male
 - B. Female

- 2) Your Age
 - A. Below 25
 - B. 25-30
 - C. 30-35
 - D. Above 35

- 3) Your Department
 - A. Department of Education
 - B. Department of Mathematics
 - C. Department of Management

- D. Department of History
 - E. Department of Physics
 - F. Department of Chemistry
- 4) Social Media Using
- A. Less than 1 Hour
 - B. 1-2 Hour
 - C. 2-3 Hour
 - D. 3-4 Hour
 - E. Above 4 Hours
- 5) Smart Phone Using
- A. Less than 1 Hour
 - B. 1-2 Hour
 - C. 2-3 Hour
 - D. 3-4 Hour
 - E. Above 4 Hours
- 6) Social Media Platform (Multiple Choice)
- A. FaceBook
 - B. YouTube
 - C. Instagram
 - D. Twitter
 - E. LinkedIn
 - F. WhatsApp
 - G. Telegram
- 7) Channel to get to know OER(Multiple Choice)
- A. Other Research Scholars
 - B. Faculty members
 - C. University or scholars Affairs
 - D. Search engine
 - E. Other channels
- 8) Purpose of practicing OER(Multiple Choice)
- A. To assist self-learning
 - B. To get to know content in areas outside one's major
 - C. To view worldwide prestigious scholars' presentation
 - D. To view Indian prestigious scholars' presentation
 - E. Other purposes
- 9) Most regularly practiced(Multiple Choice)
- A. Video
 - B. Syllabus
 - C. Online chatting and discussions
 - D. Text
 - E. Other

Part Two: Research scholar' perception related to the social media as Open Educational Practices tool status

Scales: 5-point Likert scales: 1=Strongly Disagree; 2= Disagree; 3=Neutral; 4= Agree; 5=Strongly Agree

Statements

1. I follow the open educational resource groups/pages on social media for my self-learning.
 2. It is very simple to follow the open educational resource groups/pages on social media.
 3. Accessing open educational videos for my day to day life through digital media is effective.
 4. The Data on social media platforms info graphics is much more stable.
 5. I learn the open sources of text format that I'm interested in accessing on social media platforms.
 6. I would like to give suggestion for the social media posts.
 7. I recommend gathering information from pages/group/posts on my Social Media Platform instead of just being a part of pages about Online learning courses.
 8. It is good at finding remedies to the challenges I face in my regular life on social media platforms.
 9. I'd like to engage via social media in certificate courses.
 10. I use different types of devices (mobile phone, computer, laptop and etc.) for connect my social media accounts.
 11. The social media perform like a tool for gathering and sharing personal data.
 12. The duration of the video content I view on social media is essential.
 13. The performance of a clip I watch on social media is permanent and effective.
 14. I developed my ability of commenting with help of the social media.
 15. I would like to access the open educational resources through social media.
-

Part Three: Research scholar' perception related challenges to OERs practices

Scales: 5-point Likert scales: 1= Strongly Disagree; 2= Disagree; 3=Neutral; 4= Agree; 5=Strongly Agree

Statements

Research scholar-related factor

1. I do not have an enough time to practice OER.
2. I do not like to learn practicing the online method.
3. I am not practiced to learning online.
4. Practicing OER has little impact on my learning outcome.

Material-related factor

1. OER covers particular subjects and departments.
2. OER repository has bounded materials that I am interested in.
3. Contents of OER repository are not standard quality.
4. OER repository is not revised regularly.

Communication-related factor

1. OER repository is not easily operated and time-consuming.
2. It is a time-consuming process to download (audio, video, pdf files, word files, etc.) OER resources.
3. It is complicated to access Websites of OER.
4. There is no suitable platform for two-way communication on the websites of OER.

Learning setting-related factor

1. No staff members introduced OER to me.
 2. No staff members encouraged me to use OER.
 3. There is no OER-related announcement on my university website.
 4. There are no OER-related sources accessible on our university website.
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