# ULUSILARARASI SOSYAL ARAŞTIRMALAR DERGİSİ THE JOURNAL OF INTERNATIONAL SOCIAL RESEARCH

Uluslararası Sosyal Araştırmalar Dergisi / The Journal of International Social Research Cilt: 13 Sayı: 73 Ekim 2020 & Volume: 13 Issue: 73 October 2020 www.sosyalarastirmalar.com Issn: 1307-9581

# DETERMINING FACTORS FOR INSTRUCTORS IN THE USE OF MOOCS

Gamze AYDIN\* Serdar BOZKURT\*\*

Öz

Bu araştırmanın amacı, akademisyenlerin Kitlesel Açık Çevrimiçi Dersleri (KAÇD) kullanımları ile demografik özellikleri arasındaki ilişkiyi incelemektir. Literatürdeki MOOC araştırmaları ağırlıklı olarak öğrencilerin tutum ve davranışları üzerinedir. Ancak, MOOC kullanıcılarının önemli bir bölümünü oluşturan eğitmenlerin tutum ve davranışlarına ilişkin çalışmalar daha azdır. Bu bağlamda, araştırma verileri 181 akademisyenden çevrimiçi bir anket aracılığıyla toplanmıştır. Araştırma sonucunda bazı fakültelerin (İktisadi ve İdari Bilimler, Fen ve Edebiyat, Mühendislik Fakültesi) akademisyenlerinin MOOC sağlayıcılarından daha fazla yararlandığı görülmüştür. Kadın akademisyenlerin KAÇD'lerden aldıkları sertifikalara iş hayatında daha çok değer verdiği tespit edilmiştir. Ayrıca kamu ve özel sektörde görev yapan akademisyenlerin KAÇD'leri aynı düzeyde kullanımaya önem verdiği belirlenmiştir. Daha genç ve kariyerlerinin ilk beş yılında olan akademisyenlerin KAÇD kullanımlarının daha yüksek olduğu sonucuna varılmıştır.

Anahtar Kelimeler: KAÇD, Kitlesel Açık Çevrimiçi Ders, Akademisyenler, Uzaktan Öğrenme, E-Öğrenme, Teknoloji Kabul Modeli.

#### Abstract

The aim of this research is to examine the relationship between instructors' use of Massive Open Online Courses (MOOCs) and their demographic characteristics. MOOC research in the literature is predominantly on students' attitudes and behaviors. However, there are fewer studies on instructors' attitudes and behaviors, which make up a significant portion of MOOC users. Therefore, the research data were collected from 181 instructors through an online questionnaire. As a result of the research, it was observed that the instructors of some faculties (Economics and Administrative Sciences, Science and Literature, Engineering Faculty) benefit more from MOOC providers. It has been determined that female instructors value the certificates earned from MOOCs more in business life. Moreover, it has been determined that instructors working at public and private sectors give importance to using MOOCs at the same level. It was also concluded that the MOOC utilization of instructors who are younger and in the first five years of their careers is higher.

Keywords: MOOC, Massive Open Online Course, Instructors, Distance Learning, E-Learning, Technology Acceptance Model.

<sup>\*</sup> Lecturer, Istanbul Arel University, School of Health Sciences, Department of Healthcare Management, ORCID: 0000-0001-9122-607X, gamzeaydin@arel.edu.tr

<sup>\*</sup> Assoc. Prof. Dr., Yildiz Technical University, Faculty of Economic and Administrative Sciences, Department of Business Administration, ORCID: 0000-0002-4745-9965, serdarbozkurt34@gmail.com



#### INTRODUCTION

Globalization, rapid technological advances, and the internet have also affected the field of education and training and led to the development of new application environments. These technological advances brought the world away from the domination of traditional education and introduced them to different learning styles. The latest trend is on online environments such as distance learning and e-learning rather than face-to-face lessons (Abu-Shanab and Musleh, 2018, 62). One of the most popular of these environments is the Massive Open Online Courses (MOOCs) platforms. MOOCs can be defined as digital learning environments that enable huge numbers of students from all over the world to follow courses in any field of education. Instructors come from reputable universities and provide teaching through video and presentations. At the very same time, students enrolled in these courses have the opportunity to connect with a teacher and learner community of similar interests. When they complete the course, they are awarded a certificate (Conache et al., 2016, 5). Participants of MOOCs range from engineers to homemakers, from young students to older students (Nordin et al., 2017, 2). Service providers have a significant contribution to creating a structure where such diversity can be provided.

Coursera.org, edx.org, canvas.net, udacity.com, open2study.com, iversity.com are the leading MOOC service providers. Many courses are offered in various fields such as arts, business and management, media and communication, computer science, biology and life sciences, mathematics, engineering, medicine, education, humanities, law, economics, food, and nutrition. Although mainly organized in English and French languages, some courses provide language support such as Russian, Chinese, Spanish, Portuguese, Turkish, and Japanese. Registration for these courses is free, and students can enroll as many of the courses as they would like to (Arya, 2017, 28). A typical MOOC course takes between 4 and 10 weeks. Participants usually spend two to six hours a week on lessons, but only a small group can be much more determined. The use of course materials is observed to be decreasing when participating in such courses. These published materials remain accessible after the course is closed. While those enrolled in the class can reach tens of thousands in number, those who complete and receive certificates are usually a few thousand at most (Haggard et al., 2013, 10).

Although most of the MOOC providers originate from the USA, the demographic characteristics of the participants are international (Duru et al., 2019). Similarly, MOOC platforms are also similar in Turkey. Some of these platforms are Turkcell Academy (www.turkcellakademi.com), Universite Plus (www.universiteplus.com), AtademiX (www.atademix.com). At Turkcell Academy, 340 programs in 50 categories are offered to the participants. Some of these programs are conducted in collaboration with global providers such as Coursera, MIT, Dale Carnegie Academy, and while some others are conducted in collaboration with leading universities in Turkey such as Istanbul University, Bilgi University as well as other various consulting firms. Those who complete the program with 70% success are entitled to receive a Certificate of Achievement. (Turkcell Akademi, 2020). On the Universiteplus platform, 45 different courses are offered in cooperation with Istanbul Technical University, Yeditepe University, and Boğaziçi University. Education languages are Turkish and English (Universite Plus, 2020).

Another strong MOOC platform in Turkey is AtademiX. AtademiX is defined as Turkey's first enterprise application platform. This platform was established with the technical infrastructure of the Atatürk University Distance Education Application and Research Center (AUDEAR-ATAUZEM) and is also included in the European MOOC list. This platform first started its activities in 2014 with courses of Introduction to Ottoman Turkish, Introduction to Arabic, and Introduction to Biostatistics. At AtademiX, courses are taught over the internet thanks to various course materials, exercises or practices. Courses in the program are organized to support the efficient participation of students through lecture notes, presentations, interactive videos, discussion forums, assignments, and end of class projects. These lessons are open to every individual who would like to have a particularly new way of education (AtademiX, 2020).

Instructors play a crucial role at MOOC platforms as both trainers and students. It is necessary to encourage instructors to be innovative in teaching by increasing their awareness of the implementation of MOOCs (Li, 2019, 53). In this context, it is vital to examine the factors related to the MOOC participation of the instructors. Although research on MOOC is gradually increasing, the number of research on instructors is small (Ross et al., 2014). Instructors are expected to be individuals who produce knowledge, are researchers, inquisitive, creative, can keep up with change and development, raise awareness of the society and benefit from technology (Akgün, 2017, 296). The teaching that changed in the twenty-first century has turned into a structure that requires educators to instill the use of technology resources in their lessons to



meet today's literacy needs (Batane and Ngwako, 2017, 48).

The motivation of the instructors to participate in MOOCs varies. For example, according to the study of Aydemir et al. (2018); instructors participate in MOOCs because they like to learn new things, want to improve themselves in the subjects in the lesson, and the topics they are interested in giving by experts through universities. According to another study, instructors organize a MOOC course to guide intellectuals and curious adults to learn new skills, ensuring that they take courses from the best universities in a way to eliminate inequality in education (Evans and Myrick, 2015, 302).

#### 1. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

The evolution of teaching methods and techniques has attracted attention as a transformation from the conventional face to face classroom method to digital technics. This transformation has led to the expectation that concepts such as distance education and e-learning, where online environments are at the forefront, will emerge instead of the traditional approach where students work at predetermined times and places (Saadatdoost et al., 2015). Distance learning is a method that accelerates learning and knowledge transfer by combining the best aspects of traditional education with technology (Yeşil, 2017, 758). This type of learning includes the interaction of trainers and students within a certain distance, providing students with timely trainer feedback. Sending only learning materials to students or publishing them online is not considered distance learning. Instructors should also receive students' feedback (Tsai and Machado, 2002). E-learning, a form of distance learning has come to refer to all educational technologies that digitally support education and training in online or offline environments. (Annaraud and Singh, 2017, 83).

Various theories allow explaining the concept of MOOC in enriched learning environments. One of these is the Technology Acceptance Model (TAM). The aim of the technology acceptance model is to assume that individuals have the choice of whether to adopt an innovation in the technological field and to understand the factors that affect the acceptance of new technologies in the social system (Aharony and Bar-Ilan, 2016, 147). Theory of Planned Behavior (TPB) (Ajzen et al., 1980), TAM explains the motivation of MOOC users by three factors. These factors are; perceived ease of use, attitude towards use and perceived usefulness. (Taherdoost, 2018, 962). How effectively technological resources are used for teaching and learning depends mainly on the level of technology acceptance of educators. The acceptance of technology by an individual refers to the desired level of using the designed technology. When instructors do not use technology as intended, the suitability of technology is not maximized (Teo, 2014, 128).

Considering the current studies have been done regarding MOOCs, most research is done in the United States and Britain; it is seen that among these studies Turkey is one of the countries with the least contribution (Zhu et al., 2018). According to Çakıroğlu et al. (2019), generally ignored in the literature subjects is the viewpoint of instructors on distance learning as an outcome of the research conducted between 2009 and 2016. Therefore, this study is critical in terms of filling these gaps in the literature. Qualitative methods were mainly used in studies on teaching staff (Annamalai, 2019).

In the literature, there are various researches on the MOOC participation of instructors (Soyemi et al., 2018; Ghazali and Nordin, 2018; Coker, 2018; Blackmon, 2018). In the study of Guo and Reinecke (2014), the differences in age, education, and nationality of the students were tested. According to Morris et al. (2015), stated that older students, who are not currently employed but have previous online experience and have a high level of education are more likely to complete their courses. Also, Pursel et al. (2016), investigated the use of MOOC with variables such as age, gender, educational background, and previous course participation. Study of Bayeck's (2016), examined the relationship between demographic information (gender, location, educational level, and employment status) and motivation to attend the course when students enroll in a mass open online course and also attend classes in groups. The results show that the participation of women is higher than that of men, and the purpose of enrolling in courses is due to a friend.

According to the research Singh and Nagwade (2018), the best MOOC providers preferred by students were open2study.com, coursera.org, and edx.org, respectively. When we look at the areas of MOOCs they attend, it is seen that men prefer physics and engineering (Neuböck and Kopp, 2015) courses more than women. Considering the aims of teaching staff to attend classes; It appears to consist of a variety of purposes, such as acquiring new information about the course are offered, expanding existing knowledge, gaining certification, developing their careers, being part of an online community, or meeting new people (Edinburgh; 2013; Hew and Cheung, 2014; Liu et al., 2014). In terms of the importance they attach to earning certificates, it is seen that the trends of MOOC users differ according to their education levels. For



example, according to the research of Guo and Reinecke (2014), 37% of the students who earn certificates are enrolled in the master's degree and 32% at the undergraduate level. It is anticipated that the importance given by faculty members to earn certificates may also differ. In this context, the hypotheses of the research are formed as follows:

*H*<sub>1</sub>: There is a relationship between the ways participants' access the courses and age of the MOOC user.

H<sub>2</sub>: There is a relationship between MOOC providers preferred by participants' and the department they work

*H*<sub>3</sub>: *There is a relationship between the course providers preferred by the participants' and their seniority.* 

*H*<sub>4</sub>: *There is a relationship between the participants' aims to attend the courses and their ages.* 

*H*<sub>5</sub>: *There is a relationship between the course areas of the participants' and the department they work in.* 

 $H_6$ . There is a relationship between the importance given by the participants' to earn a certificate from the courses and the type of school.

 $H_7$ : There is a relationship between the importance given by the participants' to earn a certificate from the courses and the gender.

# 2. METHODOLOGY

### 2.1 Instruments

in.

Researchers developed the data collection tool. Interviews with the literature and practitioners were used during the development of the questionnaire. To begin with, a pilot application was carried out to test the clarity of the statements in the survey, then the questionnaire was tested on 23 faculty members working in the fields of health, social, and science. As a result, a questionnaire consisting of 16 statements was developed. Eleven of the statements in the survey are multiple choices; 3 of them are of the type that can be marked more than one option, and 2 of them are of the five point-Likert scale. As Milligan and Littlejohn (2017) pointed out in their work, the motivation of the participants to participate in MOOCs is more than once. Accordingly, the relevant questions are prepared in the type in which more than one option can be marked. The data of the study were collected through an online survey between 06.01.2020-10.02.2020.

#### 2.2 Sample

The sample of the research is composed of university instructors registered to the Council of Higher Education (YÖK-CoHE). MOOC research in the literature is predominantly on students' attitudes and behaviors (Veletsianos and Shepherdson, 2016). However, there are fewer studies on instructors' attitudes and behaviors, which make up a significant portion of MOOC users. These studies in the literature are mostly on instructors' experiences of teaching on MOOC platforms (Hew and Cheung, 2014; Evans and Myrick, 2015). In this context, instructors were preferred in sample selection. The city of Istanbul, which constitutes the study's universe, was chosen due to its heterogeneity, which includes both foundation and state universities. Four hundred sixty-two of the instructors participated in the study. While determining the participants, a control question such as "Have you participated in such a course program over the internet before?" was asked at the beginning of the questionnaire, and the research was conducted with 181 people who answered "Yes."

#### 2.3 Findings

The data were analyzed using SPSS statistical software. Besides descriptive statistical analysis, chisquare analysis was used for hypothesis testing. More than half of the respondents are male (53%), married (53,6), graduates of a public university (%56,9), and in the 21-29 age range (%34,8). The vast majority are research assistants (39,8%) and with 1-5 years of experience (%42). The highest attendance was from the Vocational School and Faculty of Engineering units (Table1).

	Frequency	Percentage (%)
Gender		
Female	85	47.0
Male	96	53.0
Age		
21-29	63	34.8
30-38	60	33.1
39-47	37	20.4
48 and above	21	11.6
Type of University		
Public	103	56.9
Private	78	43.1
Seniority		
Less than a year	28	15.5
1-5 years	76	42.0
6-10 years	29	16.0
11-15 years	18	9.9
16-20 years	13	7.2
More than 20 years	17	9.4
Department		
Vocational School	52	28.7
Engineering	50	27.6
Arts and Sciences	25	13.5
Economics and Administrative Sciences	19	10.5
Health Sciences	11	6.1
Architecture	8	4.4
Communication	6	3.3
Education	3	1.7
Other	7	3.9

When the way instructors are informed about the courses, a large proportion (40.9%) appears to have discovered MOOCs during their research (Table.2).

Table 2. Ways to Access to the Cours
--------------------------------------

	Frequency	Percentage (%)
During my own research	74	40.9
Via my friends	49	27.1
Via Social media channels	34	18.8
Through seminars, conferences, etc.	15	8.3
Others	7	3.8
Via my advisor	2	1.1

Instructors provide access to MOOCs mostly through laptops (62.4%). Desktop computers (29.8%) are in second place. The most well-known MOOC provider is Coursera. Khan Academy follows it. The third place is Turkcell Academy. (Table.3).

Country	Frequency	Percentage (%)
Coursera	104	16.2
Khan Academy	84	13.1
Turkcell Akademi	69	10.7
Edx	56	8.7
Microsoft Açıkakademi	53	8.2
Udemy	51	8.0
MITx	49	7.6
Codeacademy	39	6.1
Udacity	34	5.3
Lynda	17	2.6
Academicearth	17	2.6
Open2study	14	2.2

Table 3 Most Known MOOC Providers



FutureLearn	14	2.2
Universiteplus	7	1.1
AtademiX	5	0.8
Canvas Network	5	0.8
Iversity	4	0.4
Other	21	3.3
Total*	643	100

\* Since more than one choice can be marked, the total number differs.

More than half of the instructors have completed at least two (53.6%) MOOC courses. The instructor who completed one course (24.3%) was calculated as completing eight or more classes (14.9%) and fiveseven courses (7.2%) - looking at the fields of the lessons they attended, Big Data, C ++, MATLAB, etc. It is seen that the Computer Science field and Foreign Language courses that contain courses are shared. MOOCs follow these courses in Sociology, Psychology, and Mathematics and Engineering in the field of Social Sciences (Table.4).

#### Table 4. Areas of the Attended Courses

	Frequency	Percentage (%)
Computer Science	64	20.2
Foreign language	64	20.2
Social Sciences	52	16.4
Science	46	14.5
Personal development	34	10.7
Academic Research	29	9.1
Health Sciences	17	5.4
Other	11	3.5
Total*	317	100

\* Since more than one choice can be marked, the total number differs.

Instructors participate in MOOCs mostly with the aim of obtaining new information about their fields (23,2%). This goal is followed by the objectives of contributing to their personal development and acquires knowledge in different areas (Table 5).

#### Table 5

Motives	for Signing up	to the Courses

	Frequency	Percentage (%)
Getting new information about my field	126	23.2
Contributing to my personal development	103	18.9
To be able to obtain information in different fields	78	14.3
Accessing related course materials	62	11.4
Contributing to my career	60	11.0
To have information in a short time	48	8.8
To be certified	36	6.6
To be able to receive education from successful	31	5.7
universities abroad		
Total*	544	100

\* Since more than one choice can be marked, the total number differs.

According to most of the instructors (47.5%), it is not considered essential to earn certificates from courses – the percentage of people who think that being awarded a certificate is "important" and "very important" (31.5%). The level of those who answered neither important nor unimportant is (21%). The instructors found the courses they attended at a high rate (71.8%), "very useful" and "useful." It has been determined as those who say that it has "not useful" and "not very useful" (7.8%) and neutral (20.4%).

H1: There is a relationship between the ways participants' access the courses and age of the MOOC user.

The participants' access to the courses can be provided via desktop computers, laptops, and smartphones. To test the relationship between these access tools and age, chi-square analysis was performed, and the relationship was determined (p<.05). The H1 hypothesis was accepted. Mainly, it is seen that the participants in the 21-29 age group participate in these courses via a laptop. Despite the current gradual use of smartphones nowadays, it seems that they do not have much use in participating in



classes (Table 6)

Age	Desktop PC	Laptop PC	Smartphone	Total
21-29	17	44	2	63
30-38	17	39	4	60
39-47	15	17	2	34
48-56+	5	13	6	24
Total	54	113	14	181

 Table 6. Preferred digital communication tools to reach courses

Pearson Chi-Square= .013

H2: There is a relationship between MOOC providers preferred by participants' and the department they work in.

Chi-square analysis was used to test the relationship between MOOC providers and the department. As a result of the analysis, the relationship between three different MOOC providers (Coursera, Khan Academy, Turkcell Academy) and the departments using MOOC was determined (p<.05). The H2 hypothesis was accepted. When the source of this relationship is analyzed, it is seen that it originates mainly from the faculty of engineering, science, vocational school, and Economics & Administrative sciences. No relationship has been detected between other MOOC providers and the units of the course takers (Table.7).

Table 7. Preferred MOOC provider	Table 7.	Preferred	I MOOC	providers
----------------------------------	----------	-----------	--------	-----------

Department	Coursera	Khan Academy	Turkcell Academy
Economics & Administrative Sciences	12	8	9
Science and Literature	16	15	7
Engineering	39	30	11
Architecture	3	3	1
Communication	2	2	5
Medicine & Health Sciences	2	1	3
Vocational School	23	18	29
Others	1	1	2
Education	5	5	2
Total*	103	83	69
Pearson Chi-Square	.001	.007	.005

\* Since more than one choice can be marked, the total number differs.

H3: There is a relationship between the course providers preferred by the participants' and their seniority.

The relationship between Turkcell academy and Lynda, one of the MOOC providers, was determined by chi-square analysis (p <.05). Especially for academics for up to ten years, Turkcell Academy and five years of experience were preferred by Lynda (Table8).

Seniority	Turkcell Academy	Lynda
Less than a year	19	8
1-5 year	21	5
6-10 year	14	0
11-15 year	7	1
16-20 year	3	1
More than 20 year	5	2
Total	69	17
Pearson Chi-Square	.004	.005

Table 8. Preferr	d course providers
------------------	--------------------

H4: There is a relationship between the participants' aims to attend the courses and their ages.

The relationship between the participants' intention to attend the courses and their ages was examined by chi-square analysis, and the relationship between the variables was determined (p<.05). H4 hypothesis was accepted. Especially in terms of contributing to the career, taking courses from a reputable university abroad, and gaining a certificate, it is seen that the instructors between the ages of 21 and 38 are the source of this relationship (Table 9).



Tuble 9.1 urpose of the utternuitee						
Age	Contribute to my career	Take courses from successful universities abroad	To earn a certificate			
21-29	46	16	19			
30-38	33	10	10			
39-47	20	4	5			
48-56+	10	0	1			
Total	109	30	35			
Pearson Chi-Square	.037	.031	.029			

 Table 9. Purpose of the attendance

*H5: There is a relationship between the course areas of the participants' and the department they work in.* 

The relationship between the participants' course areas and the unit studied was analyzed by chisquare analysis, and the relationship between the variables was determined (p <.05). The H5 hypothesis was accepted. When the source of this relationship was examined; courses of science and computer science stand out of all courses among the instructors in engineering. The participants of the courses in the social sciences are the faculty of economics and administrative sciences, the vocational school, and instructors in the sciences. Also, the faculty of medicine, pharmacy, and vocational school attended health sciences courses. Foreign language courses are attended by vocational college, faculty of economics and administrative sciences, and instructors in the field of engineering (Table 10).

Table 10 Areas of the attended courses

Department	Science (Physics, Chemistry, Mathematics)	Computer Sciences (Big data, C++, MATLAB)	Social Sciences (Business, Economy, Sociology)	Health Sciences (Medicine, Nutrition and dietetics, Fitness)	Foreign Language Learning (TOEFL, IELTS)
Economics & Administrative Sciences	2	3	11	0	9
Science and Literature	7	6	10	1	3
Engineering	24	35	4	0	9
Architecture	2	2	1	0	3
Communication	1	0	4	0	1
Medicine & Health sciences	3	0	2	8	3
Vocational school	6	11	16	7	29
Education	0	2	4	0	1
Other	0	2	1	0	2
Total	45	61	53	16	60
Pearson Chi-Square	.003	.000	.000	.000	.001

H6. There is a relationship between the importance given by the participants' to earn a certificate from the courses and the type of school.

As a result of the Chi-square analysis, the importance given by the participants to gain certificates from the courses seems to be related to the type of work previously. Accordingly, instructors at public and private universities see almost the same level of importance (p < .05). The H6 hypothesis was accepted.

rable 11. Importance of the carri a certificate							
University Type	Not Important	Slightly Important	Moderately Important	Important	Very Important	Total	
Public	42	14	15	20	12	103	
Private	19	11	23	20	5	78	
Total	61	25	38	40	17	181	

Table 11. Importance of the earn a certificate

*Pearson Chi-Square= .035* 

H7: There is a relationship between the importance given by the participants' to earn a certificate from the courses and the gender.

There is a relationship between the gender of the MOOC user and the importance given to getting a certificate from the course. H7 hypothesis was accepted. The research has revealed that certification is more important for females. As a reason, it can be thought that these certificates are given more value by

females in business life. (Table.12)

Gender	Not Important	Slightly Important	Moderately Important	Important	Very Important	Total
Female	28	9	15	27	6	85
Male	33	16	23	13	11	96
Total	61	25	38	40	17	181

Table 12	Importance	of the eas	rn a cei	rtificato
Table 12.	importance	oj ine eu	rn a cei	rujicule

*Pearson Chi-Square=.044* 

### 3. DISCUSSION AND CONCLUSION

This research is a descriptive study conducted to determine instructors' views on the MOOCs who work in Turkey. It is seen that the results of the research are sometimes differentiated from some studies in the literature. The use of MOOC courses that making e-learning platforms to global accessibility is low not only among students but also among instructors. In this direction, Zhong et al. (2017), were found that 27% of students had no knowledge of the concept of MOOC, and only 4% had attended a MOOC course. In our study, two-thirds of the instructors (61%) have not participated in any MOOC before. In this context, despite the increasing popularity across the world, in Turkey, it can be highly deducted that the awareness of MOOCs is considerably low. Among the tools used to access the courses, the most popular device was laptops. Despite being used extensively in Turkey, access to courses via smartphones, and the use of smartphones throughout the usage ratio was very low, as seen in similar studies (Cohen et al., 2019, 193).

Considering the number of completed courses, it is seen that more than half of the participants accomplished at least two classes. Similarly, in a study involving 895 people from 94 different countries, one-third of the participants completed at least two MOOC courses (Liu et al., 2019). With its 45 million users as of 2019 (Class Central, 2020), Coursera maintains its leading position in our study as the pioneer MOOC platform, which is also preferred by instructors. Coursera and Khan Academy were mostly preferred by instructors working in engineering faculties. In general, instructors participate in MOOCs in order to obtain new information in their fields, contributing to their personal development and training from different disciplines other than their specialties. Especially, young instructors, who are at the beginning of their academic career, see these courses as a tool to contribute to their careers. Their motivation to participate is in line with previous research (Jais et al., 2019; Neuböck et al., 2015). Although the ability to earn certificates from courses brings success in MOOCs (Rai and Chunrao, 2016), it was observed that the majority of the instructors did not give much importance to be awarded certificates gained from MOOCs.

Along with computer science, foreign language courses stand out among the most preferred courses of instructors participating in the research. The lack of Turkish language support for each course makes it difficult to use MOOCs. Indeed, it has been revealed that participants whose native language is English can use environments such as discussion forums more actively and efficiently (Duru et al., 2019). Instructors in Turkey are mostly unable to comprehend foreign languages thoroughly (Yavuz and Göver, 2012). This situation is also seen in our study and this led to the fact that the foreign-language category was of more participation in MOOC courses.

# 4. SUGGESTIONS AND FUTURE RESEARCH

The increasing online education activities during the pandemic revealed that the instructors should also evaluate MOOCs advantages and disadvantages. In this context, the research results draw a frame of the current MOOC usage of instructors in Turkey regarding MOOCs for instructors and offer the following suggestions to the concerned:

- Turkish language support for the courses offered by MOOC providers should be increased.
- Instructors have attended a significant number of courses, training, certificates, etc. programs and gained experience over the years due to their professions. Instructors may not care about getting a MOOC's certificate due to these backgrounds. Therefore, it may be more appropriate to develop motivational tools specific to academics.
- As instructors join MOOCs primarily to follow the innovations in their fields, special courses can be developed for an instructors' specialties.
- More effective interfaces and applications (eg, Gamification) can be designed to increase MOOCs participation via mobile phones.





 Cooperation by the Continuing Education Centers of the universities in Turkey; it may be beneficial to give compulsory courses such as traffic education, first aid, general health, baby care, and child education.

Yet, the study has had some limitations. Due to the geographical region in which the researchers work and the time constraints, only universities in Turkey's Marmara Region are included in the scope of this research. In future studies, the opinions of instructors who dwell not only in the Marmara Region but also in other regions are to be investigated. Personality types and learning styles of instructors who have participated in MOOCs can be researched. Whether MOOC usage characteristics differ based on the generations can also be examined more thoroughly, let alone the variables studied earlier to conduct this research.

#### REFERENCES

Abu-Shanab, E. A., & Musleh, S. (2018). The Adoption of Massive Open Online Courses. *International Journal of Web-Based Learning and Teaching Technologies*, 13(4), 62–76. https://doi.org/10.4018/ijwltt.2018100104

Aharony, N., Bar-ilan, J., & Gan, R. (2016). Students' Perceptions on MOOCs: An Exploratory Study. Interdisciplinary Journal of E-Skills and Lifelong Learning, 12, 145–162.

Ajzen, I., Fishbein, M., & Heilbroner, R. L. (1980). Understanding Attitudes and Predicting Social Behavior (Vol. 278). Englewood Cliffs, NJ: Prentice-hall.

Akgün, F. (2017). Öğretim Elemanlarının Bireysel Yenilikçilik Özellikleri ve Öğretim Teknolojilerine Yönelik Kabulleri. *Turkish Online Journal of Qualitative Inquiry (TOJQI)*, 8(3), 291–322. https://doi.org/10.17569/tojqi.292135

Annamalai, N. (2019). How Malaysian Lecturers View MOOC And Its Challanges. Journal of Nusantara Studies 2019, 4(2), 144-167.

Annaraud, K., & Singh, D. (2017). Perceptions of Hospitality Faculty and Students of Massive Open Online Courses (MOOCs). Journal of Hospitality & Tourism Education, 29(2), 82–90.

Arya, U. (2017). The Rise of MOOCs (Massive Open Online Courses) and Other Similar Online Courses Variants – Analysis of Textual Incidences in Cyberspace. *Journal of Content, Community & Communication, 6*, 26–35.

AtademiX Web site. Retrieved from http://atademix.atauni.edu.tr/index.php/ihak-hakkinda/?menu=nasilcalisir) Accessed 03.01.2020. Aydemir, M., Çelik, E., Kurşun, E., & Karaman, S. (2018). Katılımcılar Kitlesel Açık Çevrimiçi Derslere Neden Katılıyorlar? Atademix Örneği. *Abant İzzet Baysal Üniversitesi Eğitim Fakültesi Dergisi*, *18*(4), 1921–1937.

Batane, T., & Ngwako, A. (2017). Technology Use by Pre-service Teachers During Teaching Practice: Are New Teachers Embracing Technology Right Away in Their First Teaching Experience? *Australasian Journal of Educational Technology*, 33(1), 48–61.

Bayeck, R. Y. (2016). Exploratory study of MOOC learners' Demographics and Motivation: The Case of Students Involved in Groups. *Open Praxis*, 8(3), 223–233.

Blackmon, S. J. (2018). MOOC Makers: Professors' Experiences with Developing and Delivering MOOCs. International Review of Research in Open and Distance Learning, 19(4), 76–91. https://doi.org/10.19173/irrodl.v19i4.3718

Class Central Web site, Retrieved from https://www.classcentral.com/report/mooc-stats-2019/ Accessed 03.01.2020.

Cohen, A., Shimony, U., Nachmias, R., & Soffer, T. (2019). Active Learners' Characterization in MOOC Forums and Their Generated Knowledge. *British Journal of Educational Technology*, 50(1). https://doi.org/10.1111/bjet.12670

Coker, H. (2018). Purpose, pedagogy and philosophy: "Being" an online lecturer. International Review of Research in Open and Distance Learning, 19(5), 129–144. https://doi.org/10.19173/irrodl.v19i5.3312

Conache, M., Dima, R., & Mutu, A. (2016). A Comparative Analysis of MOOC (Massive Open Online Course) Platforms. *Informatica Economica*, 20(2/2016), 4–14. https://doi.org/10.12948/issn14531305/20.2.2016.01

Çakıroğlu, Ü., Kokoç, M., Gökoğlu, S., Öztürk, M., & Erdoğdu, F. (2019). An Analysis of the Journey of Open and Distance Education: Major Concepts and Cutoff Points in Research Trends. *The International Review of Research in Open and Distributed Learning*, 20(1), 1–20. Retrieved from http://www.irrodl.org/index.php/irrodl/article/view/3743

Duru, I., Sunar, A. S., White, S., Diri, B., & Dogan, G. (2019). A Case Study on English as a Second Language Speakers for Sustainable MOOC Study. *Sustainability*, 11, 1–24. https://doi.org/10.3390/su11102808

Evans, S., & Myrick, J. G. (2015). How MOOC Instructors View the Pedagogy and Purposes of Massive Open Online Courses. *Distance Education*, 36(3), 295–311. https://doi.org/10.1080/01587919.2015.1081736

Ghazali, N., & Nordin, M. S. (2016). The Perception of University Lecturers of Teaching and Learning in Massive Open Online Courses(MOOCS).JournalofPersonalizedLearning,2(1),52–57.Retrievedfromhttp://spaj.ukm.my/jplearning/index.php/jplearning/article/view/107/67

Guo, P. J., & Reinecke, K. (2014). Demographic Differences in How Students Navigate Through MOOCs. First ACM Conference on Learning @ Scale Conference, 21-30. https://doi.org/10.1145/2556325.2566247

Haggard, S., S. Brown, R. Mills, A. Tait, S. Warburton, W. Lawton, and T. Angulo. (2013). "The maturing of the MOOC: Literature review of Massive Open Online Courses and other forms of online distance learning" BIS Research Paper 130.

Hew, K. F., & Cheung, W. S. (2014). Students' and Instructors' Use of Massive Open Online Courses (MOOCs): Motivations and Challenges. *Educational Research Review*, 12, 45–58. https://doi.org/10.1016/j.edurev.2014.05.001

Jais, J., Chen, S. Der, Eladwiah, R., Rahim, A., & Din, N. (2019). Postgraduate Students Motivation for MOOC Enrollment. *International Journal of Engineering and Advanced Technology (IJEAT)*, 9(1), 1763–1765. https://doi.org/10.35940/ijeat.A2698.109119

Li, Y. (2019). MOOCs in Higher Education: Opportunities and Challenges. *Advances in Social Science, Education and Humanities Research* (*ICHSSR* 2019), 319, 48–55.

Liu, M., Kang, J., Cao, M., Lim, M., Ko, Y., Myers, R., & Schmitz Weiss, A. (2014). Understanding MOOCs as an Emerging Online Learning Tool: Perspectives From the Students. *The American Journal of Distance Education*, 28(3), 147–159. https://doi.org/10.1080/08923647.2014.926145

Liu, M., Zou, W., Shi, Y., Pan, Z., & Li, C. (2019). What Do Participants Think of Today's MOOCs : An Updated Look at the Benefits and Challenges of MOOCs Designed for Working Professionals. *Journal of Computing in Higher Education*, 1-23.

Milligan, C., & Littlejohn, A. (2017). Why Study on a MOOC? The Motives of Students and Professionals. International Review of Research



in Open and Distributed Learning, 18(2), 92-102.

MOOCs @ Edinburgh 2013: Report #1, Retrieved from https://era.ed.ac.uk/handle/1842/6683 Accessed 03.01.2020.

Morris, N. P., Hotchkiss, S., & Swinnerton, B. (2015). Can Demographic Information Predict MOOC Learner Outcomes? Retrieved from http://www.emoocs2015.eu/sites/default/files/Papers.pdf eMOOCs Conference, May 2015. Accessed 07.01.2020.

Neuböck, K., Kopp, M., Media, N., & Transfer, K. (2015). What Do We Know About Typical Mooc Participants? First Insights From the Field. European MOOC Stakeholder Summit 2015, 183–190.

Nordin, N., Norman, H., & Embi, M. A. (2015). Technology Acceptance of Massive Open Online Courses in Malaysia. *Malaysian Journal of Distance Education*, 17(2), 1-16. https://doi.org/10.21315/mjde2015.17.2.1

Pursel, B. K., Zhang, L., Jablokow, K. W., Choi, G. W., & Velegol, D. (2016). Understanding MOOC Students: Motivations and Behaviors Indicative of Mooc Completion. *Journal of Computer Assisted Learning*, 32, 202–217. https://doi.org/10.1111/jcal.12131

Rai, L., & Chunrao, D. (2016). Influencing Factors of Success and Failure in MOOC and General Analysis of Learner Behavior. International Journal of Information and Education Technology, 6(4), 262–268. https://doi.org/10.7763/IJIET.2016.V6.697

Ross, J., Sinclair, C., Knox, J., Bayne, S. & Macleod, H. (2014). Edinburgh Research Explorer Teacher Experiences and Academic Identity: The Missing Components of MOOC Pedagogy. *Journal of Online Learning and Teaching*, 10(1), 57–69.

Saadatdoost, R., Sim, A. T. H., Jafarkarimi, H., & Mei Hee, J. (2015). Exploring MOOC From Education and Information Systems Perspectives: A Short Literature Review. *Educational Review*, 1911(July), 1–14. https://doi.org/10.1080/00131911.2015.1058748

Singh, M., & Nagwade, O. (2018). Massive Online Open Courses (Moocs) and Its Impact on Management Students. Paridnya – The MIBM Research Journal, 6(1), 81–91.

Soyemi, O., Ojo, A., & Abolarin, M. (2018). Digital Literacy Skills and Mooc Participation Among Lecturers in a Private University in Nigeria. *Library Philosophy and Practice*, 2018. Retrieved from https://www.scopus.com/inward/record.uri?eid=2-s2.0-85057494471&partnerID=40&md5=1708d0d868e19a706bbb8fcc26e4986b Accessed 10.02.2020

Taherdoost, H. (2018). A Review of Technology Acceptance and Adoption Models and Theories. *Procedia manufacturing*, 22, 960-967. https://doi.org/10.1016/j.promfg.2018.03.137

Teo, T. (2014). Computers & Education Unpacking Teachers' Acceptance of Technology: Tests of Measurement Invariance and Latent Mean Differences. *Computers & Education*, 75, 127-135. https://doi.org/10.1016/j.compedu.2014.01.014

Tsai, S., & Machado, P. (2002). E-learning, Online Learning, Web-based Learning, or Distance Learning: Unveiling the Ambiguity in Current Terminology. *Association for Computer Machinery ELearn Magazine*, 2002(7), 3–5.

Turkcell Akademi Web site. Retrieved from http://www.turkcellakademi.com/kurumsal Accessed 03.01.2020.

Universite Plus Web site. Retrieved from https://www.universiteplus.com/dersler Accessed 03.01.2020.

Veletsianos, G., & Shepherdson, P. (2016). A Systematic Analysis and Synthesis oOf The Empirical Mooc Literature Published in 2013–2015. *International Review of Research in Open and Distributed Learning*, 17(2), 198-221.

Yavuzer, H., & Göver, İ. (2012). Akademik Personelin Yabancı Dil Durumu ve Yabancı Dil Sınavlarına Bakışı: Nevşehir Örneği. Nevşehir Hacı Bektaş Veli Üniversitesi SBE Dergisi, 1(2), 136-158.

Yeşil, Y. (2017). Türkiye'de Mesleki Eğitimin Gelişimi Açısından Uzaktan Eğitim Faaliyetlerinin Önemi. Suleyman Demirel University The Journal of Faculty of Economics and Administrative Sciences, 22(3), 757–767.

Zhong, S., Li, Y., Liu, Y., & Wang, Z. (2017). A Computational Investigation of Learning Behaviors In MOOCs. Computer Applications in Engineering Education, 25(March), 693–705. https://doi.org/10.1002/cae.21830.

Zhu, M., Sari, A., & Lee, M. M. (2018). A Systematic Review of Research Methods and Topics of the Empirical MOOC literature (2014–2016). *The Internet and Higher Education*. https://doi.org/10.1016/j.iheduc.2018.0