



Attitude of Faculty Members' towards Open Educational Resources: A Systematic Review of Literature

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Abstract

Aim of the Study: This study aims to investigate faculty attitudes toward Open Educational Resources (OER), identify factors influencing their adoption, and explore the implications for educational policy and practice. **Design/Methodology:** The study synthesizes findings from multiple research studies through a systematic review approach to examine the adoption and impact of OER in higher education. **Findings:** Faculty generally hold positive attitudes toward OER, valuing their potential to lower educational costs, improve access to learning materials, and enhance teaching effectiveness. Despite these benefits, barriers such as copyright issues, insufficient institutional support, and lack of quality assurance impede broader adoption. The variability in OER integration across different contexts highlights the need for tailored strategies to address these challenges. **Practical Implications:** The review underscores the necessity for robust institutional policies and support systems to facilitate effective OER integration. By focusing on the interplay between individual attitudes, institutional policies, and contextual factors, the study provides insights for enhancing educational accessibility and quality through OER. **Originality/Value:** This review contributes to the understanding of OER integration in higher education by systematically analyzing faculty attitudes and identifying key barriers and benefits. It emphasizes the importance of addressing contextual and institutional factors to improve OER adoption and implementation.

Keywords: *Open Educational Resources (OER); Faculty Attitudes; Educational Policy; Adoption Barriers; Teaching Effectiveness; Institutional Support*

1. Introduction

Open Educational Resources (OER) stand as versatile pillars in the realm of education, encompassing a plethora of teaching, learning, and research materials available in both digital and analog formats. These resources, whether residing in the public domain or protected by open licenses, beckon a revolution by granting unhindered access, encouraging use, fostering adaptation and facilitating redistribution, all while preserving the essence of the original work within the bounds of intellectual property rights and international standards (UNESCO, 2012, p.1). In recent years, Open Educational Resources (OER) have emerged as pivotal elements in transforming educational practices worldwide. Defined broadly as freely accessible, openly licensed text, media, and other digital assets used for teaching, learning, and research (Hussain et al., 2013), OER aim to reduce costs, enhance access to information, and improve the quality of education (Martin & Kimmons, 2020). Despite their potential, adoption varies significantly across different educational contexts and disciplines.

Numerous studies have underscored the positive attitudes towards OER among educators, highlighting benefits such as cost savings, enhanced educational accessibility, and pedagogical innovation (Karunanayaka, 2012; Jhangiani et al., 2016). Educators recognize the value of OER in enhancing their teaching effectiveness and reputation (Rolfe, 2012). Furthermore, the shift towards digital learning environments has only amplified the importance of OER in providing scalable and sustainable educational solutions (Ganapathy et al., 2015). However, the integration of OER into academic practice is not without challenges. Issues such as copyright concerns, lack of quality assurance, and insufficient institutional support hinder broader adoption (Rolfe, 2012; Martin, 2018). Additionally, while there is a general positivity towards OER, specific barriers related to technology infrastructure and faculty readiness also play critical roles (Cote, 2017). These challenges suggest a gap between the recognition of OER's benefits and their practical implementation.

This study seeks to understand the factors that influence faculty members' acceptance and use of Open Educational Resources (OER) in higher education. It focuses on examining how educators' individual attitudes, institutional policies, and various contextual elements affect their engagement with OER. The goal is to inform discussions on effectively integrating OER into educational systems to enhance their benefits and address associated challenges. To achieve this, a systematic review of the literature will address the following research questions: 1) What are the predominant attitudes of higher education faculty towards OER? 2) How do institutional policies and supports OER adoption and utilization? and 3) What are the potential barriers to the integration of OER in teaching practices.

2. Methodology

Marangunić & Granić (2015) highlight the critical role of literature reviews in building a foundation of knowledge, suggesting that these reviews are essential for enhancing theories and addressing research gaps. They also illuminate overlooked areas in existing studies. Despite these insights, there remains a notable gap: no systematic literature review has been conducted to comprehensively analyze the attitudes of faculty members towards the adoption and use of Open Educational Resources (OER) either in India or globally. This omission is significant as such a review could provide valuable insights into faculty perceptions and potentially influence both academic and practical approaches to OER implementation worldwide. The completion of this study would be instrumental for researchers and practitioners globally, offering a clearer understanding of the factors influencing faculty engagement with OER.

2.1 Identification Phase

The database used for this systematic literature review included ERIC, Google Scholar, Pro-Quest, Science direct and others (EBISCO, SCISPACE, Springer Open Access, Mendeley Reference Manager and Research Gate). Five related search key words were used to access the research studies from above mentioned electronic databases as shown in Table 1.

Table 1. Literature search key words

Database	Key words
ERIC	<ul style="list-style-type: none">• Faculty Attitudes and OER Adoption• Faculty Perceptions and OER Adoption• Academic Acceptance of OER• OER Use in Higher Education• OER Implementation Barrier
Google Scholar	<ul style="list-style-type: none">• Faculty Attitudes and OER Adoption• Faculty Perceptions and OER Adoption• Academic Acceptance of OER• OER Use in Higher Education• OER Implementation Barrier
Pro-Quest	<ul style="list-style-type: none">• Faculty Attitudes and OER Adoption• Faculty Perceptions and OER Adoption• Academic Acceptance of OER• OER Use in Higher Education• OER Implementation Barrier
Science Direct	<ul style="list-style-type: none">• Faculty Attitudes and OER Adoption• Faculty Perceptions and OER Adoption• Academic Acceptance of OER• OER Use in Higher Education• OER Implementation Barrier
Others (EBISCO, SCISPACE, Springer Open Access, Mendeley Reference Manager and Research Gate)	<ul style="list-style-type: none">• Faculty Attitudes and OER Adoption• Faculty Perceptions and OER Adoption• Academic Acceptance of OER• OER Use in Higher Education• OER Implementation Barrier

2.2 Screening Phase

The titles and abstracts of the research studies were screened in all five databases namely ERIC, Google Scholar, Pro-Quest, Science direct and others (EBISCO, SCISPACE, Springer Open Access, Mendeley Reference Manager and Research Gate). The titles were screened based on how closely they matched the keywords. The abstracts of each study were then skimmed and scanned

2.3 Inclusion and Exclusion Criteria

Subsequently, the results obtained underwent filtering according to the predefined inclusion and exclusion criteria. A study was excluded if: (1) The original written language is not English; (2) Non-peer-reviewed sources; (3) Non-empirical studies; and (4) The full text is not available in online. The following typologies of studies were included: (1) Peer reviewed journal research articles; (2) Review

papers; (3) Chapters in edited book; and (4) Published master and Ph.D theses. The details were summarized from searching process using the PRISMA flow chart in figure 1.

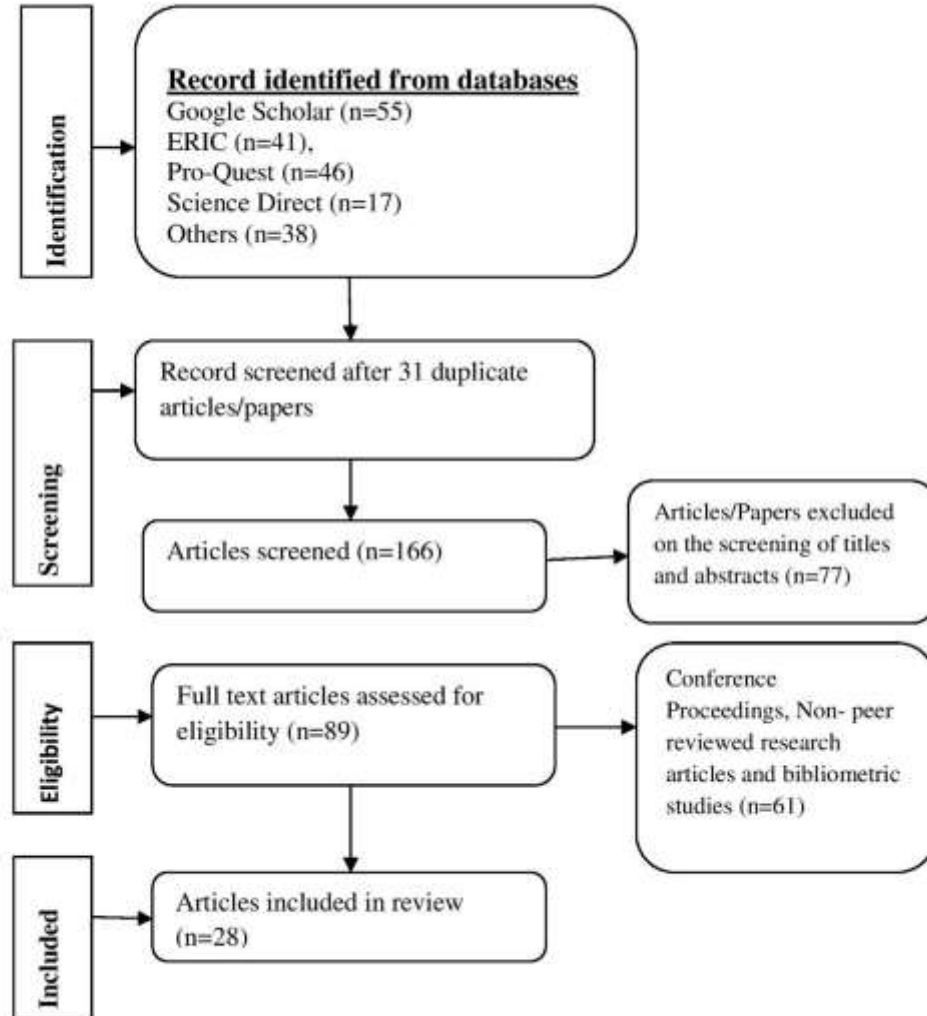


Figure 1. PRISMA flow chart

2.4 The Final Selected Papers

From 2000 to 2024 a total of 197 research studies were found from five database and additional records namely Google Scholar (n=55) ERIC (n=41), Pro-Quest (n=46), Science direct (n=17) and others (EBISCO, SCISPACE, Springer Open Access, Mendeley Reference Manager and Research Gate) n=38. During the screening process, 31 duplicates research studies were removed, leaving 166 research articles. After screening research title and abstracts, 77 articles were excluded from the obtained results. Then, 61 articles were removed because they did not have access to the full text and were comprised of review papers, meta-analysis and bibliometric studies. Finally, 28 articles were chosen from among those that met the inclusion criteria to be included in this review.

3. Analysis of Results

Table 2 provides an overview of the research studies, country, research methods and research participant levels.

Table 2. Characteristics of research studies

No.	Authors	Affiliation	Research Method	Research Participants	Citation Index
1	(Karunanayaka, 2012)	Open University of Sri Lanka, Sri Lanka	Quantitative	53 teachers, teacher educators and principals	07
2	(Rolfe, 2012)	De Montfort University, Leicester, UK	Mixed method	Faculty of Health and Life Sciences	230
3	(Hussain et al., 2013)	The Islamia University of Bahawalpur, Pakistan	Mixed method	278 university faculty	36
4	(Ganapathy et al., 2015)	Universiti Sains Malaysia	Quantitative	35 English Language Teachers	19
5	(Jhangiani et al., 2016)	Polytechnic University Rebecca Pitt, UK	Mixed method	78 educators from 17 BC post--secondary institutions	137
6	(Perryman & Seal, 2016)	UK Open University, UK	Quantitative	300 Teachers, Teacher Educators	25
7	(Delimont et al., 2016)	Kansas State University, USA;	Mixed method	13 University Faculty members	102
8	(Panda and Santosh, 2017)	Indira Gandhi National Open University, India	Quantitative	316 university faculty	39
9	(Cote, 2017)	Northern Illinois University, USA	Mixed method	340 full time and 1400 part time	07
10	(Anderson et al., 2017)	Washington State University, USA	Qualitative	266 engineering faculty members	33
11	(Mishra & Singh, 2017).	Indira Gandhi National Open University, India	Mixed Method	227 faculty members of Higher education Institution of India	34
12	(Martin, 2018).	Brigham Young University, USA	Qualitative	8 University faculty members	01
13	(Padhi, 2018)	Indira Gandhi National Open University, India	Quantitative	202 university Teachers	61
14	(Pande et al., 2019)	Sukhothai Thamathirat Open University, Thailand	Quantitative	32 university faculty members	01
15	(Tlili et al., 2019)	Beijing Normal University, China	Qualitative	24 journal articles, conference proceedings, book chapters and Thesis	77
16	(Tipton, 2020)	University of Mississippi, USA	Quantitative	414 faculty members	02
17	(Martin &	Brigham Young	Qualitative	8 university faculty	35

18	Kimmons, 2020) (Gamit, 2021)	University, USA Gujarat University, India	Quantitative	members 57 university faculty members	00
19	(Shemy et.al., 2021)	Arab Open University, Oman	Quantitative	40 male and female teachers	02
20	(Lantrip & Ray, 2021)	Walla Walla Community College, USA	Quantitative	39 faculty members of college	32
21	(Behera et al., 2021)	Utkal University, India	Quantitative	60 trained graduate teachers	00
22	(Otto, 2021).	University of Duisburg- Essen, Germany	Quantitative	201 faculty members	37
23	(Otto, 2021).	University of Duisburg- Essen, Germany	Mixed Method	20 faculty members	09
24	(Tlili et al., 2022)	Near East University, Cyprus	Mixed Method	57 university faculty members	01
25	(Baas et al., 2022)	Leiden University Netherlands	Qualitative	11 university teachers	27
26	(Bello et al., 2022)	Universities of North-East, Nigeria.	Mixed Method	338 lecturers	02
27	(Karipi et al., 2022)	Namibia College of Open Learning, Namibia	Qualitative	24 faculty members	05
28	(Marín et al., 2022)	Carl von Ossietzky University of Oldenburg, Germany	Mixed Method	University and college faculty members from nine countries	26

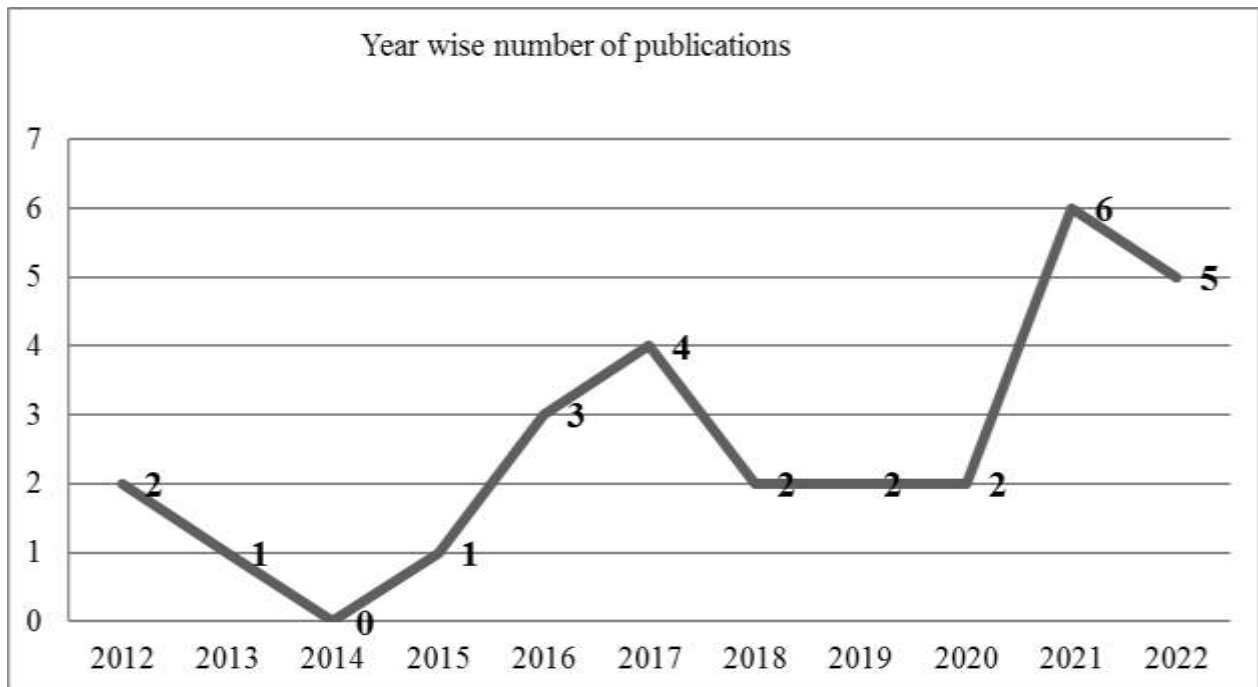


Figure2. Time distribution of selected studies

Figure 2 depicts the year-wise number of publications of research articles on Open Educational Resources (OER) from 2012 to 2022. The graph shows fluctuations in the number of publications over the years. There is no consistent upward or downward trend; rather, there are periods of both increase and decrease in output. Variability: There is significant variability in the number of publications year to year. Notably, there was a dip to zero publications in 2014, which could indicate a lack of research interest or funding, a change in publication practices, or perhaps a data collection error. The peak occurs in 2021 with six publications.

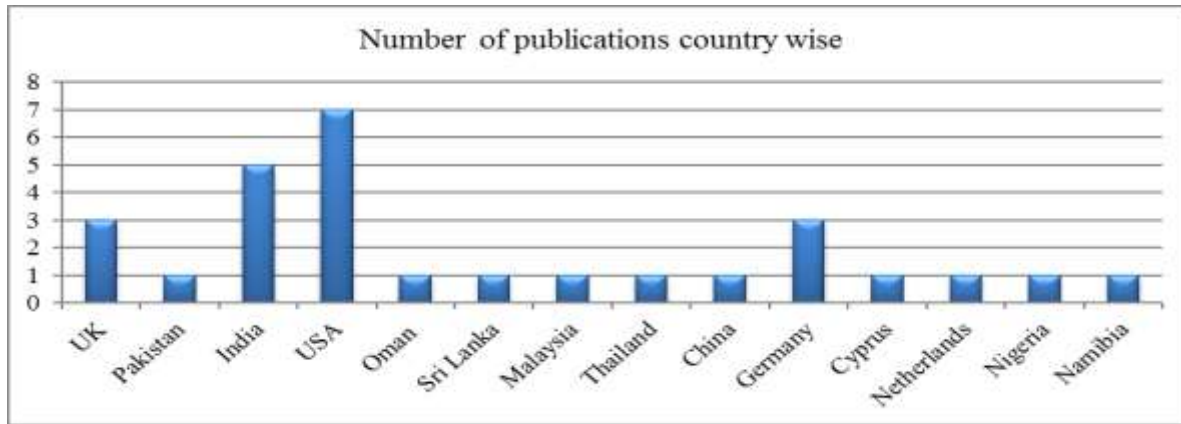


Figure 3. Country wise publication from 2012 to 2022

Figure-3 presents a comparison of the number of publications on attitude of faculty members towards the adoption and use of Open Educational Resources (OER) from various countries between 2012 to 2022. The data suggests that research output is unevenly distributed among the countries. USA stands out as the country with the most publications (7), followed by the India (6). This could indicate a higher level of engagement with the subject matter or a greater number of researchers in these countries focusing on this area. There is a representation of both developed countries (like the UK, USA, Germany, and the Netherlands) and developing countries (like India, Pakistan, Nigeria, and Namibia). However, developed countries do not necessarily dominate in publication numbers, which could imply a global interest in the subject matter that transcends economic status.

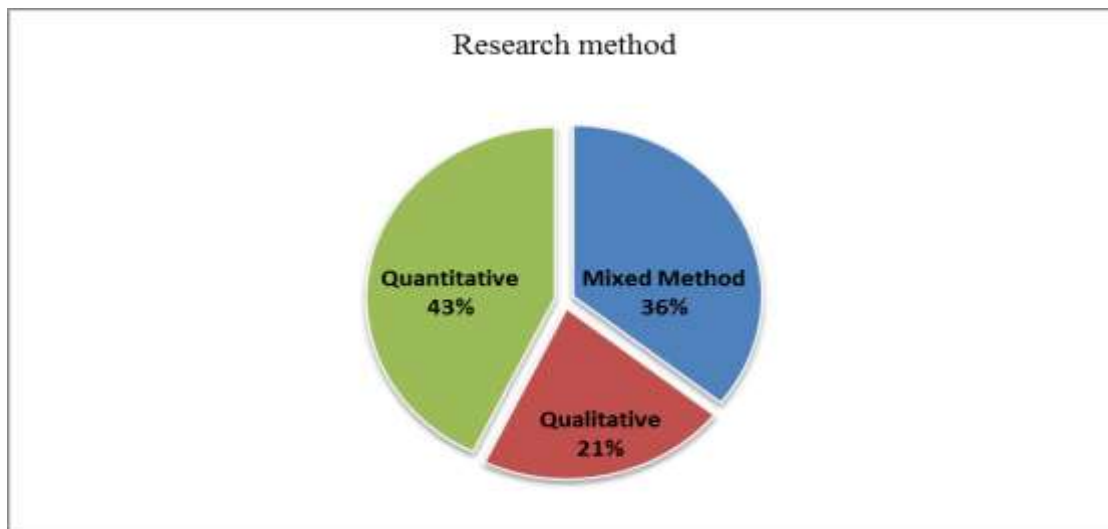


Figure 4. Method wise percentage of studies

In terms of research methods, Figure 4 illustrates the distribution of research methods used globally to study faculty members attitudes toward the use of Open Educational Resources (OER). Quantitative methods were the most utilized, accounting for 43% of the research studies followed by mixed method (36 %) and qualitative approach (21 %). As illustrated in Figure 4, it is clear that the preference for quantitative methods may imply a desire for generalizable findings across larger populations, which can be particularly appealing for policymakers and educational administrators. However, the lower use of qualitative methods may suggest a gap in the nuanced understanding of faculty attitudes that numbers alone cannot convey. The relatively high use of mixed methods demonstrates an awareness of the complexity of attitudes towards OER and recognition of the value of integrating different types of data.

Table 3. Country wise average citation per article

Country	No. of Publications	Citation	Average Citation per Article
UK	03	382	127.3
China	01	77	77
Pakistan	01	36	36
USA	07	222	31.7
Netherlands	01	27	27
India	05	134	26.8
Germany	03	72	24
Malaysia	01	19	19
Sri Lanka	01	07	07
Namibia	01	05	05
Nigeria	01	02	01
Oman	01	02	01
Thailand	01	01	01
Cyprus	01	01	01

Table 3 displays average citation score per research article which provides a lens to gauge the impact and recognition of research articles on faculty members' attitudes towards the use and adoption of Open Educational Resources (OER) from 2012 to 2022 across various countries. The UK stands out with an exceptionally high average citation score of 127.3 per article. Furthermore, China and Pakistan demonstrate significant impact with their research contributions with average citation scores of 77 and 36 respectively. These scores suggest that the research articles from these countries are well-received and referenced within the academic community. Despite a lower average citation score of 31.7 compared to the UK, China, and Pakistan, the USA's contribution cannot be understated. The relatively high number of publications coupled with this average citation score illustrates a broad engagement with OER research, contributing a variety of perspectives and findings to the field. India and Germany show a consistent level of engagement and impact in OER research, with average citation scores of 26.8 and 24, respectively. Countries such as Malaysia, Sri Lanka, Namibia, Thailand, Cyprus, Nigeria, and Oman have lower average citation scores, ranging from 19 down to 0.5. This could reflect emerging research areas within these countries, smaller academic communities engaged in OER research.

Karunanayaka (2012) stated that a significant portion of Sri Lankan teachers and teacher educators lacked prior exposure to Open Educational Resources (OER), those who were aware exhibited positive attitudes towards their use. The attitudes towards sharing and using OER among the participants

were positive, with many recognizing the practical benefits such as enhancing one's reputation as a good teacher and saving time and money. However, there was some reluctance to share personal educational materials, as only 58.3% of participants allowed their resources to be freely used by others, often preferring to share only within close academic circles.

Rolfe (2012) reported that faculty attitudes towards OER were generally positive, driven by a strong belief in the value of open education, the potential for enhancing individual and institutional reputations and economic factors. Despite these positive attitudes, there were significant barriers to the adoption and use of OER. Faculty members expressed concerns over copyright issues and a lack of IT support, which hindered their willingness to fully engage with OER. There was a culture of sharing resources within close collegial circles, but extending this to a wider, more open context was less common. The study indicated that while there is a foundation of support for OER, significant work is needed to improve awareness, address barriers and foster an environment that supports broader sharing and adoption of OER practices.

Hussain et al. (2013) found that university academia in Pakistan recognize the significant role of Open Educational Resources (OERs) in enhancing higher education. Academics appreciated OERs for facilitating research, accessing instructional materials and learning about innovations in their disciplines. They highlighted the benefits of OERs being freely available, providing access to a vast body of knowledge and offering insights into the latest research practices and instructional experiences. The overall attitude towards OERs was positive, emphasizing their importance in the academic and educational advancement.

Ganapathy et al. (2015) explored the attitudes and practices of English language teachers regarding OERs. The findings indicated a generally positive perception and high level of engagement with OERs. The faculty members acknowledged the usefulness of OERs in enhancing teaching and learning processes and expressed interest in both using and contributing to OERs. Additionally, while faculty members were open to sharing OERs, concerns about copyright and proper acknowledgment were noted. This indicates a supportive yet cautious approach towards the adoption and integration of OERs in their teaching practices.

Jhangiani et al. (2016) concluded that faculty members from discipline of institutions display uniform engagement with Open Educational Resources (OER). This tendency aligns with a faculty's openness, suggesting that a more open attitude enhances the tendency to modify and innovate with OER. The consensus among faculty is that OER has positive impact on student outcomes and teaching methodologies which is widely acknowledged, underscoring OER's role in enhancing academic experiences. Furthermore, a significant majority faculty members' have recognized OER's potential in saving cost of students' expenditure.

Perryman & Seal (2016) conducted a study to explore the utilization and perceptions of Open Educational Resources (OER) in India. It found that despite facing significant technical and structural barriers, Indian educators are highly engaged with OER, notably in creating resources and using creative commons licenses more extensively than their peers in developed countries. Educators in India also demonstrate a strong belief in the educational benefits of OER, often using them to enhance their teaching methods and professional development.

Delimont et al. (2016) found that faculty members involved in Kansas State University's Open/Alternative Textbook initiative generally had positive attitudes towards using Open Educational Resources (OER). They reported a preference for teaching with OER over traditional textbooks. Faculty members observed that student learning was somewhat better with OER and found it easier to teach using these resources compared to traditional textbooks. Almost all faculty members expressed a preference for

continuing to use OER after the funding period ended, underscoring their support for the initiative and its perceived benefits for student savings and educational outcomes.

Panda and Santosh (2017) revealed that the faculty members highly valued the concept of sharing resources within academic institutions. This study underscores the faculty's positive stance towards the openness movement in education, emphasizing the importance of institutional support and policy development for harnessing the full potential of OER.

Cote (2017) found that community college faculty shared similar attitudes, knowledge and use of OER with their national peers, prioritizing the cost of course resources significantly more. Awareness of OER was linked to familiarity with its features and licensing. Although motivated to enhance affordability for students, faculty readiness for OER adoption was limited.

Anderson et al. (2017) surveyed engineering faculty and instructors at Washington State University and the University of Idaho to understand their perceptions of Open Educational Resources (OER). The survey revealed that a significant portion of the respondents (59%) reported little to no familiarity with OERs. Those familiar with OERs had mixed feelings about their quality and suitability for engineering courses, often citing concerns about the need for course customization and the clarity of the process for adapting OERs. The study indicates that while there is interest in OERs among engineering faculty, there is a need for more targeted educational efforts to increase familiarity and address concerns about quality and customization.

Mishra & Singh (2017) explored the perceptions of higher education teachers in India towards Open Educational Resources (OER). It found that despite a relatively low level of awareness prior to the study, teachers expressed very positive attitudes towards creating and sharing OER. Teachers were cautiously optimistic about OER quality, indicating they would use OER that met their needs despite concerns about quality assurance. The study highlights the importance of raising OER awareness among faculty and suggests that institutional policies and support could significantly influence the adoption and development of OER.

Martin (2018) investigated the experiences of faculty at Brigham Young University as they navigate the adoption and adaptation of Open Educational Resources (OER). The research highlights faculty's desire to use OER primarily to alleviate the financial burden on students. Despite this intention, faculty members encounter several challenges in the process, including a lack of understanding about where to find quality OER and the tools needed for its adaptation. The study suggests that while there is a genuine interest in leveraging OER for the benefit of students, significant gaps in knowledge and resources exist among faculty regarding the effective utilization of OER. The study calls for future research to focus on simplifying the process of finding and customizing OER to make it a more viable alternative to traditional textbooks.

Padhi (2018) presented that faculty attitudes towards OER were influenced by performance expectancy and effort expectancy, both of which had positive impacts on their intentions to use OER. These findings suggest that faculty believe OER can enhance course development, teaching outcomes and provide broader access to resources. However, the study also highlighted significant challenges, notably social influence and facilitating conditions, which did not positively impact the faculty's intention to use OER. This indicates a lack of institutional support and resources, which hampers the effective integration of OER in teaching.

Pande et al. (2019) stated that faculty members displayed a strong positive attitude towards sharing OER, appreciating the professional networking and collaboration it facilitated. They felt that sharing their educational resources was a responsibility and found satisfaction when others adopted or adapted their materials. Faculty attitudes towards adaptation and use of OER were also positive,

recognizing the utility of OER in various learning scenarios and appreciating the flexibility and accessibility of OER, which supports diverse learning needs and styles. Overall, the study indicated a supportive attitude towards OER among faculty, coupled with a recognition of its potential to enhance teaching and learning through increased accessibility and customization of educational materials.

Tlili et al., (2019) revealed a significant and ongoing commitment to the adoption of Open Educational Resources (OER) within China. The findings highlighted that both faculty members and institutional leaders have shown a positive attitude towards OER. Faculty members recognize the benefits of OER in enhancing educational accessibility and quality and they actively participate in initiatives to develop and share OER. Moreover, institutional support, including government and university policies, has played a crucial role in promoting the use of OER across educational platforms. The overall attitude towards OER in China is one of strong support, with a recognition of its potential to transform educational practices through increased access and innovation.

Tipton (2020) undertaken a study to investigate the factors leading faculty to use Open Educational Resources (OER) and their relation to teaching behaviours. The survey reported that attitude, subjective norms and perceived behavioural control significantly predicted the use of OER in preparing for instruction and reflective practices. Further, study found that while these factors are significant predictors of OER usage in preparation and reflection, they explained a relatively low variance, indicating other unexplored factors might influence OER adoption. This suggests a need for interventions to support faculty in transformative teaching with OER and highlights the importance of understanding the specific attitudes and factors that encourage faculty to adopt OER.

Martin & Kimmons (2020) reported that Faculty members expressed a strong motivation to use OER to alleviate the financial burden on students and to enhance pedagogical effectiveness. However, they faced significant barriers including concerns about the quality of OER, copyright issues, technical challenges and sustainability of resources. Despite a general willingness to adopt OER, these concerns often stymied actual implementation. The study highlights the need for better institutional support, clearer information about quality assurance and more robust technological tools to facilitate the adoption and creation of OER among faculty members.

Gamit (2021) revealed that a high level of satisfaction with OAR is reported, with 68.4% of faculty members satisfied and 24.6% highly satisfied. Faculty are well aware of various open access outlets, especially Google and Google Scholar. The findings emphasize the crucial role OAR play in supporting faculty in teaching, research and continuous learning. The study suggests a need for regular updates on genuine sources of OAR and advocates for a unified platform providing information on various categories of OAR, highlighting their importance in research and knowledge enhancement.

Shemy et al. (2021) conducted study to investigate the impact of an OER-based training program on teachers' professional development and attitudes. The findings demonstrated a significant positive effect of OER platforms on enhancing teachers' knowledge and teaching skills. This positive attitude suggests that OER environments, rich in knowledge and cooperative activities, are appreciated for their role in supporting continuous professional development and self-learning among teachers.

Lantrip & Ray (2021) found that the majority of faculty perceived Open Educational Resources (OER) positively and modified these resources during the adoption process to better align with their instructional practices. Faculty experienced changes in their teaching methods post-adoption, indicating a shift towards more dynamic and engaged learning environments. Overall, faculty believed their efforts positively impacted students by increasing access to education, reducing costs and enhancing engagement. The study suggests that effective OER adoption is significantly influenced by comprehensive institutional support, including the provision of resources for OER customization and ongoing professional development.

Behera et al. (2021) investigated the perceptions of secondary school teachers toward the use of OER in education. The findings indicate a favourable attitude among teachers towards OER. It was observed that teachers recognize the potential of OER to enhance the quality and accessibility of educational materials at minimal costs, thus contributing to a more equitable education system. The study found no significant differences in attitudes towards OER based on gender or academic stream (arts or science), suggesting a uniform acceptance across different demographics. This positive outlook is attributed to the ability of OER to provide high-quality instructional material and support reflective teaching practices, which are crucial in educational reforms.

Otto (2021) found that individual attitudes, driven significantly by feelings and emotions towards the core ideas and values of OER, strongly influence their intentions and behaviours regarding OER usage. The study reveals that while faculty members are emotionally driven to adopt OER, their actual engagement and the depth of usage correlate with their level of knowledge about OER. This knowledge impacts their ability to use, share and even modify OER effectively in their teaching and professional practices.

Otto (2021) explored the perceptions of experienced OER users in higher education in Germany, particularly their attitudes towards different measures to increase OER use. The findings indicated a preference for support and incentives over compulsory measures. The faculty favoured offering free legal advice, developing a cross-institutional meta search engine for OER and funding programs for creating OER as the top measures. These were perceived to address major barriers such as legal uncertainty and the difficulty of finding suitable OER, thus potentially enhancing the adoption and effective use of OER in teaching.

Tlili et al. (2022) revealed that while personality traits did not significantly impact educators' attitudes towards OER, they had a substantial effect on their intention to use OER. Specifically, the traits of extraversion, agreeableness and openness were positively associated with a higher intention to utilize OER. This suggests that educators who are more extroverted, agreeable and open are more likely to engage with and adopt OER in their teaching practices.

Baas et al. (2022) stated that faculty perceptions towards OER. Faculty exhibited a nuanced understanding, generally positive attitudes and recognized the pedagogical value of OER for curriculum integration. They assessed OER based on content relevance, design, usability and engagement, favouring resources that fit their teaching context and enhanced student interaction. The study highlighted the importance of institutional support and suggested that dialogue among faculty during curriculum reforms could enhance OER understanding and adoption.

Bello et al. (2022) explored faculty attitudes and the factors influencing the use of OER. Key determinants identified included performance expectancy, effort expectancy, social influence and facilitating conditions. The study found that these factors collectively influenced lecturers' attitudes towards using and sharing OER, shaping their behavioural intentions in significant ways. Faculty members recognized the potential benefits of OER in enhancing their teaching performance and broadening access to educational resources.

Karipi et al. (2022) found that faculty members, despite recognizing the potential of OER to cut educational costs and enhance access, have not fully implemented OER in their teaching. Faculty attitudes towards OER were generally positive, acknowledging its role in broadening access to higher education. However, the actual use of OER within the institutions was limited, with various challenges impeding adoption at the institutional level.

Marín et al. (2022) explored faculty attitudes and the factors influencing the use of OER. Key determinants identified included performance expectancy, effort expectancy, social influence and

facilitating conditions. The study found that these factors collectively influenced lecturers' attitudes towards using and sharing OER, shaping their behavioural intentions in significant ways. This indicates a generally positive but conditional attitude towards OER, contingent on support and practicality in their academic environments.

4. Discussion and Conclusion

The studies reviewed provide a comprehensive examination of faculty attitudes towards Open Educational Resources (OER) across various global contexts. Despite variations in geographical and institutional settings, several common themes and challenges emerge, highlighting both the potential benefits and barriers to the adoption of OER.

4.1 Positive Attitudes and Recognized Benefits

Consistently, studies demonstrate a generally positive attitude towards OER among faculty. For instance, Karunanayaka (2012) found that Sri Lankan educators who were familiar with OER had positive attitudes towards them, recognizing the practical benefits such as enhancing reputation and saving time and money. Similar sentiments were echoed by Rolfe (2012), who noted that faculty were driven by the belief in the value of open education and potential reputation enhancements. This positivity is further supported by Hussain et al. (2013) in the context of Pakistani academia, where OERs are appreciated for facilitating access to instructional materials and innovations. Ganapathy et al. (2015) and Jhangiani et al. (2016) highlighted the high engagement and positive impact of OER on teaching methodologies and student outcomes, indicating a wide acknowledgment of OER's role in enhancing academic experiences. The study by Delimont et al. (2016) also reported a preference for OER over traditional textbooks, underlining perceived benefits for student learning and cost savings.

4.2 Barriers to Adoption

Despite the favourable perceptions, several significant barriers to OER adoption were consistently reported. Rolfe (2012) identified copyright issues and lack of IT support as major hurdles. Similarly, Cote (2017) pointed out limited faculty readiness due to concerns about copyright and acknowledgment. These findings suggest a need for better institutional support and clearer information about copyright and quality assurance to facilitate adoption, (Martin and Kimmons, 2020). Anderson et al. (2017) highlighted another barrier concerning the quality and suitability of OER for specific disciplines like engineering, which suggests a need for more targeted educational efforts to address concerns about quality and customization.

4.3 Institutional Support and Policy

Several studies underscore the importance of institutional support and policy development in harnessing the potential of OER. Panda and Santosh (2017) emphasized the need for policy development to support OER adoption. The findings from Tili et al. (2019) and Lantrip & Ray (2021) further corroborate the crucial role of institutional support, including policy frameworks and resources for OER customization, in promoting effective adoption and integration of OER.

4.4 Knowledge and Awareness

Knowledge and awareness of OER also play a critical role in faculty engagement with OER. As Martin (2018) noted, significant gaps in knowledge and resources exist among faculty regarding the effective utilization of OER. Otto (2021) further discussed how individual attitudes and knowledge about OER significantly influence their usage and modification in teaching practices.

In sum, while there is a generally positive attitude towards OER across different studies and contexts, their adoption and effective integration are hindered by a range of challenges. These include copyright concerns, lack of IT support, quality assurance issues and the need for more profound institutional support and clearer policies. Addressing these barriers could enhance the broader sharing and adoption of OER practices, ultimately benefiting educational systems globally. To move forward, it is essential for institutions to invest in training and resources that increase faculty familiarity with OER and to develop policies that support open educational practices.

5. Suggestions for Future Research Studies on OER

Given the findings and insights gleaned from the diverse studies on Open Educational Resources (OER), there are several promising directions for future research. Addressing the identified gaps and extending the understanding of OER adoption and its implications can further enhance educational practices globally. Here are several suggestions for future research studies:

1. Quality Assurance and OER Suitability: The concerns about the quality and suitability of OER, especially in specialized fields like engineering (Anderson et al., 2017), suggest a need for more detailed investigations into the standards and evaluation processes for OER. Future research could focus on developing quality assurance frameworks that are applicable across various disciplines. This research could involve: 1) Developing and testing quality assessment tools specific to different academic disciplines; 2) Case studies on the adaptation and use of OER in less commonly covered fields to provide models of best practices.

2. Institutional Support and Policy Development: As highlighted by Panda and Santosh (2017) and Tlili et al. (2019), institutional policies play a crucial role in the adoption of OER. Future studies could explore: 1) Comparative studies of institutional policies across different regions or educational systems to identify effective strategies for OER integration; 2) Impact analysis of specific policy interventions on OER adoption rates and educational outcomes.

3. Faculty Readiness and IT Support: With the noted barriers related to copyright issues and lack of IT support (Rolfe, 2012; Cote, 2017), research could investigate: 1) The specific IT competencies needed for faculty to effectively use and contribute to OER; 2) Intervention studies that test the effectiveness of targeted training programs on increasing faculty engagement with OER.

4. Behavioural Intentions and Psychological Factors: Otto (2021) provided insights into the emotional and psychological aspects influencing OER usage. Future research can delve deeper into: 1) Psychological drivers that motivate or deter faculty from using OER, using frameworks like the Theory of Planned Behaviour; 2) Longitudinal studies to track changes in attitudes and behaviours towards OER over time as exposure increases.

5. Impact of OER on Student Outcomes: While Jhangiani et al. (2016) discussed the positive impacts on student outcomes, there is room for more robust, empirical studies that quantify these effects. Future research could focus on: 1) Comparative studies between courses using OER and traditional resources to measure differences in student performance and engagement.; 2) Meta-analyses of existing studies to aggregate findings on student outcomes related to OER use.

These suggested future research topics not only build on the findings from existing studies but also aim to address the complexities and challenges of implementing OER effectively across diverse educational landscapes.

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