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AN ANALYTICAL APPROACH OF THE USAGE OF OPEN EDUCATIONAL RESOURCES (OER) BY THE TEACHERS AT BUSINESS AND HEALTH SCIENCE SCHOOLS: A CASE STUDY FROM THE UNIVERSITIES OF LAHORE DISTRICT

Maryam Sarfraz

Assistant Professor, Department of Management, University of Management and Technology Lahore, Pakistan <u>maryamsarfraz@umt.edu.pk</u>

Darakhshan Muslim

Lecturer, Department of Education, Virtual University of Pakistan <u>darakhshan.zahid@vu.edu.pk</u>

Sadia Kausar

Instructor, Department of Management Sciences, Virtual university of Pakistan sadia.kausar@vu.edu.pk

ABSTRACT

The goal of this study is to determine and compare the degree of OER usage, the influences on OER use, and the opinions of OER use by business school and health science school teachers at leading universities in Pakistan. Two business schools and two schools of health sciences from various institutions were included in our study. Using the questionnaire approach, information is gathered from a sample of 80 respondents from two prestigious institutions. The findings of the data show that teachers at business schools utilize digital and OER resources more frequently than those in health science institutions and possess advanced technical abilities. The teachers of business school also show more positive perceptions about the use of different OER with the lectures as supporting material than the health science schools.

Keywords: Questionnaire, OER (Open Educational Resources), adherence, perception.

INTRODUCTION

The term Open Educational Resources first came in to use in the early decade of 2000, to be exact in 2002 at the conference which was promulgated and hosted by the UNESCO participants and this term defined as "The open Provision of Educational resources, enabled by information and communication technologies, for consultation, use and adaptation by a community of users for non-commercial purposes". Open Educational Resources are the study material which is not restricted to any institution; rather it is available on the internet.

There are ample of factors which keep in view in order making reliable pedagogy,

- Costing price of the study material is not so high
- Essay assessable to students
- Additional of personalized trends can be entered (for example case studies)
- Contextualizing the content won't impact the pedagogy

The same extrinsic goal can be obtained from the conventional educational system, it is evident that same goals are obtained from the open resource system are much easier and attainable. Though in OER system, educator can alter the content in to more relatable and relevant for the students. At the same extend, educator can evolve through the latest global trends and equipped themselves from the problems and challenges and to give solution to students. The major catastrophic even like Covid-19 pandemic, gives the shelter to the educators who are innovative by nature and used to OER system in their methodology. The innovative educators all over the world already made their efforts to engage the student which were not possible with the traditional educational system. Publishing the circular which affects and adds the dynamics of new century helps the student at large.

Before covid, things were little different about the educational system. Learning materials are often published with copyrights and using them needs either payment or consent from the copyright holder. The purpose behind this practice is to give proper acknowledgement to the writer and pen holder.

Openly licensed learning materials (OER) are those that have been made available online under a Creative Commons (CC) license, allowing others to use, reuse, remix, and redistribute (the 5Rs) them (Wiley and Hilton, 2018). Even Khan Academy material is available on internet as the realm of this license and that website does not make for commercial purpose. OER also contains content in the public domain, which is composed of works no longer protected by copyright or works whose authors have donated them to the public domain and given up their rights to exclusivity (William and Flora Hewlett Foundation, 2013). Though it is dire need to time to spend some time in the innovation of the new system. According to Wiley and Hilton (2018), each CC license stipulates that users must show attribution to the original work to fully utilize the resources. The daunting thing for students to attain the expensive books and courses but this system not only introduced easement to them rather, give them leverage to utilize their innovation into the next level.

There is a study conducted in the City University of New York system in New York City, in that study the writers introduced new avenues related to the education among students, also tried to elaborate some disparities and absurdities among the students. 53% of students at the community college, living in the state of poverty and they cannot afford books and essential learning materials. The same study results has been obtained from 37% of students in the senior college living in poverty(City University of New York, 2018), though this studies reveals the heart shaking facts relating to the students' lives, for example 48% of students were food insecure rather 55% were housing insecure. So, it would be daunting for them to secure the good modes of the education. Hence, it is evident that an open educational resource plays the pivotal role in the progression and development of young minds without taking large interest or money from the students. These resources are openly available for the people and without any distinguish any one can get benefitted from them.

There are ample of examples working as the development of OER System, among them. Khan Academy played an integral role in the past decade. Even before the covid, the mode of their teaching was quite interesting in contrast to the conventional educational system. All the materials and sources are available to the public at large. There is no doubt that teacher candidates' exposure to OER improved their learning experience and improved the accessibility and personalized nature of the learning materials used in the classroom. They were also encouraged to investigate, develop, update, and OER for Pakistani matriculation, such as open textbooks, lesson plans, lesson materials, and more. The future students who will be served by these teacher candidates may also benefit from the inclusion of OER in teacher preparation training in addition to the teacher candidates themselves. Understanding CC licenses, where to discover open teaching and learning resources within class, and how to use these resources effectively helps enhance equality by enhancing learning opportunities for their matriculation students.

Understanding the fact that sole purpose of educational system is to promote the knowledge and cherish the literacy's, innovations, research, cultural norms and antiquates of worldly scenarios and exploration of languages, with the referred pedagogy of OER system, things would be much easier. With this objective is reinforced across several ways by opportunities to remix and adjust OER content for students. To incorporate case studies and narratives that more closely portray the geographies, settings, and communities in which their students feel like "cultural insiders," teachers might modify and remix open educational resources (OER). In an attempt to help students, comprehend the significance of the content and build on their past knowledge, it is often helpful to replace traditional stories or historical events with more culturally relevant ones. The Teacher Education in Sub-Saharan Africa (TESSA) initiative offers examples of OER adaptations intended to accommodate regional systems and cultures (Wolfenden et al. 2012).

The common usage of open Educational Resources is not the daunting at all; rather it is simple because it is digitalized material, which is offered freely to the instructors, educators, students, self-learners. There are ample of things which are used in Open Educational Resources (OER), For example classroom activities, assignments, case studies, course modules, syllabi and many more other sources which are embedded in the digitalized form.

REVIEW OF LITERATURE

The Open Education Resources (OERs) is inevitable approach for the world at large. The usage of OERs is expanding every passing day, the free sharing of knowledge means that more people are involved in the process of problem-solving mechanism. The expanding usage of OER is tending to

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approach the faster and effective development in the educational sector. It is evident that developing countries had to face the ample of problems in education and OER approach gives the leverage to the people to gain the free access to the knowledge and ends the economic disparity among the marginalized community. This system won't effect on specific area or class, rather it impacts the whole system. (Geith & Vignare, 2008; Hatakka & Mozelius, 2009; Pagram & Pagram, 2006). The prior objective of this study will focus on resources which are open content of OER, but this study won't relay on the open software and tools.

According to Bissell, OERs are considered to have open access to everyone regardless of their status, educator, student and self-learners are to use this open medium. The accessibility to every medium makes it more valuable and it clearly enhanced the opportunities for the learning in formal and informal settings. It also gives the leverage of quality and flexibility of the courses.

According to the Bissell (2009), Digitalized material is offered freely to the public at large" Though the biggest contribution to OER has been developed and promulgated by the MOOCS that amalgamated almost 2200 courses for the educators and learners (Atkins et al., 2007). China is also playing the vital role in it through its direct access on the system via China Open Courseware and NPC (Dhanaranjan & Porter, 2013).

As per the Economic Survey of Pakistan 2002, the causes impact the literacy system of Pakistan are the defective and unchanged curriculum, dual mediums of instruction at school level, mal treated students, poor management, Lack of worldly and new knowledge among the instructors, overwhelmed syllabus, overcrowded classrooms, plagiarized work and cheating in the examination (Memon, 2007). It was also explained that mal hiring of incompetent teachers in Pakistan, and pivotal reason behind this act is lack of resources and lack of educational qualification among the primary level teachers. Usually, it has been witnessed that primary level instructor only attained the matriculation degree along with eleven-month certification program. There are more reasons Memon(2007) expressed about the defective education system, is appointment of educators through the teacher certification programs are usually fall under the vested agendas also the intervention of local groups in the appointment of educators plays an negative role in educational system of Pakistan at large.

In this hijacked environment, the open education resources can be beneficial for the educators, students and the teachers. OERs contains learning contents, tools and implementation resources like content modules, learning objects, publications, simulations, readings and journals (UNESCO, 2002). It is only possible through international collective effort made by world for the progression of the humanity (Bissell, 2009). The foremost lead of OER is to provide the knowledge to "marginalized, unconventional groups and disadvantaged students, resulting in to not only widen the perspective in educational context but also become the part of international educational community" (Harsasi, 2015). This would be the biggest benefit of the open education resources for the developing countries are to become the part of international community through the sharing knowledge. It will also impact the economic success not only for individuals but also for the entire world (McDowell, 2010).

Littlejohn et al. (2008) elaborates the responsibility of informational content into capacity of teaching and learning. The knowledge about the learning activity would be beneficial in general and apprehension that how it falls under the realm of the learning activity

- Digital assets- In general sense, it contains the single file system (for example, video, audio, or imagery). It is also known as" Raw Media Assets".
- Information Object- These are structural aggregation of digital assets. The sole purpose is to present and elaborate the information
- Learning objects- Such digital assets has educationally meaningful content
- Learning Activities- Specific activities or case studies to elaborate the cause of study material through involving the interaction among the students and educators.
- Learning Designs- Usually it presents the structural phenomenon of the related subject, to enhance the learning and knowledge.

It is quite injustice to compare the one learning material from another because the rationale behind every material is different and as accord with the specific audience in OER. Due to the ample of learning strategies and material, it is quite daunting to comprehend the impact of single specific OER study to other OERs.

As per the study maintained by Hilton and Laman (2012) the performance of 690 students who used the open resource educational system for attaining the knowledge with the 370 students, who used the conventional approach of studying with traditional textbooks. It was evident that students who used the open book resources not only scored better; but their withdrawal rate was much lower than rest of the students. Robinson, Fischer, Wiley and Hilton (2014) organized the same kind of study organized with 4183 specifications of students in the realm of the district of Utah and analyzed the rest of the students who used textbooks and traditional approach of learning. The result of this study was astonishing that conventional students attained lower grades, rather the students who widen their knowledge to use open resource education system. In the capacity of higher educational system, a study was done by the Bliss et al. (2013), the spectrum was that study involved the eight colleges and fifty-eight teachers and 490 students who shared their experience of using the OERs through filling the survey. In that survey students gave the reason of giving preference the OERs over conventional approach of teaching is to cost saving, also 55% teachers expressed that they are same as textbooks rather, 35% teachers felt that OERs were much better in quality.

It's critical to understand how OER affects student learning since adoption of OER resources would not be supported by lower costs if student learning results were to decline. Lovett et al. (2008) at Carnegie Mellon University analyzed the learning of pupils through taking an OER statistics course compared with those taking a regular conventional course. Students who volunteered to take part in the study were divided into control and experimental groups at random, and their final test results were compared. There was no difference in the students' scores between the two groups in the two semesters, according on their performance on three midterms and one final.

Bowen et al. (2014) compared the performance of pupils taught using a standard book in a face-to-face class to another group of learners taught with a blended learning methodology incorporating OERs in another study on the usage of OERs. There were 605 students in the blended learning technique and 2439 students in the face-to-face session. Students who employed a blended learning strategy using OERs performed somewhat better than students who were taught in a traditional fashion, but there was no statistically significant difference in their results. Due to the variance in textbooks, teaching methods, assessment procedures, and pedagogical approaches, the advantages of diverse forms of OER on students to develop nations may vary. In wealthier nations, where the majority of OER content is being created and where there are less infrastructural and technology limitations, students may encounter greater obstacles than students in underdeveloped nations. Studies on the students who are constantly studying in underdeveloped countries are required in order to make them accessible to those students as "education is alienable right rather than an esteemed privilege" (Larson and Murray, 2008). This will allow for the identification of hurdles and the development of methods to maximize implementation.

In this study, instructors from Pakistan's traditional (face-to-face orthodoxical approach of teaching) and e-learning matriculation systems are surveyed on their perspectives of using open educational resources (OER), the amount to which OER are used, and the variables that influence OER usage. After Covid 19, it became inevitable to frame the structure in institution which supports diversity along with Open Resource System. It was really daunting for the students to visit campuses and acquired the education. The ninth and tenth grades of Pakistan are covered in our analysis. Using the survey approach, data is taken from 100 respondents drawn at random from each school. The data's results demonstrate that instructors use digital and OER materials and have a high level of technological proficiency. Though it was quite new process in start but instructor's exhibits good skills in institutions. With lectures serving as a supplementary resource, the teachers also exhibit more constructive attitude on the usage of various OER.

This study is designed to find and compare the extent of use of Open Educational Resources (OER), the factors that affect the use of OER and perceptions about the use of OER by the business schoolteachers and health science schoolteachers of different Universities of Pakistan. For our study purpose we have included two business schools and two health sciences schoolteachers of different universities of Pakistan. The data is collected from a sample of 80 respondents from the two-leading university of Lahore using the questionnaire method.

This study aims to determine and compare the degree of Open Educational Resources (OER) usage, the influences on OER use, and the opinions of OER use by business school instructors and health science school instructors at several Pakistani universities.

Two business schools and two schools of health sciences from various institutions were included in our study. Using the questionnaire approach, information is gathered from a sample of 80 respondents from two prestigious institutions.

Research Objectives

- 1. To make the legitimate analysis of use of OER by the business schoolteachers compare with health science schoolteachers of different Universities of Pakistan.
- 2. To evaluate the key factors that affects the use of OER by the business schoolteachers and health science school teachers of different Universities of Pakistan.

Research Questions

The research questions for this study are:

- 1. What is the extent of use of OER by the business school teachers and health science school teachers of different Universities of Pakistan?
- 2. What are the chief factors that affect the use of OER by the business school teachers and health science school teachers of different Universities of Pakistan?

MATERIALS AND METHODS

Development of Questionnaire

In this study, data is collected from a sample of 80 total respondents. The sample size is selected by the Yamane formula using 10% precession level. The multi-stage sampling technique is used to select the sample. The two leading universities of Lahore are selected at random and the 40 respondents are selected from each University. The 20 respondents form the business school and 20 respondents from health science school are selected using equal allocation method. The sample is selected using Simple Random Sampling technique. The data is collected from questionnaire which is developed by reviewing the questions for the purpose of OER Asia Study. The steer study is conducted and some changes were incorporated in questionnaires. Validity of the questionnaires was determined and scrutinized by statistically. The pivotal query was addressed in the questionnaire for Teachers are: Impartial approach to use of OER; key factors enabling and inhibiting OER use; Impact of OER use among student learning.

Sampled Population

The sample of 80 total respondents/teachers is selected. The sample size is selected by the Yamane formula using 10% precession level. The multi-stage stratified sampling technique is used to select the sample. The two leading universities of Lahore are selected at random and the 40 respondents are selected from each University. The 20 respondents form the business school and 20 respondents from health science school are selected using equal allocation method.

RESULTS AND DISCUSSION

From the 40 business schoolteachers surveyed, 45% were male and 55% were female. In the beginning of the questionnaire teachers were asked about their proficiency and use of different digital resources such as using computer, tablet, smart phone, scanner, printer, email, different software programs and editing tools. The results indicate that 100% of the teachers can use computers, smart phones and tablets efficiently and independently. Almost half of the teachers could use scanner, editing tools, multimedia projector and printer. The digital and resources most frequently used by teachers are e-books, tutorials, slide presentations, online quizzes, videos, simulations and audios.

The table 1 & 2 shows the perceptions of Business schoolteachers about the different uses of Open Educational Resources.

Table No. 1General Perceptions of Business School Teachers about Benefits of OERs Usage (%)

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Per ns Ber of Use	Ver Imj	Im	Mo Imj	Slig Imj	No Imj	N _C Apj

Usage of the open educational (OER) materials enable me leverage and access to the greatest resources available.	43.62	26.38	6.79	0.38	2.96	19.88
Usage of OER encourages scientific research and education as activities that are open to the public.	29.40	25.85	12.59	4.98	6.77	20.41
Students save money by using open educational materials.	35.44	31.05	6.18	2.78	6.68	17.88
The use of OER reduces the cost of developing instructional materials.	34.65	22.46	6.31	10.00	7.54	19.04
The use of free educational resources allows Business School Teachers to reach out to underserved populations.	38.62	26.76	11.24	3.66	0.00	19.72
The use of OER is a type of support to underdeveloped nations.	26.96	35.46	3.35	1.84	9.87	22.52
The use of free educational materials allows Business School Teachers to become self-sufficient from publishers.	50.84	31.42	1.71	0.00	1.16	14.88

Table No. 2General Perceptions of Business school Teachers about OERs Usage (%)

	Strongly Agree	Agree	Disagree	Strongly Disagree	Not Applicable
The usage of OER improves the engagement of learners in conversations.	38.87	51.20	0.00	0.00	1.90
The use of open educational materials boosts students' interest in the subjects they are learning.	40.24	48.41	0.93	0.00	1.99
Learners are more satisfied with their learning experiences when they use open educational materials.	23.77	57.93	4.48	2.00	1.39
The use of free educational resources improves student academic performance.	28.39	48.41	6.85	2.00	1.32

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The use of OER boosts students' confidence.	30.43	57.77	0.00	0.00	3.22
The use of open educational resources fosters independence and self-reliance among students.	33.93	50.04	2.13	0.00	5.69
The usage of OER enables me to better meet the requirements of various learners.	26.75	46.82	6.06	2.95	7.03
The use of OER improves student involvement with the lesson.	20.76	59.74	3.07	1.41	3.34
The use of OER encourages learners to try out different approaches of learning.	29.08	53.40	0.33	0.00	4.00
The use of OER enhances learner cooperation and/or peer assistance.	27.54	47.64	10.79	0.88	2.37
Use of open educational resources increases learners' enthusiasm for future study.	26.45	48.73	5.15	0.00	6.47

Majority of the Business school teachers have positive perception towards the use of OER resources. Approximately 50-60% of the teachers give positive response to the constant usage of the open educational resources established a scientific culture of research among the students and teachers. It keeps motivating the many inquisitive factors among the pupils also it is cost affecting tendency make it more reliable towards the educational system. The direct connection of imparting education among the students in business school has been improved by using the open educational resources. However, Teachers face barriers that hinder use of OER. The table 3and figure 1 given below shows the barriers faced by teachers when using OER.

Table No.3Personal barriers for not using OERs in Business Schools(%)

	Strongly Agree	Agree	Disagree	Strongly Disagree	Not Applicable
I'm unaware of any open educational materials.	33.66	10	15.81	11.89	24.68
I do not have access to freely available educational resources.	7.58	16.53	16.07	32.11	20.61

Using open educational resources wastes time.	27.88	15.29	9.39	12.82	28.12
I'm not sure how to gain access to open educational resources.	29.16	22.20	19.26	6.83	22.71
For the courses I teach, I like to utilize recommended texts.	9.53	14.93	19.49	35.02	21.05
Using open educational resources takes too much time.	39.69	16.45	6.35	21.51	15.90

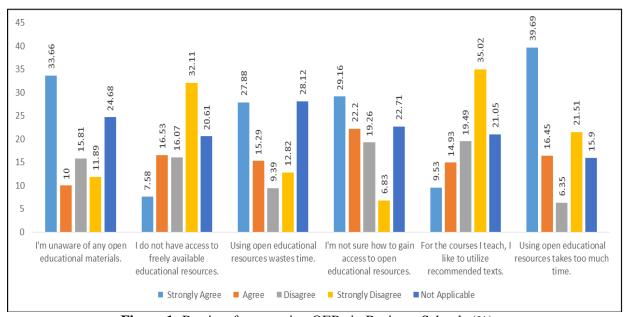


Figure 1: Barriers for not using OERs in Business Schools (%)

From table 3 and figure 1 it is observed that when teachers were asked about the barriers faced by teachers in using OER, almost 8% of the teachers indicated that they do not have proper access to OERs and their students are not familiar with OERs. The other barriers identified by teachers are: 20% of the teachers indicated that they do have the ability to find OERs; 30% believe that using OERs wastes time and believes that it is too time consuming to use OERs.

To summarize, the results of the study indicate that students can use digital devices, software programs and they are using certain digital resources. Teachers have positive perception about the use of OER and its possible impact, but more than half of the Teachers showed preference for textbooks rather than OERs. Not having proper access and non-familiarity with OER were mentioned as barriers by almost half of the teachers. The other barriers were not having the ability to find OER and that the use of OER is too time consuming and wastes time.

From the 40 respondents from health science schools, 50% were male and 50% were female. Similarly, like business school teachers, health science school teachers were asked about their proficiency and use of different digital resources such as using computer, tablet, smart phone, scanner, printer, email, different software programs and editing tools. The results indicate that 80% of the teachers can use computers, smart phones and tablets efficiently and independently. Almost 30% of the teachers could use scanner, editing tools, multimedia projector and printer. The digital and resources most frequently used by teachers are e-books, tutorials, slide presentations, online quizzes, videos, simulations and audios.

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The table 4 and 5 shows the perceptions of Health Science School teachers about the different uses of Open Educational Resources.

Table No. 4 General Perceptions of Health Science School Teachers about Benefits of OERs Usage (%)

<u>(%)</u>						
•	Very	Important	Moderately	Slightly	Not	Not
	Important		Important	Important	Important	Applicabl
Usage						e
Usage of the oper		17.75	10.87	22.72	4.65	10.80
educational (OER)	•					
materials enable me						
leverage and access						
to the greates	t					
resources available.		10.15	4.00	20.5	44.00	10.00
Usage of OER		19.46	4.88	20.67	41.98	10.90
encourages scientific						
research and						
education as						
activities that are	2					
open to the public.	4414	10.55	7 01	C C 1	10.06	12.02
Students save money		12.55	5.81	5.51	19.96	12.03
by using oper	1					
educational						
materials.	20.72	10.04	5.04	25.62	12.60	12 17
The use of OER		10.94	5.94	25.62	13.60	13.17
reduces the cost of	L					
developing instructional						
materials.						
	21.82	8.07	5.37	23.94	25.07	15.72
educational	21.02	0.07	3.37	23.94	23.07	13.72
resources allows						
Business Schoo						
Teachers to reach ou						
to underserved						
populations.	4					
The use of OER is a	a 5.98	29.85	1.69	15.69	36.16	10.63
type of support to		27.03	1.07	15.07	50.10	10.03
underdeveloped	,					
nations.						
The use of free	27.15	14.41	20.08	5.44	25.83	9.40
educational			20.00		20.00	,o
materials allows	S					
Business School						
Teachers to become						
self-sufficient from						
publishers.						

Table No. 5*General Perceptions of Health Science School Teachers about OERs Usage* (%)

Table No. 5General Perception	Strongly	Agree	Disagree	Strongly	Not
	Agree	U	C	Disagree	Applicable
The usage of OER improves the engagement of learners in conversations.	31.71	39.60	9.09	1.85	20.92
The use of open educational materials boosts students' interest in the subjects they are learning.	26.31	37.76	11.00	5.75	16.95
Learners are more satisfied with their learning experiences when they use open educational materials.	10.47	55.05	9.12	6.33	17.00
The use of free educational resources improves student academic performance.	20.47	37.52	17.02	10.05	15.40
The use of OER boosts students' confidence.	15.99	40.67	15.86	14.63	13.09
The use of open educational resources fosters independence and self-reliance among students.	28.49	35.65	13.01	4.40	13.76
The usage of OER enables me to better meet the requirements of various learners.	24.29	46.71	8.44	13.85	6.66
The use of OER improves student involvement with the lesson.	18.00	40.59	12.81	7.90	19.07
The use of OER encourages learners to try out different approaches of learning.	21.89	36.42	14.19	8.03	17.75
The use of OER enhances learner cooperation and/or peer assistance.	18.69	40.38	21.28	4.01	14.57

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Use of open educational	27.78	44.70	15.58	1.44	11.21
resources increases learners' enthusiasm for					
future study.					

Majority of the Heath science school teachers have positive perception towards the use of OER resources. Approximately 60-70% of the teachers give positive response towards the new approach in imparting education among students. Open educational resources open the window towards the versatility and knowledge. It has also the tendency to promote the scientific culture in educational institutions. Bringing down the cost is also the motivating factors for the students and teachers. Such factors keep affecting the intrinsic motivation of the students

However, Teachers face barriers that hinder use of OER. The table 6 and figure 2 given below shows the barriers faced by teachers when using OER.

Table No. 6 Personal barriers for not using OERs in Health Science School (%)

	Strongly Agree	Agree	Disagree	Strongly Disagree	Not Applicable
I'm unaware of any open educational materials.	5.77	8.57	19.76	37.60	28.14
I do not have access to freely available educational resources.	3.24	32.22	35.18	9.60	22.06
Using open educational resources wastes time.	20.12	7.44	47.83	11.83	13.49
I'm not sure how to gain access to open educational resources.	11.56	11.76	39.81	11.82	27.56
For the courses I teach, I like to utilize recommended texts.	10.00	19.57	42.61	12.88	15.38
Using open educational resources takes too much time.	30.93	15.26	18.82	17.56	17.56

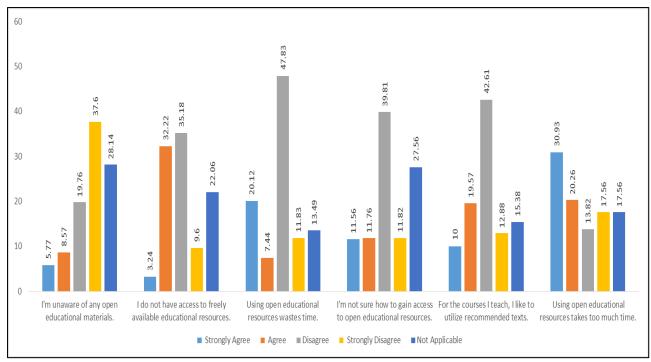


Figure 2: Personal barriers for not using OERs in Health Science School (%)

From table 6 and figure 2, it is observed that when teachers were asked about the barriers faced by Health science school teachers in using OER, almost 40% of the teachers indicated that they do not have proper access to OERs and their students are not familiar with OERs. The other barriers identified by teachers are: 35% of the teachers indicated that they do have the ability to find OERs; 50% believe that using OERs wastes time and believes that it is too time consuming to use OERs.

To summarize, the results of the study indicate that teachers can use digital devices, software programs and they are using certain digital resources. Teachers have positive perception about the use of OER and its possible impact, but more than half of the Teachers showed preference for textbooks rather than OERs. Not having proper access and non-familiarity with OER were mentioned as barriers by almost half of the teachers. The other barriers were not having the ability to find OER and that the use of OER is too time consuming and wastes time.

CONCLUSION

The data for this study was collected from two business schools and two health science schools of Lahore. The results of the study indicate that in comparison to business school, Health science schoolteachers have more basic technological apprehension also; teachers have positive perceptions about OER and its usage in their regular teaching pedagogy. Usually, the constant barrier of technology could cause distress in the study, but the result is quite contrast. No such barriers as infrastructure, unavailability, access, and non-familiarity could become hazards to the exercise of OERs in the computer labs. This study is valuable as it explores the use of OER by business schools and health science schoolteachers and their perception about the OER materials.

Data for this study were gathered from two Lahore business schools and two health science colleges. According to the study's findings, health science school instructors have higher fundamental technology abilities than business school teachers, and the majority of teachers have good attitudes about the usage of OER. The hazards on any domain were not applicable in the exercising the OER methods in Computers laboratories. This study is important because it investigates the usage of OER by business and health science school instructors, and yet their perceptions of the OER resources.

Instructors highlight proper access as one of the impediments, which may include a variety of circumstances that hinder teachers' access to OER materials. The following factors are perceived more positively by business school teachers than by health science teachers Usage of open resource education opens the door of new era knowledge which is pivotal and as accord the requirement of 21st century. It gives the leverage to students to minimizing the costs of their educational materials but also gives the

opportunities to teachers to understand and comprehend the new avenues of education. Open educational system also explores the new dimensions of scientific research based learning. The range of use cases and criteria for open educational materials is not unexpected given the diversity of its users, providers, and sponsors. For this reason, examining the variations among descriptions of free educational materials may be just as beneficial as examining the descriptions themselves. This is one of OER's major benefits, and as such, it possesses the potential to result in significant efficiency improvements. OER does not have to be made from scratch. OER may indeed be evolved in an array of ways, encompassing innovation, assimilation, modification, and curation. As per this study, it has been observed that open educational resources system strengthened the resources' scalability and effectiveness. It serves to allow students to go and see knowledge in a broad perspective than their curriculum might either enable (international dimension).

It also supports learner-centered, self-directed, peer-to-peer, and social/informal learning methodologies. This study is established and maintained to know the teacher's apprehension towards new educational requirement and their perspective of using OER. The same study can be extended for knowing the student's perspective about the impact/use of OER on their studies.

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