

Do EFL Instructors' Interactions with Their Students on Learning Management Systems Differ by Certain Variables?

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Abstract

The number of studies on the relationship between English as a foreign language (EFL) instructors' interaction levels and certain variables is limited to draw conclusions. This study aims to determine whether the levels of EFL instructors' interactions with their students on learning management systems (LMSs) differ in accordance with certain demographic variables. The participants were 246 English instructors who were employed in preparatory schools across a range of state and private universities in Turkey participated in the study. The participants were given a demographics questionnaire and a survey with 24 items for data collection. The statistical data underwent analysis utilizing both parametric and non-parametric tests via the SPSS software. The results of the study indicated that the adoption of LMSs by EFL instructors displayed no differences according to their demographic characteristics except for their native languages and weekly online teaching hours. In light of the results, it can be said that Turkish EFL instructors have a higher level of engagement with their students through LMS platforms compared to native instructors. Moreover, instructors use LMSs to engage with their students in a variety of ways owing to the escalating amount of hours they dedicate each week to teaching English online.

Keywords: communication, demographic variables, higher education, technology, Turkish EFL context

1. Introduction

With the technological advances in education, traditional education has been accompanied by digital software called learning management systems (LMSs) as a learning and communication tool. It can be said that web-based learning platforms have numerous benefits for both educators and their learners. First, LMSs have administrative features that authorize educators to manage courses, students, and the system. LMSs enable enrolling courses, running classes, identifying academic differences among learners, pursuing learner achievement, and informing everyone in the learning process about learners' progress (Gilhooly, 2001, as cited in Watson & Watson, 2007). Secondly, LMSs are archives that teachers can share and keep written materials and multimedia files. As Costa et al. (2012) state, the main aim of utilizing those platforms is to store resources and data. Teachers can upload presentations, worksheets, listening tracks, recorded lectures, videos, online quizzes, and even course schedules and booklets onto the LMS so that their students can have limitless access to study with those resources. Another benefit of using LMSs is that it allows educators and students to reach online learning sources. Walker et al. (2016) point out that students can access the resources on the LMS irrespective of time and place as long as their devices are connected to the internet. Moreover, students are able to take courses off-campus and from other higher institutions via those virtual platforms (Garrote & Pettersson, 2007). Nevertheless, there are some problems related to LMSs. Firstly, those virtual learning platforms require an internet connection. However, it is impossible to access learning resources or read messages sent by the teacher when there is no internet connection. Another handicap of LMSs is that some online learning platforms may not be very user-friendly. While some do not have a lot of features, some are full of apps. LMSs which have limited features and tools can cause students to be unmotivated. On the other hand, if an online learning platform has too many apps, students may get confused, which leads to a loss of motivation. In addition to these, some LMSs can be used both on mobile phones and computers. However, mobile applications might not work properly, so students cannot utilize those platforms properly.

Despite some problems linked to LMSs, these digital platforms provide ideal environments for instructors to maintain continuous communication with their students outside the confines of the traditional classroom setting. In addition to providing continuous connection outside of the classroom borders, LMSs also facilitate the process of sharing educational resources, provide compatibility with various technological devices, and provide a platform for students to express themselves more comfortably via written communication. The degree to which instructors make use of these functions of LMSs varies depending on a number of different factors. Below, a brief review of previous research was presented after drawing a theoretical framework.

1.1 Literature review

Numerous studies have been published showing that gender, one of the demographic factors, has an impact on the utilization of LMSs. For instance, Abazi-Bexheti et al. (2018) examined

the factors that promoted the utilization of Google Classroom activities, which served as the LMS of South East European University. The data comprised 937 observations, and this study adopted the Ordinary Least Square Regression model in order to probe Google Classroom implementation in this university. One of several results showed that female instructors use the LMS more than male instructors, as measured by the number of pupils joined. Tena et al. (2016) conducted a study with 1302 lecturers from 6 diverse Andalusian higher education institutions, all at various levels, to discover how instructors utilized e-learning and gauge how satisfied they were with it. The data were gathered and analyzed through the use of questionnaires. The results indicated that female lecturers were more likely to employ a variety of synchronous and asynchronous communication technologies when compared to male lecturers despite the fact that male lecturers had more technical proficiency and capacity to utilize multiple interaction tools while teaching.

Not enough studies have been done to determine whether or not there is a correlation between the age of instructors and their adoption of LMSs. The results of Alharbi and Drew's (2014) study, which was conducted by giving a questionnaire to 59 participants, revealed that gender or age did not affect whether academics used LMSs, how simple they thought the systems were to use, or how the systems were relevant to their jobs.

Although there is no research proving that neither age nor gender influences the utilization of LMSs, a study in the literature demonstrates that the position of instructors impacts whether or not they utilize these virtual learning platforms. Gautreau's (2011) purpose was to determine the aspects of motivation that faculty members thought significant to their individual choice to implement an LMS. Forty-two academicians with tenure and on the path to tenure who were teaching at a four-year higher education institution in California constituted the participants of the research. In order to determine what prompted faculty members to include an LMS in their pedagogical practices, a needs assessment evaluation approach was used. The results indicated that neither age nor gender had a role in an academic member's choice to use an LMS. On the other hand, their willingness to use such online platforms depended on their tenure position.

Some researchers in the relevant literature search for signs that LMS use and teaching experience are connected to one another. Lin (2009) explored the acceptance and deployment of Moodle by individual instructors in the Faculty of Education at a university in Hong Kong. Nine instructors participated in the study, and the researcher used two methods to gather data: an interview and a survey. She found that instructors with 5-10 years of experience were likely to spend more time and energy using the discussion forum features of Moodle than teachers who just started their careers or with more than 10 years of experience. Besides that, Cigdem and Topcu (2015) investigated instructors' willingness to use Moodle at a military-based vocational college in Turkey. An online survey was administered to the participants, and the findings were analyzed in the SPSS software by using the most relevant analysis techniques. 41.7% of the participants were instructors with 1-3 years of teaching experience; the instructors with more than 20 years of experience made up only 6.1% of the study. The

researchers found that the number of years the instructors had been in the classroom correlated negatively and significantly with their likelihood of using Moodle.

Almost no research examines the relationship between demographic characteristics and the use of LMS in the Turkish context, but this study is the most comprehensive. Erdin and Uzun (2021) aimed to learn how well Turkish English teachers were adapting to new educational developments and whether or not teachers' perceptions of their own technological competence were influenced by demographic factors like gender, age, teaching experience, institutional type (public vs. private), and the number of hours per week spent using technology. Two hundred seventy-three participants completed a survey in which they assessed their own technological competence in the 21st century for data collection. According to the findings, a correlation was found between the Turkish EFL teachers' technological competence and the amount of time they worked in technology settings and whether or not a public or private school employed them.

1.2 Overview of the current study

The use of LMSs which have been used more frequently with the increase in technological developments and the integration of distance education into instructors' lives varies according to the demographic characteristics of teachers. In the Turkish EFL context, female teachers dominate, teachers' ages differ, Turkish is used to teach a foreign language, teachers' experiences vary, some work as administrators in their schools, and their workload per week changes according to the type of school they work in. The extent to which these factors affect the use of LMSs needs to be investigated. However, there is a scarcity of research that investigates the link between demographic variables and the use of LMSs in the Turkish EFL context. Thus, the current study aims to examine whether EFL instructors' interactions with their students on LMSs differ by certain variables and seek an answer to the following research question:

- Does the use of LMSs as interaction tools differ regarding demographic variables such as gender, age, native language, teaching experience, schools they work in, administrative duties, and workload?

2. Method

This section offers a comprehensive analysis of the study methodology, which is presented below as a breakdown into four separate sections.

Participants

The participants in the study were 246 English instructors employed at the Schools of Foreign Languages in various state and private universities in Turkey. There were 178 female participants, making up 72.4% of the total, while there were 68 male participants, making up 27.6% of the total. The participants' ages ranged from 23 to 69 years old, with the mean being almost 38 years old. Among all the age groups, the highest number of participants were between the ages of 31 and 40. While 227 of the instructors (92.3%) participating in the study

were native speakers of Turkish, only 19 (7.7%) were native speakers of English. In addition, the range of answers for the participants' level of teaching experience was from 2 to 42 years, with 10 years of teaching experience being the most common response. The majority of the participants were those who had been teaching for 11-15 years. Furthermore, 101 participants (41.1%) were employed in state English preparatory schools, whereas 145 (58.9%) were employed in private institutions. In terms of educational status, there were 81 instructors with bachelor's degree, 132 instructors with master's degree, and 33 instructors with doctorate degree. Slightly more than half of the participants were instructors who completed their master's degree. Regarding their administrative duty, the bulk of the instructors—192 or 78%—had no leading position in the educational institution. On the other hand, 54 (22%) were in charge of management duties in the prep schools. In addition, the amount of time that instructors spend teaching English each week is shown in Table 2. The hours they spent instructing varied from 4 to 30 hours per week with a mean of 19.01. Twenty-five instructors (10.2%) worked less than 10 hours, 126 instructors (51.2%) worked 11-20 hours, and 95 instructors (38.6%) worked more than 20 hours per week. In terms of weekly face-to-face teaching hours, there were instructors who never taught in person and those who taught 30 hours in the classroom. Ninety-two participants (37.4%) taught English face-to-face fewer than 10 hours, 141 (57.3%) taught between 11-20 hours, and 13 (5.3%) taught beyond 20 hours. Lastly, 199 instructors (80.9%) taught English less than 10 hours a week online, while only four of them (1.6%) taught twenty hours or more. The rest (17.5%) taught students English remotely via online platforms for 11-20 hours a week.

Tools

For the aim of data collection, an online questionnaire consisting of two parts and prepared via Google Forms was used. Participants were first asked to fill out a demographics questionnaire that inquired about their gender, age, native language, years of teaching, type of university they worked at, degree of education earned, administrative duties, number of weekly classes taught (both in-person and online), preferred LMS, and preferred device for accessing the LMS. Second, respondents were given a questionnaire adapted from Teclehaimanot and Hickman (2011). The questionnaire consisted of 24 items that investigated the various means through which instructors interact with their students using online LMSs. Using a 5-point Likert scale, participants were required, for each question, to remark on the frequency with which they utilized various modes of interaction when using the LMS (“Never”, “Rarely”, “Sometimes”, “Often”, “Always”).

Procedure

After obtaining ethical approval, a link to the online questionnaire, which also includes a demographics section, was emailed to English instructors who work at the state or private English preparatory schools of universities all over Turkey. A personalized email was sent to every instructor to encourage them to take the questionnaire more seriously and increase their participation. At the beginning of the online questionnaire, the participants were provided with a short text informing them about the purpose and content of the study, the duration of

the questionnaire, the study coordinator and her consultant, the voluntary nature of the study, and the confidentiality of the information.

Data Analysis

After the data were collected, they were imported into the SPSS software version 21.0 for analysis. First of all, the questionnaire items were subjected to validity and reliability testing. The varimax rotation was performed, and the % of variance for the scale was determined to be 65.19. In addition, the scale's reliability was assessed using Cronbach's Alpha analysis, and it was found to be .89. Moreover, intervals were determined for participants' ages, experience, in-class and online, and overall teaching hours a week. After that, calculations were made to determine both the percentage and the frequency for every interval. Similarly, the frequency and percentage of gender, age, native tongue, experience in English teaching, sort of university they worked, administrative responsibility, and weekly workload data were calculated. One-way ANOVA and Independent Samples T-test were conducted. Non-parametric tests including Kruskal-Wallis H and Mann-Whitney U tests were used for analyzing the data when the number of respondents was low.

Results

Gender and age

Table 1 shows that regarding the communication level of female and male instructors with their students via LMSs, there is not a significant difference between the two independent variables ($p=.08$).

Table 1. Relationship between gender and the level of interaction via LMSs (Independent Samples T-Test)

	Gender	N	Mean	Std. Deviation	t	Sig.
Mean Score of Instructor-Student (I-S) Interaction via LMS	Female	178	2.98	.62	1.74	.08
	Male	68	2.82	.67		
	Total	246				

The results in Table 2 reveal that the ages of foreign language (FL) instructors do not affect their level of communication with their students in LMS platforms ($p=.19$).

Table 2. Relationship between age and the level of interaction via LMSs (Kruskal-Wallis H Test)

	Age interval	N	Mean Rank	H (Chi-Square)	Sig.
Mean Score of I-S Interaction via LMS	<30	44	128.99	4.73	.19
	31-40	121	126.18		
	41-50	55	126.70		
	>51	26	94.96		

	Total	246			
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Native language

Table 3 demonstrates that whether FL instructors are native or Turkish has an impact on the contact they make with their students on LMSs ($p=.00$). It can be said that native Turkish EFL instructors made much greater use of LMS as a communication medium than native EFL teachers.

Table 3. Relationship between native language and the level of interaction via LMSs (Mann-Whitney U Test)

	Native language	N	Mean Rank	U	Sig.
Mean Score of I-S Interaction via LMS	Native (English)	19	71.34	1165.50	.00
	Non-native (Turkish)	227	127.87		
	Total	246			

Teaching experience in years and institutions

Table 4 illustrates that the number of years FL instructors have been in the classroom has no effect on the degree of their social exchange with their learners on LMSs ($p=.34$).

Table 4. Relationship between teaching experience and the level of interaction via LMSs (One-way ANOVA)

	Teaching Experience	N	Mean	Std. Deviation	F	Sig.
Mean Score of I-S Interaction via LMS	<5	30	3.03	.67	1.15	.34
	6-10	61	2.88	.72		
	11-50	71	3.05	.59		
	16-20	31	2.81	.63		
	>21	53	2.92	.59		
	Total	246				

Table 5 displays that EFL instructors' interactions with their learners in digital learning platforms do not differ based on the kinds of universities in which the instructors worked ($p=.87$).

Table 5. Relationship between type of university and the level of interaction via LMSs (Independent Samples T-Test)

	Type of university	N	Mean	Std. Deviation	t	Sig.
Mean Score of I-S	State	101	2.95	.58	.16	.87
	Private	145	2.93	.68		

Interaction via LMS	Total	246				
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Administrative duty and workload

Table 6 illustrates that there is no differentiation between EFL teachers' contacts with their students in LMSs depending on their management responsibilities ($p=.79$).

Table 6. Relationship between administrative duty and the level of interaction via LMSs (Independent Samples T-Test)

	Administrative duty	N	Mean	Std. Deviation	t	Sig.
Mean Score of I-S Interaction via LMS	Yes	54	2.92	.65	-.27	.79
	No	192	2.94	.64		
	Total	246				

Table 7 shows that there is no statistically significant difference between FL instructors' weekly teaching hours and LMS interaction ($p=.24$). In other words, FL instructors' opportunities to interact with their students via LMSs do not differ depending on the number of hours instructors teach in a week.

Table 7. Relationship between weekly teaching hours and the level of interaction via LMSs (Kruskal-Wallis H Test)

	Teaching hours a week interval	N	Mean	Std. Deviation	Mean Rank	H (Chi-Square)	Sig.
Mean Score of I-S Interaction via LMS	<10	25	2.84	.61	111.10	2.85	.24
	11-20	126	2.90	.70	119.02		
	>21	95	3.03	.60	132.71		
	Total	246					

Table 8 indicates a significant difference between the time instructors spend teaching English online per week and the degree of interaction among learners and instructors taking place in LMS platforms ($p=.05$). To put it another way, the quantity of time that EFL instructors allocate to online teaching every week has an impact on the extent of their social engagement with students via LMSs.

Table 8. Relationship between weekly online teaching hours and the level of interaction via LMSs (Kruskal-Wallis H Test)

	Online teaching hours a week interval	N	Mean	Std. Deviation	Mean Rank	H (Chi-Square)	Sig.
Mean Score of I-S Interaction via LMS	<10	199	2.90	.64	118.01	6.20	.05
	11-20	43	3.20	.61	146.92		
	>21	4	3.20	.43	144.75		
	Total	246					

Discussion

Several inferences are possible in view of the aforementioned results. First and foremost, according to the results, there is no relationship between the genders and ages of EFL instructors and the extent of their interactions with their students. Correspondingly, Alharbi and Drew (2014) claim that the usage of LMSs by instructors at universities is independent of either gender or age. On the contrary, research supports that female instructors utilize a wide range of real-time and asynchronous tools for student interaction more than the opposite gender (Abazi-Bexheti et al., 2018; Tena et al., 2016). Another finding of the current study is that EFL instructors' communications with their students in LMS platforms are unrelated to the number of years they have been teaching. There may be an inconsistency with Gautreau's (2011) research claiming that the tenure status of an academic is a major factor in the extent to which they would adopt a digital learning platform. The results of the present study suggest that years of teaching experience and LMS use for interaction are not related, so they do not match the findings of prior research. For example, Cigdem and Topcu (2015) assert that teachers' potential to use digital learning platforms decreases when their teaching experience increases. Last but not least, the present study reveals no relationship between the school types in which instructors work and their level of interaction via LMSs. However, this finding does not correspond with Erdin and Uzun's (2021) research which found a correlation between the level of technology knowledge among educators and whether they work in a public or private institution.

The outcomes of this study have several educational implications. In the first place, this study provides evidence that LMSs can be effective tools for EFL teachers to engage with their students. EFL teachers and their students can have fruitful discussions in the many interactive ways offered by LMSs. To facilitate engagement with learners through LMSs, it is crucial that teachers have inner motivation and strong support from the schools they work in to effectively employ these digital learning platforms. Furthermore, these online platforms can make printed course materials more interactive by integrating them into the curriculum or course books. Lastly, it is crucial not to ignore the incorporation of gamification into LMSs,

and more focus should be directed towards utilizing gaming functionality on LMSs. In this way, learners' enthusiasm and participation in learning a language can be promoted.

The current study has some limitations. Firstly, 246 EFL instructors working in prep schools of state and private universities in Turkey were eligible to participate in the study. In addition, it is confined to a descriptive research design which consists of a demographic background and a 24-item questionnaire. Future research should examine different variables such as the training EFL teachers receive for LMSs, their perceptions of technology competence, and the educational institutions' facilities since these variables may affect I-S communication via LMSs.

3. Conclusion

The existing research collection on the relationship between the degrees of EFL instructor-student interaction and demographic factors is insufficient to make definitive conclusions. This study aims to investigate the degree of interactions between EFL instructors and their students on LMSs based on certain demographic factors. The study concludes that EFL instructors' use of LMSs with their students does not differ according to their demographic features except for their mother tongues and online weekly teaching hours. It can be said that non-native EFL instructors in Turkey employ LMSs as a means of contact with students far more often than their native counterparts do. Moreover, the amount of instructor-student contact taking place on LMSs differs significantly in line with instructors' weekly time spent teaching English online.

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