

Systematic Review On Perception Of Stakeholders On The Use Of Oer

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In the present study, 19 articles were reviewed to examine the perception of stakeholders on the use of OER. The purpose of the study is to identify and discuss the 19 articles published regarding the perception of faculty members or students towards the quality or use of OER in higher education. The articles are searched on Google Scholar. Teachers use these materials to enhance their pedagogical skills. They are also interested in designing some good qualities of resources, despite the funding. Without lowering their learning outcomes, students seem to benefit monetarily from the choice to use OER.

Keywords: Perception, Cost, adoption, Teacher, Student, OER.

Introduction

Textbooks are essential for gaining knowledge. Textbooks help the students in enriching their academic excellence and support in improving classroom practices. According to Skinner and Howes (2013), reading the assigned materials helps students in many ways, one of which is that it raises their baseline knowledge for class. Darwin (2011) discovered that students' performance in class and finishing the assigned reading were positively correlated in accounting classes. In certain cases, students are facing problems in reading good-quality books due to the price of the textbook. In order to minimize the burden of buying textbooks, accessing open educational resources (OERs) is the best alternative for students. These resources are available freely in different databases and can be easily accessed by anyone at any time. These are available in different forms such as text materials, audio, videos, etc.

The development of good qualities of open materials is challenging. The adoption of these resources into teaching and learning process is also important. Teachers use different OERs in their instructional process. These resources help the teachers and students to get new information and update their knowledge.

Open Educational Resources (OER) have transitioned from theory to reality. There are now a number of ways to find high-quality OER, a subset of OER that is frequently utilised in place of traditional textbooks. In some studies, it was reported that most of the faculty members are 'not at all familiar' with open textbooks (Morris-Babb and Henderson, 2012) and very few are also aware of the awareness of OER (Allen and Seaman, 2014). Individual OER adoption

is also influenced by time availability and reputation (Bates et al., 2007; Rolfe, 2012; Schuwer & Janssen, 2018). The purpose of the study is to identify and discuss the 19 articles published regarding the perception of faculty members or students towards the quality or use of OER in higher education.

Method

In the present study, the following criteria are followed in selecting the articles for review purposes. First, the articles published in peer-reviewed journals are included in this review. The articles published as preprints or dissertation copies, or conference copies, are not considered for the present study. The articles, in which the sample size is less than 50, are not included in this study. Again, the articles where the perception of the faculty members or student teachers is not analysed are also not included in this study. The articles published before 2015 are also not included in this study. In the present study, all the articles published relating to higher education are included. In the present study, teachers and students are taken as the stakeholders.

In the present study, the researchers searched the articles on ‘Google Scholar’. During the search of the articles, the keywords like “OER and perception”, “Open Educational Resources and perception of faculty members”, and “OER and perception of students” are used. 400 articles are found on the search engines. Most of the articles are excluded from the inclusion process just by reading the titles of the articles and looking at the year of publication (before 2015). The articles related to the theme of the present study are kept for further analysis. After reading the abstract, those articles that meet the above criteria are considered for further analysis. Then the full paper was downloaded, and a thorough reading was carried out. The articles, which do not meet the criteria, such as sample size or the perception of faculty members or students towards higher education, are also excluded from the study's analysis. The articles that cover all the above-mentioned criteria are included in the present study, and the number is limited to 19 articles and the summary is presented in Table 1.

Results

Mubofu and Kainkwo (2023) conducted a study to analyse the perceptions of lecturers of two institutions in Tanzania. They collected the information from 52 lectures at two universities. The selected lectures are purposeful. It was reported that the lecturers are ‘moderately aware’ of OERs. The majority of the lectures are believed on OERs. Lecturers are happy when others use their resources. It was also reported that the institute's reputation has been enhanced due to the use of OER. Regarding the attitude of lectures, it was reported that OERs are beneficial for academic and research purposes.

According to Cheung et al. (2023), OER is beneficial for OER students. Participants include both in-person and remote learners from Hong Kong Metropolitan University. For the 2019 survey, students participating in in-person and distance learning programs provided a total of 489 and 423 valid replies, respectively. For the other poll conducted in 2021, a total of 624 and 394 valid responses were received from the two groups, respectively. In-person students saw OER as being more useful for test and exam preparation, whereas distance learning students believed it was more beneficial for improving course materials.

Zaidi et al. (2022) investigated preservice teachers' perceptions of the advantages and disadvantages of open educational resources. The results of the survey showed that most participants had a positive attitude towards the adoption and use of OERs and agreed on their advantages. According to the report, higher education institutions should give priority to programs and resources that support preservice teachers in creating and disseminating their lesson plans and in encouraging the use of open educational resources (OERs) in classroom discussions.

A study on faculty members' perceptions of OER and other facets of library practice was carried out by Bond et al. (2021). The study was conducted at Mary Coats Burnett Library at Texas Christian University, and 104 faculty members responded to the questionnaire. Most of the teachers used the OERs at different times and also developed their OERs. Regarding academic comparison, the majority of faculty members said that OER and traditional textbooks were on par with one another, however, 25% said that traditional textbooks were more scholarly. The most common answers to the question of what steps the library could take to encourage staff to create more open educational resources (OER) were training opportunities and financial assistance for academics who use OER. 59% of teachers are interested in OER-based training programmes.

Bello et al. (2021) evaluated the factors influencing instructors' attitudes and use of open educational resources (OERs) in northeastern Nigerian universities. The results show that lecturers' use of shared OER is influenced by social influence, performance expectancy, effort expectancy, and facilitating factors. Among other things, the study suggested that the university administration improve the culture of academic knowledge sharing on OER repositories to build upon the construct's features.

Margo and Tabaei (2020) conducted a study in an undergraduate Psychology department at Touro College. The purpose of the study was to analyse the student and faculty members' perceptions of the cost and academic outcomes of OER. Sixty-two teachers and sixty-one students participated in the study. The professors had mixed feelings about the texts utilised, but the students had a very positive impression. Due to the textbook's availability, some academics who thought it missed crucial information supplied their own material. Pupils who took OER courses outperformed those who took the identical courses with a commercial textbook. The professors had mixed feelings about the texts utilised, but the students had a very positive impression. Due to the textbook's availability, some academics who thought it missed crucial information supplied their own material.

Howard and Whitmore (2020) conducted a study on 'Evaluating the student perceptions of open and commercial Psychology textbooks.' This study aimed to determine whether students' preferences changed after learning about textbook costs and to assess their perceptions of the quality of brief, de-identified open and commercial textbook samples. 81.29% of respondents said they preferred a certain commercial text before learning the price of the textbooks used to choose each sample. They cited quality characteristics such as the book layout, the quality of the figures, and the writing's clarity as the main reasons for their preference. Only 42.46% of respondents said they preferred a commercial textbook after the cost was revealed, whereas 57.53% said they preferred an open textbook.

At Ghana's Kumasi Technical University, Appiah et al. (2020) carried out an evocative assessment of OER awareness, attitude, and utilisation. According to the study, most Kumasi

Technical University faculty (83.9%) and students (91.5%) were not aware of open educational resources (OERs) and hence hardly ever used them in their coursework. According to the study, only a small percentage of university academic staff members who were aware of OERs used them for teaching, research, and consulting. Therefore, the study recommended more awareness-raising training to boost the university's use of these resources. In order to solve the problems that library patrons encounter when utilising OERs, these studies have typically suggested that OER training be conducted regularly.

The motivating factors of the 77 university faculty members towards the adoption of OERs were analysed by Nagashima and Hrach (2021). The important motivating factors for adopting OERs are incentives received by the university and the cost of the materials. The benefits perceived by the faculty members are 'pedagogical improvements', 'collaboration', 'discoverability of materials', and 'students' access to learning materials.'

Elder et al. (2020) analysed the faculty members' perception towards OER. 135 faculty members of four institutions took part in the survey. Regardless of prior OER experience, findings indicate that faculty members are more engaged in open educational practices, are receptive to learning more about OER, and are aware of library support and institutional OER initiatives. Additionally, they are drawn to these tools because they can help students save more money. In order to locate or create resources for their specialised disciplines, faculty members expressed interest in using open educational resources (OER) to fill gaps. They want the materials to be updated as soon as possible. Time constraint is the major barrier for the faculty members, as per their perception.

Jhangiani et al. (2018) highlighted the students' perception of the quality of OER. It was reported that students significantly prefer the open textbook significantly higher than the traditional textbook due to its clarity in writing and citing good examples. Students prefer print materials instead of digital formats (as open textbooks are available in both digital and print formats).

Hunsicker-Walburn et al. (2018) reported the comparative perceptions of OER and traditional textbook quality. They reported that 238 students participated in the survey, of which 136 are male and 102 are female students. The survey questionnaire was used to collect the information from the students. ANOVA was run to test the hypothesis. Of the 238 respondents, 95 (40%) said they have used open educational resources (OER) rather than a textbook. Of the 95 respondents who had utilised open educational resources (OER), 79 (83%) said that the content of OER is on par with or better than textbooks. Regarding subject quality, there was no discernible difference between male and female students.

OERs have minimal to no detrimental consequences on students' learning, according to a survey of 320 British Columbian undergraduate students (Jhangiani & Jhangiani, 2017). Faculty who had embraced OER textbooks in 2015 were asked to respond to the poll. The researchers looked into how students viewed open educational resources (OER) textbooks and other facets of traditional textbooks. The majority of students, according to the researchers, solely used digital versions of their OER textbooks; 72% downloaded and used a PDF file, 50% read the PDF online, and the remainder students used smartphones or tablets. Of the student participants, 43% recorded their OER in print format, either printing the complete document or just the pages and chapters they needed. A significant percentage of respondents (63%) who were asked to rate the quality of their OER said it was above average or

exceptional, and 33% of students said it was ordinary. Furthermore, 56% of respondents disagreed slightly or strongly when asked if they would have chosen to buy a traditional textbook for their course, citing ease, cost savings, and instant access as advantages (Jhangianai & Jhangiani, 2017).

The results of a study by Zhang and Li (2017) that examined several facets of OER in connection with faculty members' online teaching experiences confirmed that, on the whole, faculty members have a favourable opinion of OERs. In the Zhejiang University (ZJU) study, 360 faculty members were asked about their experiences with online instruction and open educational resources (OERs), as well as how they felt about OER resources. Researchers discovered that whereas 60% of faculty members would be open to sharing their resources and instructional materials with external websites, 87.8% of faculty members expressed interest in doing so on ZJU. Moreover, a significant portion of the faculty (93%) concurred with the compatibility of innovation and the relative benefit of OER (Zhang & Li, 2017).

Jung et al. (2017) examined how faculty members felt about using open educational resources. According to their report, open textbooks are of higher quality than traditional textbooks. The faculty members' perception regarding the usage of OER was analysed in four perspectives, such as 'teacher preparation time (82%)', 'instructional changes (52%)', 'student preparedness (68%)' and 'perceived performance'. Regarding performance, only 23% believed that the students' performance was better when using the open textbooks, while 64% believed that the performance level was the same.

Martin et al. (2017) analysed the perception of faculty members at Brigham Young University, a large private university, regarding textbook costs. 53% of the faculty at this institution would appreciate help finding and modifying course materials, and 91% of them would be open to using OER alternatives. Even though 90% of respondents were amenable to the idea of adopting open resources, their acceptance was conditioned on the OER being "suitable," or at the very least of comparable quality to what they were already consuming. Nearly 69% of respondents who said they would be open educational resources (OER) substitutes for their classes were unaware of any particular OER substitutes for the materials. The faculty members also used the OERs to save costs for the students.

It was reported that 66% of this institution's students had not bought a textbook because of the expense. They have strong opinions about textbook prices, focusing especially on established textbook publishers.

Watson et al (2017) conducted a study to analyse the students' experience towards an OpenStax textbook through a mixed-methods. It was reported that despite some minor issues regarding its online format, the OpenStax Biology textbook's quality, features, and price were considered to be highly valued by 1,299 students who participated. Faculty members are satisfied with the course redesign and scope for improvement.

Delimont et al. (2016) analysed the faculty members' perception of adopting 13 OAER courses. It was reported that the institutional support for professional credit encourages the faculty members to adopt OERs. They have a positive experience towards the use of such resources. It was reported that 12 members have an interest in continuing to use OER in spite of funding. The major challenges highlighted by the faculty members are the time and technological issues in technology. Faculty members are motivated to use OER due to the

financial benefits for the students, the initiative of the materials, followed by the consistency with teaching.

Again, 524 students responded to the survey. In the survey, 524 students responded to the questionnaire, and the percentage is 25.3% of the total students. Students' perception of the OAERs is satisfactory. Students responded that the quality of the materials is good. It was also reported that the students prefer to use the OAERs instead of traditional textbooks. The reason for supporting the OAERs is the financial benefits.

Belikov and Bodily (2016) analysed 216 US faculty members' perceptions on the use of OER qualitatively. The major challenges, according to the faculty members' perception, are 'need more information', 'lack of discoverability' and "confusing OER with digital resources". Institutional support for adoption of OER, pedagogical benefits for the students and cost benefits for the students are the major incentives as reported.

Table 1: Summary of Perception of teachers towards the use of OER

Study	Sample of the study (Faculty)	Sample of the study (Student)	Tools used	Key findings
Mubofu and Kainkwo (2023)	52	N/A	Survey	More than one year of teaching experience is held by 72.1% of teachers. 34.6% of educators had a moderate understanding of OER usage.
Belikov and Bodily, 2016	216	N/A	Survey	48% of faculty members indicated that they need more information about OER
Delimont et al. 2016	13	524	Interview	More than 92% used the OERs beyond the funding period. OAERs are more up-to-date in information (6/133). 62% of students preferred to use the OAERs due to financial support.
Jung et al. 2017	150	N/A	Questionnaire	Quality of OER – 62% believed as good Use of OER – 80% feel better than a traditional textbook
Martin et al. (2017)	573	676	Survey Questionnaire	66% of students did not purchase books due to cost.
Watson et al. (2017)	3	1299	The survey included 38 questions.	57% of students replied that the textbooks are too expensive.

Nagashima and Hrach (2021)	77	N/A	The survey questionnaire has 28 items	73.2% felt about the monetary award
Jhangiani et al. 2018	N/A	178	Questionnaire	Students spend more time on commercial textbooks per week. The quality of the print format of the open textbooks is of higher quality than the commercial textbook, according to the result of the ANOVA test.
Elder et al. (2020)	136	N/A	Survey questionnaire	75% of instructors are interested in OER but do not use.
Hunsicker-Walburn et al. (2018)	N/A	238	Survey questionnaire	Concern about the quality of course content resources was deemed significant by 220 (92.4%) of the respondents.
Jhangiani and Jhangiani, (2017)	N/A	320	Questionnaire	Most students exclusively used digital versions of their OER textbooks.
Zhang & Li (2017)	360	N/A	Questionnaire	While 60% of the teachers would be ready to share their resources and instructional materials with external websites, 87.8% of the faculty expressed interest in doing so on ZJU.
Bond et al. (2021)	104	N/A	MCQ and free-text questions	OER and traditional textbooks are at the same level (70%). OER is more or less scholarly, according to 87 faculty members
Margo and Tabaei (2020)	62	61	Survey questionnaire	70% of students replied that the cost of the textbooks has caused them not to purchase them. 68% of students responded that the quality was better than other texts.

Cheung et al. (2023)	N/A	2019- 489 (f-t-f) and 423 (DM) 2021- 624 (f-t-f), 394(DM)	Survey questions	OER is considered more useful for learning in an online mode during the pandemic.
Howard and Whitmore (2020)	N/A	151	Survey question	81.29% of participants who responded said they preferred a certain commercial text, with the main reasons given being the calibre of the figures, book arrangement, and writing quality/clarity.
Appiah et al., (2020)	50	300	Questionnaire	The results showed that most students (91.5%) and faculty (83.9%) at Kumasi Technical University were unfamiliar with the phrase open educational resources (OER), and as a result, they barely accessed them.
Zaidi et al. (2022)	102	N/A	Questionnaire	61.8% responded that OER assists teachers in improving classroom teaching
Bello et al. (2021)	338	N/A	Closed-ended questionnaire	Believing that OER helps in increasing academic performance.
Total	2236	5677		

Discussion

In the present study, there are six studies, where the perception of both student and teacher was analysed. The perception of only students was analysed and reported in five reports. In nine articles, the perception of teachers was analysed and reported. In total, the responses of 2236 teachers and 5677 students are analysed and reported.

The present study highlights that the teachers have a feeling towards the cost of the textbooks, and so they use the OERs. the students and teachers use the OERs due to the quality of the resources. The OERs are helpful for teachers to work collaboratively and to enhance academic excellence. Course design and pedagogical improvements are two important aspects for using OER by teachers. OERs are more helpful in learning during the pandemic period.

It was also reported that 81.29% of students who responded said they preferred a certain commercial text, with the main reasons given being the calibre of the figures, book

arrangement, and writing quality/clarity. It was also reported that the students use the OERs due to their quality and cost.

Conclusion

In this article, the collective results of 19 studies are discussed. This provides clear information about the quality of the content and the cost of the resources. As per the collective results of this study, there was no negative influence of these articles on students' performance. Teachers use these materials to enhance their pedagogical skills. They are also interested in designing some good qualities of resources, despite the funding. Without lowering their learning outcomes, students seem to benefit monetarily from the choice to use OER.

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