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Academics' Intentions to Use Open Educational Resources (OERs) in Professional Development

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Abstract:

Introduction: Open educational e-resources (OERs) are one of the informational resources that are openly available to all. Open educational e-resources provide learners with free access to high-quality educational content and materials. Learners should be able to use, read, adapt, and share these resources freely. In this study, we aimed to examine academics' open educational e-resources usage intentions. We also tried to understand behavioral differences by collecting data from two different countries: Turkey and the United Kingdom.

Methods: The study employed a cross-sectional approach, which is one of the quantitative research designs. In cross-sectional studies, several variables (characteristics, behavior, attitude, etc.) are measured simultaneously. Data were collected using a questionnaire based on the quantitative research paradigm. In order to address the research problem, the two researchers of the current study developed this questionnaire based on field expert opinion, a literature review, and from the researchers' experiences. The questionnaire was initially developed in Turkish and then translated into English. In the current study 67 participants from Turkey and 18 from the United Kingdom have answered all the items of the questionnaire.

Results: In this study, the academics were found to be more inclined to use existing resources (81.39% for Turkey, 72.72% for the United Kingdom) than to generate e-resources of their own (47.67% for Turkey; 50% for the United Kingdom). The frequency for the usage of open educational e-resources for Turkey is 97 and 6 for the United Kingdom. The frequency number of open educational e-resources per participant from the United Kingdom averaged as less than one. Similarly, academics did not find beneficial the use of social media

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(frequencies for Turkey and the United Kingdom is 136 and 45) and video-hosting sites (frequencies for Turkey and the United Kingdom is 93 and 31). We can see that the academics expressed benefitting from e-resources whilst preparing new content ($\bar{X}_{TR}$=1.12, 82.09%; $\bar{X}_{UK}$=0.78, 77.78%, respectively) or enriching current content ($\bar{X}_{TR}$=1.25, 88.06%; $\bar{X}_{UK}$=0.94, 83.33%, respectively); engaging existing content ($\bar{X}_{TR}$=1.10, 80.60%; $\bar{X}_{UK}$=0.89, 72.23%, respectively) or for preparing interactive course content ($\bar{X}_{TR}$=0.73, 74.63%; $\bar{X}_{UK}$=0.94, 83.33%, respectively). The participant academics from Turkey generally reported finding e-resources to be useful in the long term ($\bar{X}_{TR}$=1.13, 83.59%), and think that they will contribute to their interdisciplinary studies ($\bar{X}_{TR}$=0.81, 71.64%). Like the academics in Turkey, academics from the United Kingdom reported finding e-resources to be useful in the long term ($\bar{X}_{UK}$=0.67, 66.67%). The academics from both countries stated that if they had more time ($\bar{X}_{TR}$=1.13, 80.59%; $\bar{X}_{UK}$=1.11, 83.34%, respectively), and if e-resources were customized more according to their needs ($\bar{X}_{TR}$=0.61, 64.18%; $\bar{X}_{UK}$=0.44, 55.56%, respectively), and they had a basic level of technology literacy ($\bar{X}_{TR}$=0.76, 68.66%; $\bar{X}_{UK}$=0.89, 68.34%, respectively), they would likely use and benefit from e-resources more frequently.

Discussion: Being familiar with open educational e-resources positively affects attitudes towards open educational e-resources; therefore, academics should be encouraged to become better acquainted with the development of open educational e-resources. However, academics are ready to use and develop open educational e-resources. Managers could help to incentivize academics in this regard. In the current study, open educational e-resources preferences seem quietly low. We can especially say that the academics from the UK stated that they rarely use open course materials to learn something. It may be necessary to increase the general awareness of academics about OERs for social media and video-hosting sites as they are among the less preferred OERs. In short, the habits of academics to use OERs can vary culturally. When we compare the results for the two countries, we can say that academics from Turkey have a more positive view of using e-resources for learning purposes compared to those from the UK. Academics from both countries find the use of e-resources useful in the long term, but especially participants from the UK have neither positive nor negative opinions (approximately 50%) about utility perceptions in terms of means of working interdisciplinary, contributing their career, getting certificates, enhancing their professional recognition, making different them from their colleagues, and increasing their level of professional satisfaction. When the necessary conditions are met, academics tend to use e-resources more, and they do not overestimate the problems they face, such as the language barrier.

Limitations: As one of the limitations of the current study, the data collected from the United Kingdom was considerably less than that collected from Turkey. Despite periodic reminders having been sent out with regards to the data collection form to academics working in the United Kingdom, only 41 instructors intended to answer the form and only 18 of those gave answers to all items of the questionnaire.

Conclusions: This research study has shown that academics both intend to and utilize educational e-resources (including open educational e-resources) for the purposes of their own professional development; however, the results of the study have also revealed the need to increase usage more widely in this area. The current study has shown that academics working in Turkey had slightly higher e-resource usage than those working in the United Kingdom. Additionally, it can be said that the open educational e-resources usage intentions of the academics from Turkey was higher as well. Whilst the results of this study are not generalizable due to the limited sample size, academics' open educational e-resources usage intention is a promising topic of study for the future. Furthermore, it is clear that educational e-resources could be more widely employed for the purposes of professional development, regardless of the country or level of education.

Key words: open educational resources, higher education, academics' professional development, educational e-resources.

Introduction

Providing access to learning regardless of age and position in society, with the use of new information and communication technologies, emerges as a priority at every stage of life and brings new possibilities (Simándi, 2018). One of the most important skills that 21st-century individuals are expected to possess is the ability to use information technologies in order to research, evaluate, organize, and relate qualified information that is necessary for them to know from a wide variety of informational resources available via the Internet (P21, 2019). Open educational e-resources (OERs) are one such informational resources that are openly available to all, and can be utilized as a good solution to meet the increasing informational needs of today's individuals.

The term OERs was first defined by UNESCO 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" (UNESCO, 2002, p. 24). OECD (2007) then defined OERs as, "digitized materials offered freely and openly for educators, students, and self-learners to use and reuse for teaching, learning and research" (p. 97). Therefore, anyone can legally and freely access, copy, use, adapt, and re-share material from OERs (UNESCO, 2019).

Openness includes two important aspects: free availability, and as few restrictions as possible. When trying to reach or use an open resource, there should be no technical, financial, or legal permission barriers encountered (Hylén, 2006). OERs provide learners with free access to high-quality educational content and materials, and learners should be able to use, read, adapt, and share these resources freely (Hylén, 2006; Willems & Bossu, 2012).

However, Pawlowski and Bick (2012) stated that not all OERs are altruistic or non-commercial, and accordingly, they have considered the term as freely accessible resources but for educational purposes only.

Emergency Distance Education, which was exercised widely in response to the COVID-19 pandemic, deeply affected all segments of society, and especially affected were students and educational instructors. For institutions that were unprepared for distance education or had little or no prior experience, OERs were seen as a means for such institutions to freely access important support materials for direct use by their stakeholders. During this period, many institutions such as UNESCO and Creative Commons opened calls and organized websites to prepare OERs that could be shared with those in need (Creative Commons 2020; OER4Covid 2020). In addition, institutions such as digital libraries and publishers that offered paid access to their digital content changed their services in order to support public access to OERs and to other resources during the initial pandemic lockdown period, with numerous materials made available free of charge (Schaffhauser, 2020).

As a broad term, "learners" includes not only enrolled students, but also any individuals who are willing to learn. People from any profession might take advantage of OERs as a learner for the purposes of driving their own personal and professional advancement. In the published literature, it is possible to locate various research studies based on the use of OERs by those employed in many fields.

Kitching, Winbolt, MacPhail, and Ibrahim (2015) conducted a study with managers and other high-level clinical and executive staff. According to the researchers, staff and managers were seen as cautious about the use of social media for the purposes of professional development. Social media offer certain advantages such as contemporary information that is delivered rapidly and in varying formats yet has several obstacles such as issues surrounding the credibility of information, potential misinterpretation, sector demographics, and time constraints. Many of the study's participants preferred formal e-learning platforms to web-based social media applications.

Academics involved in the teaching profession can utilize OERs for the purposes of both their own professional development and also for teaching purposes. In their research, Manca and Ranieri (2016) applied a questionnaire to academics throughout Italy, and determined that academics of any age used social media for both personal and professional purposes, and that it was the academics rather than teaching practitioners who used social media for these dual purposes.

Ozdemir and Bonk (2017) conducted a study on the use of OERs in professional development and education. The researchers aimed to determine Turkish teachers' awareness of OERs, and their perceptions of the opportunities and difficulties in using such resources in teaching. The researchers collected data

through both questionnaires and interviews. At the end of their study, they determined that the time required to search for, select, edit, and apply OERs presented enormous challenges in their usage.

Donelan (2016) also determined that lack of time is an obstacle to the use of OERs for business or professional purposes. According to the study conducted with academics from the UK's Open University, the factors that motivated academics to use social media were stated as the encouragement of colleagues, self-development, maintaining networks, and widening networks. The more academics saw the positive outcomes of social media usage including career progression, the more motivated they were to use social media.

One of the social media platforms that can make use of OERs is Twitter. Carpenter and Krutka (2015), in their study conducted with K-16 teachers, found that teachers used Twitter for professional development rather than communication with other teachers or with their families. Twitter enables teachers to access novel ideas and to maintain their awareness regarding current innovations, trends, and advantages in education; especially those related to educational technologies. In addition, teachers can reach their colleagues with similar or new ideas via Twitter.

Tour (2017) determined how teachers use personal learning networks for professional development by working in-depth with three teachers. As a result of the study, it was seen that teachers used personal networks for information acquisition, aggregation, cooperation, collaboration, reflection, and for socialization. The researcher of the current study is of the opinion that in order to provide education through digital technologies, teachers should continue to maintain their professional development and that this is possible through personal learning networks. Prestridge (2017) found that teachers are using the existing knowledge instead of contributing to co-created knowledge within online professional development platforms.

Anderson, Gaines, Leachman, and Williamson (2017) examined the opinions of faculty members towards OERs. According to their study, faculty members had certain concerns about the quality, sustainability, and availability of OERs. Similarly, Hylén (2006) stated that faculty members were willing to share their resources, yet stated that they worried about how this could be done without losing their rights (Hylén 2006). In fact, whilst academics may not be far off from the usage and development of OERs, they may need some encouragement in this respect. For example, Todorinova and Wilkinson (2020) gave academics OER production courses in return for financial incentives and found that such courses were successful. However, they also determined that the incentives provided could be increased, and that the faculty members should be better supported by both their institutions and their libraries in developing OERs.

Anderson, Gaines, Leachman, and Williamson (2017) stated that in cases where the use of OERs as course content alone is insufficient, academics may think that OERs can be used at least to meet the supplemental material needs of their students. In addition, instructors need to continuously improve and update themselves in professional terms, and OERs offer a wide range of opportunities to faculty members as well as everyone else. Therefore, it is considered necessary to examine how well instructors are aware of these types of resource, and to study their thoughts on using them.

Zancanaro, Todesco, and Ramos (2015) examined 544 studies that were based upon OERs in a bibliometric study. According to the results of their research, the number of studies conducted in the field of OERs is increasing rapidly on an annual basis. The institution that has made the biggest single contribution to this increase has been the UK's Open University. Although the Netherlands and Spain follow the UK, it has also been observed that Anadolu University, a Turkish University and one of the world's largest open universities with more than three million students, was not included in the scope of their study. However, since 2006, the Turkish Academy of Sciences (TÜBA) has pioneered studies regarding OERs in Turkey. Although these recent studies may still lag behind the rest of the world, systematic studies continue to be conducted in many Turkish universities besides Anadolu University (Baysal, Çakır, & Toplu, 2015).

The major motivation for the researchers of the current study was to research academics' usage intentions of OERs. In addition, the aim was also to compare the usage intentions of OERs of academic colleagues in two different countries based on two of the world's largest open universities.

1 Method

This section presents information about the research model, research sample, data collection tools, and data collection process of the study.

1.1 Model

The study employed a cross-sectional approach, which is one of the quantitative research designs. In cross-sectional studies, a number of variables (characteristics, behavior, attitude, etc.) are measured simultaneously (Büyüköztürk, Kılıç-Çakmak, Akgün, Karadeniz, & Demirel, 2011). Cross-sectional studies can be defined as an observational study that collects data on a particular subject from different participants at the same time (Cohen, Manion, & Morrison, 2013; Knowland, Purser, & Thomas, 2015). In the current study, data were obtained from participants in different countries, and the existing situation was revealed without need for manipulation.

1.2 Data collection tool

In order to address the research problem, the two researchers of the current study developed a questionnaire based on field expert opinion, a literature review, and from the researchers' experiences. The questionnaire was initially developed in Turkish and then translated into English for application in the two target countries. First, the questionnaire was translated from Turkish to English by two of the study's researchers, who are both Turkish. This translation was then checked by two English native subject-matter experts. The controlled questionnaire was then translated back into Turkish by two experts who spoke English as near-native speakers, but whose mother tongue was Turkish in accordance with the measurement tool adaptation rules. The back-translation result was then compared to the original version of the Turkish form. Since the meanings of the items were found to be similar, it was decided that the English version of the questionnaire was fit for use. The data collection tool was prepared electronically, and then sent to the academics who formed the study group of the current research. The questionnaire consists of two parts: in the first part, there are questions about the status and frequency of using OERs for educational purposes; in the second part, there are 42 items in 5-point Likert-type regarding the intention of academics to use OERs.

1.3 Sample

Data were collected from academics working in the UK and in Turkey. The sample was determined through an appropriate sampling method, which was based on time, money, location, and the availability of the location or respondents (Merriam 2015; Patton 2014). In total, 86 responses (89%) were received from Turkey, and 22 (54%) from the UK. Data were collected using the same method during the same period in Turkey and also in the UK. However, whilst 41 academics in the UK answered the questionnaire, only 22 completed all the questions given in the first part of the questionnaire. Meanwhile, data loss for the Turkish sample was limited to only 11 participants for the first part. So, Tables 1-13 are presented according to 86 responses from Turkey, 22 responses from the UK. However, since there was no inferential analysis included in the study, the difference between the number of participants in each country was considered not to pose a problem in terms of the data analysis. Distribution of the participants by country is shown in Table 1.

Table 1

Distribution of participants by country

Country	*f*	*%*
Turkey	86	79.6
UK	22	20.4
Total	108	100.0

When Table 1 is analyzed, we see that 79.6% of the academics that participated in this research lecture in Turkey, and 20.4% lecture in the UK. Table 2 presents the distribution of the participants according to their university.

Table 2

Distribution of participants by university

Country	*University*	*f*	*%*
Turkey	Gazi University	40	37.0
Turkey	Ankara University	13	12.0
UK	Nottingham Trent University	11	10.2
UK	St Mary's University	4	3.7
Turkey	Necmettin Erbakan University	3	2.8
Turkey	Aydın Adnan Menderes University	2	1.9
Turkey	Kırşehir Ahi Evran University	2	1.9
Turkey	Hatay Mustafa Kemal University	2	1.9
Turkey	Karadeniz Teknik University	2	1.9
Turkey	Kırıkkale University	2	1.9
Turkey	Bozok University	2	1.9
UK	Newcastle University	2	1.9
Turkey	Ordu University	2	1.9
UK	University of Worcester	2	1.9
Both	Others[1]	18	0.9 (x18)

A total of six universities from the UK and 26 from Turkey contributed to the research. As researchers, we shared the questionnaire on our social media accounts. In addition, the UK-based researcher also distributed the questionnaire via e-mail. When compared to the UK, a greater number of academics from Turkey contributed to the study (see Table 2), which may be linked to the majority of researchers in this study being based in Turkey.

[1] Contributors with one participant: 16 universities in Turkey and 2 in the UK.

2 Findings

2.1 Online teaching experience

Table 3

Online teaching experience (Yes/No)

Country	*Yes*	*Total*	*%*
Turkey	38	86	44.19
UK	12	22	54.55

Table 4

Online teaching experience by country (average in years)

Country	$\bar{X}$	*SS*
Turkey	5.13	4.61
UK	5.80	6.43

When Table 3 is examined, the online teaching experience of academics working in the UK (54.55%) was seen to be slightly higher than those in Turkey (44.19%). However, when asked how many years the academics had been teaching online, the average of the two groups was much closer together (see Table 4).

2.2 Experience in utilizing/developing e-resources for educational purposes

Table 5

Experience of utilizing and developing e-resources for educational purposes (Yes/No)

Experience	*Country*	*Yes*	*Total*	*%*
Utilizing	Turkey	70	86	81.39
	UK	16	22	72.72
Developing	Turkey	41	86	47.67
	UK	11	22	50.00

Table 6

Experience in utilizing and developing e-resources for educational purposes (average years)

Experience	*Country*	$\bar{X}$	*SS*
Utilizing	Turkey	9.26	5.89
	UK	9.60	6.20
Developing	Turkey	6.85	5.78
	UK	6.91	5.72

When Table 5 and Table 6 are analyzed together, it can be seen that, when compared to the study's participants from the UK, those working in Turkey benefit more from e-resources; however, approximately half of the participants from both groups have some experience in the development of e-resources. Notably, the experience of the participants in using e-resources was shown to be much more than their e-resource development experience. When we look at the number of years of utilization and development of e-resources, it can be seen that no significant difference exists between the groups. Additionally, it can be said that the groups' experiences of benefiting from e-resources are greater than their e-resource development experience, which may be interpreted as the academics gain experience of using e-resources before developing e-resources.

2.3 Experience of open course materials

Table 7

Using open course materials (Yes/No)

	Usage status			*Usage time (years)*	
Country	*Yes*	*Total*	*%*	$\bar{X}$	*SS*
Turkey	57	86	66.28	4.93	2.76
UK	9	22	40.91	3.67	1.15

Table 8

Number of open courses followed for educational purposes

Country	$\bar{X}$	*SS*
Turkey	4.74	7.81
UK	1.86	3.05

According to Table 7, the academics based in Turkey used open course materials more and for longer than those in the UK. Looking at Table 8, it is seen that the average number of open courses followed by academics in Turkey is higher.

However, it cannot be said that the percentage of OER usage by academics in both groups was high. The open course materials platforms used by the academics are given in Table 9.

Table 9

OERs used by country

OERs	Country				Total	
	Turkey		UK			
	F	%	*f*	%	*f*	%
MIT Open Courseware	28	28.87	1	16.67	29	28.16
TÜBA OERs	23	23.71	0	0.00	23	22.33
WikiEducator	9	9.28	2	33.33	11	10.68
UNESCO	9	9.28	0	0.00	9	8.74
OECD	8	8.25	1	16.67	9	8.74
OER Handbook	2	2.06	0	0.00	2	1.94
Coursera	2	2.06	0	0.00	2	1.94
METU OCW	2	2.06	0	0.00	2	1.94
Other[2]	18	14.42	2	33.33	20	47.75
Total	97	100.00	6	100.00	103	100.00

The questionnaire included a number of suggested OERs, namely MIT Open Courseware, Hewlett Foundation, OECD, UNESCO, Cape Town Declaration, WikiEducator, OER Handbook, OER Commons, TÜBA (Turkish Academy of Sciences) OERs, plus participants were able to add other OERs themselves. When Table 9 is examined, it can be seen that the three most utilized OERs were MIT Open Courseware, TÜBA OERs, and WikiEducator. Those OERs platforms with a frequency of one were grouped in Table 9 under the title of "others." Whilst 86 participants from Turkey stated a total of 97 OERs ($\bar{X}$ = 1.13 OERs), 22 from the UK stated just six OERs ($\bar{X}$ = 0.28 OERs). Although Coursera is actually a massive open online course (MOOC), two of the participants described it as an OER. Looking at the average in general, we can also say that the OERs followed by the participants are diverse. However, in comparing Table 11 and Table 13, it can be said that the academics from the UK use OERs much less than social media platforms and video-hosting sites.

[2] OER Commons, 4 Turkish Universities' OERs, 5 private and public Turkish institutions' OERs, 2 MOOCs Elsevier, AIMS LMS, some audio and video materials from various resources, Hewlett Foundation, Cape Town Declaration.

2.4 Social media experience

Table 10

Using social media for education (Yes/No)

		Usage status		*Usage time (years)*	
Country	*Yes*	*Total*	*%*	$\bar{X}$	*SS*
Turkey	37	74	50.00	7.27	3.61
UK	6	22	27.27	4,73	2.28

According to Table 10, the academics from Turkey have been using social media for educational purposes more and for longer than those in the UK. This situation is similar to that reported for open course materials (see Table 7). It can be said that the level of using social media for educational purposes was low for both groups.

Table 11

Social media sites used by country

	Country					
Social Media Platforms	Turkey		UK		Total	
	f	%	*f*	%	*f*	%
Facebook	23	16.91	9	20.00	32	17.68
Academia.edu & Google +	24	17.65	5	11.11	29	16.02
ResearchGate	21	15.44	7	15.56	28	15.47
Twitter	16	11.76	9	20.00	25	13.81
Wikipedia	21	15.44	2	4.44	23	12.71
LinkedIn	11	8.09	8	17.78	19	10.50
SlideShare	11	8.09	3	6.67	14	7.73
Instagram	6	4.41	1	2.22	7	3.87
Edmodo	2	1.47	0	0.00	2	1.10
Publon	1	0.74	0	0.00	1	0.55
Yammer	0	0.00	1	2.22	1	0.55
Total	136	100.00	45	100.00	181	100.00

When compared to Table 9, it can be seen that the range of social media sites used for educational purposes was considerably wider. It is especially striking that the frequency of OERs stated by academics working in the UK was six, whilst the frequency of social media platforms stated was 45. It is understandable that the use of social media, which is an integral part of daily life today, was considerably higher. As indicated in Table 9, the limited usage of OERs suggests that it may be necessary to increase the general awareness of academics about OERs.

2.5 Video-hosting sites experience

Table 12

Using video-hosting sites for education (Yes/No)

		Usage status		Usage time (years)	
Country	Yes	Total	%	$\bar{X}$	SS
Turkey	58	70	82.86	7.14	3.15
UK	10	20	50.00	7.10	3.78

According to Table 12, academics in Turkey use video hosting sites more than academics in UK. The average number of years of their usage of these sites for educational purposes was similar for the two groups. However, when interpreted together with the other findings of the research, it is seen that the participants use video-hosting sites more than OERs and social media platforms.

Table 13

Video-hosting platforms used for educational purposes by country

Video-hosting Platforms	Country				Total	
	Turkey		UK			
	f	%	f	%	f	%
YouTube	58	62.37	10	32.26	68	54.84
Dailymotion	17	18.28	17	54.84	34	27.42
Vimeo	15	16.13	2	6.45	17	13.71
Lynda.co	1	1.08	1	3.23	2	1.61
MEB EBA*	1	1.08	0	0.00	1	0.81
Panopto	0	0.00	1	3.23	1	0.81
TEDx	1	1.08	0	0.00	1	0.81
Total	93	100.00	31	100.00	124	100.00

* Education Information web platform: Turkish Ministry of National Education

When Table 13 is examined, it can be seen that the most used video-hosting sites are YouTube, Dailymotion, and Vimeo. Academics in the UK use Dailymotion more than YouTube, but YouTube is more frequently used by academics working in Turkey, which may just relate to cultural habits.

2.6 Academics' intentions to use online educational resources for professional development

To get data for academics' intentions to use online educational resources for professional development, the second part of the questionnaire was applied. When the data are examined, we see that only 67 participants from Turkey and

18 from the UK answered all the items in the second part of the questionnaire. In Table 14, we compared the intentions of academics in the UK and Turkey to use OERs for the purposes of professional development. Questions as shown in Table 14 were asked to the academics in random order. The questions are grouped and interpreted accordingly, as well as their answers used to achieve a total score used to help interpretation. As the questionnaire consists of 5-point Likert-type 42 questions for the second part, we give -2 points to Strongly Disagree; -1 to Disagree; 0 points to Neither agree or nor disagree; 1 to Agree and 2 to Strongly Agree. So average point for every item is 0. Since the participation rate of the items coded as agree and strongly agree are high, the percentages of these two values are added together while giving the percentages, and similarly, the percentages of the two values encoded as disagree and strongly disagree are also summed.

2.6.1 Collaboration and communication

Based on the results, we can say that both the majority of academics from Turkey ($\bar{X}_{TR}$=1.18, 88.06%) and the vast majority of academics from the UK ($\bar{X}_{UK}$=0.67, 66.67%) use educational e-resources for cooperation and communication with their colleagues. However, we can also say that academics from Turkey seem abstaining to take the initiative in undertaking new studies or projects with colleagues they met through educational e-resources ($\bar{X}$=-0.07, 32.84%). We can say that most of the academics from the UK ($\bar{X}_{UK}$=-0.61, 66.66%) have more negative views on the usage of the educational e-resources for cooperation and communication with their colleagues. In Table 5, we see that academics are mostly benefiting (for Turkey 81.39% and for the UK 72.72%) from these resources rather than developing (for Turkey 47.67% and for the UK 50.00%) educational e-resources themselves.

2.6.2 Learning

Academics from Turkey frequently make use of e-resources when learning a new topic ($\bar{X}_{TR}$=1.48; 92.54%); accessing a topic or subtopic ($\bar{X}_{TR}$=1.27, 88.06%); learning a new topic in a structured way ($\bar{X}_{TR}$=1.25, 86.57%); improving their technological knowledge and skills using educational e-resources ($\bar{X}_{TR}$=1.21, 88.06%); improving their field-specific knowledge and skills ($\bar{X}_{TR}$=1.12, 92.54%); and acquiring new knowledge and skills about areas other than their specialism ($\bar{X}_{TR}$=1.09, 85.08%). The academics from the UK just frequently make use of educational e-resources to access a topic or subtopic ($\bar{X}_{UK}$=0.94, 83.34%). However, the academics both from Turkey and the UK disagreed with the idea that new skills and knowledge cannot be gained through e-resources ($\bar{X}_{TR}$=-0.82; 71.64%, $\bar{X}_{UK}$=-0.67, 66.66%, respectively). When we compare the results for the two countries, we can say that academics from Turkey have a

more positive view of using e-resources for learning purposes compared to those from the UK.

2.6.3 Teaching

Academics also use e-resources to improve their teaching; academics from Turkey have tendency to use e-resources in observing how their colleagues teach ($\bar{X}_{TR}$=0.81, 77.61%) and have the idea that using educational e-resources changes their academic perspectives ($\bar{X}_{TR}$=0.60, 65.67%). In addition, according to Turkish academics benefiting from e-resources increases the teaching motivation ($\bar{X}_{TR}$=0.55, 64.18%). Academics from the UK have positive idea that using educational e-resources changes their academic perspectives ($\bar{X}_{UK}$=0.28, 66.67%). When the items in this heading are examined, it can be said that especially the academicians in the UK do not have a distinctly negative or positive approach.

2.6.4 Preparing course content

In terms of developing course content, which is one of the dimensions of teaching, we can see that the academics benefit from e-resources while preparing new content ($\bar{X}_{TR}$=1.12, 82.09%; $\bar{X}_{UK}$=0.78, 77.78%, respectively) or enriching current content ($\bar{X}_{TR}$=1.25, 88.06%; $\bar{X}_{UK}$=0.94, 83.33%, respectively); engaging existing content ($\bar{X}_{TR}$=1.10, 80.60%; $\bar{X}_{UK}$=0.89, 72.23%, respectively) or for preparing interactive course content ($\bar{X}_{TR}$=0.73, 74.63%; $\bar{X}_{UK}$=0.94, 83.33%, respectively). When the items under this heading are examined, the percentages being higher than the other headings can be interpreted as a natural result of content preparation.

2.6.5 Utility perception

The participant academics from Turkey in this study generally reported that they find e-resources to be useful in the long term ($\bar{X}_{TR}$=1.13, 83.59%), and think that they will contribute to their interdisciplinary studies ($\bar{X}_{TR}$=0.81, 71.64%). Like the academics in Turkey, academics from the UK reported that they find e-resources to be useful in the long term ($\bar{X}_{UK}$=0.67, 66.67%). In general, under this heading, academics from both countries find the use of e-resources useful in the long term, but especially participants from the UK have neither positive nor negative opinions (approximately 50%) about utility perceptions in terms of means of working interdisciplinary, contributing their career, getting certificates, enhancing their professional recognition, making different them from their colleagues, and increasing their level of professional satisfaction.

2.6.6 Obstacles and enablers

The academics from both countries stated that if they had more time ($\bar{X}_{TR}$ = 1.13, 80.59%; $\bar{X}_{UK}$=1.11, 83.34%, respectively), and if e-resources were customized more according to their needs ($\bar{X}_{TR}$=0.61, 64.18%; $\bar{X}_{UK}$=0.44, 55.56%, respectively), and they had a basic level of technology literacy ($\bar{X}_{TR}$=0.76, 68.66%; $\bar{X}_{UK}$=0.89, 68,34%, respectively), they would likely use and benefit from e-resources more frequently. According to the Turkish academics, the fact that e-resources are paid is not considered as a major obstacle ($\bar{X}_{TR}$=-0.93, 73.13%). While the academics from the UK preferred not to use e-resources prepared in a language other than their own ($\bar{X}_{UK}$=1.22, 77.77%), the academics from Turkey consciously used resources prepared in a foreign language ($\bar{X}_{TR}$=-0.42, 53.74%). The reason for this may well be that academics whose native language is English have no need for resources in other languages due to the large number of e-resources available in English. It is seen that the common views of the participants under this heading from both countries, when the necessary conditions are met, they tend to use e-resources more, and they do not overestimate the problems they face, such as the language barrier.

3 Discussion

In this study, the academics were found to be more inclined to use existing resources (81.39% for Turkey, 72.72% for the UK) than to generate e-resources of their own (47.67% for Turkey; 50% for the UK). Prestridge (2017) also determined that teachers tend to use existing resources rather than collaboratively produce online resources. However, Guo, Zhang, Bonk, and Li (2015) found that academics with previous online tutoring experience placed less emphasis on the challenges of developing OERs. Being familiar with OERs also positively affects attitudes towards OERs; therefore, academics should be encouraged to become better acquainted with the development of OERs.

Guo, Zhang, Bonk, and Li (2015) stated in their study that the factors that encourage academics to use OERs are not sufficient. However, academics are ready to use and develop OERs (Nkuyubwatsi, 2017) and MOOCs (Ab Jalil, Ma'rof & Omar, 2019).. Managers could help to incentivize academics in this regard; however, Kitching, Winbolt, MacPhail, and Ibrahim (2015) determined that managers are cautious about the usage of e-resources for professional development. Todorinova and Wilkinson (2020) offered financial incentives to academics in order to develop OERs and identified certain positive effects from offering such an incentive.

In the current study, OERs preferences seem quietly low. The frequency for the usage of OERs for Turkey is 97 and 6 for the UK. We can especially say that the academics from the UK stated rarely using open course materials to learn

something, so much so that the frequency number of OERs per participant averaged as less than one. Similarly, academics did not find beneficial to use the social media (frequencies for Turkey and the UK is 136 and 45) and video-hosting sites (frequencies for Turkey and the UK is 93 and 31). Chugh, Grose, and Macht (2020) also determined that academics used social media mostly to disseminate their own research and for personal reasons, but that most of the academics did not use social media for teaching purposes. Similar results were obtained in the current study.

Social media can contribute to the recognition of academics (Mazurek, Górska, Korzyński, & Silva 2020), and academics' usage of social media for personal reasons and for their own professional development is one of the results encountered in the published literature (Manca & Ranieri 2016). Still, the use of social media for teaching purposes by academics could be increased significantly. On this, Mustafa, Taha, Alshboul, Alsalem, and Malki (2020) determined that 83.9% of medical students used the YouTube platform for learning purposes.

If academics had a basic level of technology literacy ($\bar{X}_{TR}$=0.76, 68.66%; $\bar{X}_{UK}$=0.89, 68.34%, respectively), they would likely use and benefit from e-resources more frequently. Conversely, according to Atenas, Havemann, and Priego (2015), the educational value of Open Data appears to be an important component of research and scenario-based activities, where its distribution can improve communication and digital literacy and support the development of critical, analytical, collaborative and civic skills. Therefore, as the OER of Open Data, it can enable cooperation, discussion and participation mechanisms with local communities for their global citizens. The effect of having a lack of time, as was determined in the current study, has also been demonstrated in other studies (e.g. Donelan 2016; Ozdemir & Bonk 2017). However, COVID-19 has actually revealed the potential of OERs in saving academics considerable time, with OERs frequently used to maintain education during the COVID-19 period (Bozkurt, Jung, Xiao, Vladimirschi, Schuwer, Egorov et al., 2020; Zhou & Li 2020).

Conclusions, limitations and suggestions

This research study showed that academics use and intend to use educational e-resources (including OERs) for the purposes of their own professional development; however, the results of the study have also revealed the need to increase usage more widely in this area. In addition, academics make more use of existing resources and shy away from cooperation and the potential production of their own OERs. As stated in the literature, it would be useful to encourage academics in this regard.

The current study has shown that academics working in Turkey had slightly higher e-resource usage than those working in the UK. Additionally, it can be said that the OERs usage intentions of the academics from Turkey was higher as well. Whilst the results of this study are not generalizable due to the limited sample size, academics' OER usage intention is a promising topic of study for the future. Furthermore, it is clear that educational e-resources could be more widely employed for the purposes of professional development, regardless of the country or level of education.

One of the limitations of the present study is that the data collected from the UK is considerably less than the data collected from Turkey. Despite periodic reminders having been sent out with regards to the data collection form to academics working in the UK, only 41 instructors answered the form and only 18 of those gave answers to all items of the questionnaire. Therefore, the current research could be repeated with a larger sample in order to increase the generalizability of the research results.

Increasing the awareness of academics about the positive aspects of educational e-resource use may be beneficial. In addition, academics can be trained on educational e-resource usage and development. By following the works and projects of academics using educational e-resources, they may be rewarded as a means to encouraging other academics. Finally, since we consider that the usage of OERs has increased due to the COVID-19 pandemic, we recommend that the current study be repeated based on more current data.

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